

**Building on “Soft Systems for Soft Projects”:
Project management lessons learned**

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Certificate of authorship / originality

I certify that the work in this thesis has not previously been submitted for a degree, nor has it been submitted as part of the requirements for a degree, except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Kerry Costello

3 July 2012

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ABBREVIATIONS

AL	Action Learning
AR	Action Research
ARC / SPIRT	Australian Research Council / Strategic Partnerships with Industry
CAPS	Coaching and Performance System – NSW Health
DPWS	NSW Department of Public Works and Services
GLP	NSW Government Licensing Project
GLS	NSW Government Licensing System
HPRB	NSW Health Professionals Registration Boards
ICT	Information and Communications Technology
IJPM	International Journal of Project Management
IM&T	NSW Information Management & Technology Blueprint
IRNOP	The International Research Network on Organizing by Projects
ISD	Information Systems Development
IS / IT	Information Systems / Information Technology
LO / LO	Learning Organisation / Organisational Learning
MbP	Managing by Projects
NHS	United Kingdom National Health Service
NMB	NSW Nurses and Midwives Board
NPM	New Public Management
NSW	New South Wales
OICT	NSW Office of Information and Communications Technology (2003/04)
OIT	NSW Office of Information Technology (1999-2003)
OGC	United Kingdom Office of Government Commerce
PA	Public Administration
PARA	Practitioner and Researcher (Soft Systems for Soft Projects) Affiliation
PIR	Project Implementation Review
PM	Project Management
PMBOK®	The Project Management Body of Knowledge®, PMI
PMI	Project Management Institute
PMIS	Project Management Information System
PO / PMO	Project Office / Project Management Office
POM	Processes for Organization Meanings ('POM') model (Checkland and Holwell, 1998b p106)
PRINCE2™	Projects in Controlled Environments (Trade Mark of OGC)
PVM	Public Value Management
QSARP	Qualitative and Strategic Audit of the [NSW Police Service] Reform Process
RFS	NSW Rural Fire Service
SSM	Soft Systems Methodology
SSPMA	Soft Systems Project Management Approach
UTS	University of Technology, Sydney

ABSTRACT

This thesis explores lessons emerging from a multi-disciplinary affiliation of practitioner-researchers endeavouring to apply soft systems thinking to project management practice between 1998 and 2006 in New South Wales (NSW) public sector agencies.

The research began with award of an Australian Research Council grant to the Project Management Research Program at the University of Technology, Sydney and the NSW Police Service. Titled “Soft Systems for Soft Projects”, the award application had been made with reference to the Soft Systems Methodology (SSM) developed by Professor Peter Checkland and colleagues. Hard project management approaches were proving inadequate for dealing with the complex and shifting project environments being encountered in NSW public sector agencies. “Soft Systems for Soft Projects” was a multi-faceted and multi-level inquiry that delivered practical results. Affiliation members carried learning from this experience into other public sector change management initiatives and wider project management research and practice networks.

The inquiry reported in this thesis was initially mapped out while the author was managing a NSW public sector agency’s response to an across-government e-commerce initiative. The aim of the inquiry was to look back on the affiliation’s attempts to reconcile hard and soft perspectives, as represented by project management and SSM respectively, while supporting development of an organisational project management capability through implementing a Project Management Information System (PMIS). It was framed within a modified model of the process of inquiry which Mode 2 use of SSM facilitates (Checkland and Holwell, 1998b, p. 170) and particularly focused on the affiliation’s engagements with Checkland and Holwell’s (1998, p. 106) “processes for organization meanings” (POM) model.

The research material is drawn from the affiliation’s published outputs, the author’s personal documentation of emerging project management practice, public sector practice guides and documents about the contextual discourses that were shaping the scope of project management action at the agency level. These are “read” according to a model developed for exploring the relationship between the documents according to level of public exposure and close versus long range interest. In a novel approach, the POM model is used as a sense-making framework for appreciating the dynamic relationships between the agency projects / programs, internal organisational processes and the external shaping discourses as documented in this material.

CHAPTER ONE: Overview

Government projects are not the same as commercial projects. Different factors apply, different rules control. (Rose, 2006, p. 72 on *Government Extension to the PMBOK^(R) Guide*)

1.1 Thesis Background: Collaborating in Research and Sharing Practice

This thesis explores lessons emerging during an eight-year period of project engagements (1998-2006) by a dispersed and multi-disciplinary community of practitioner-researchers employed, or contracted, in project management (PM) capacities in public sector agencies in New South Wales (NSW) Australia.

“Communities of practice are regularly cited as fundamental to knowledge creation, dissemination and use within organisations although they are equally if not more valuable in facilitating knowledge creation, transfer and learning between individuals and across organisational boundaries.” (Crawford and Cooke-Davies, 2000, p.2).

This community, of which I was a member over the entire eight years, was not an action research cohort developing, for example, a framework for sense-making out of common experience within a university PhD program (Sarah et al., 2002; and Haslett et al., 2002 and 2005). It was debatable whether it could be considered an epistemic community / epistemic collective (Lindkvist, 2003; Grabher, 2004a; Grabher, 2004b; Cicmil et al., 2006; Hodgson and Cicmil, 2007; Candler, 2008), or indeed even a PM community of practice (Lave and Wenger, 1991; Brown and Duguid, 1991; Brown and Duguid, 1998; Brown and Duguid, 2001; Wenger et al., 2002; Swan et al., 2002; Lindkvist, 2003; Barton and Tusting, 2005; Barton and Hamilton, 2005; Hodgson and Cicmil, 2006; Handley et al., 2006; Garavan et al., 2007; Williams, 2007).

Throughout the thesis I refer to the community as a practitioner-researcher affiliation. It was an eclectic group of academics, research students, researchers, practitioners (public servants or contractors) and practitioner-researchers who might be undertaking any of these roles at different sites. Nevertheless, the affiliation was arguably a community of practice according to Wenger et al.'s, (2002, pp. 5-6) sense of "people who share a concern, a set of problems, or a passion about a topic and who deepen their knowledge and expertise in this area by interacting on an ongoing basis". The affiliation's areas of practice are mapped in Figure 1.1.

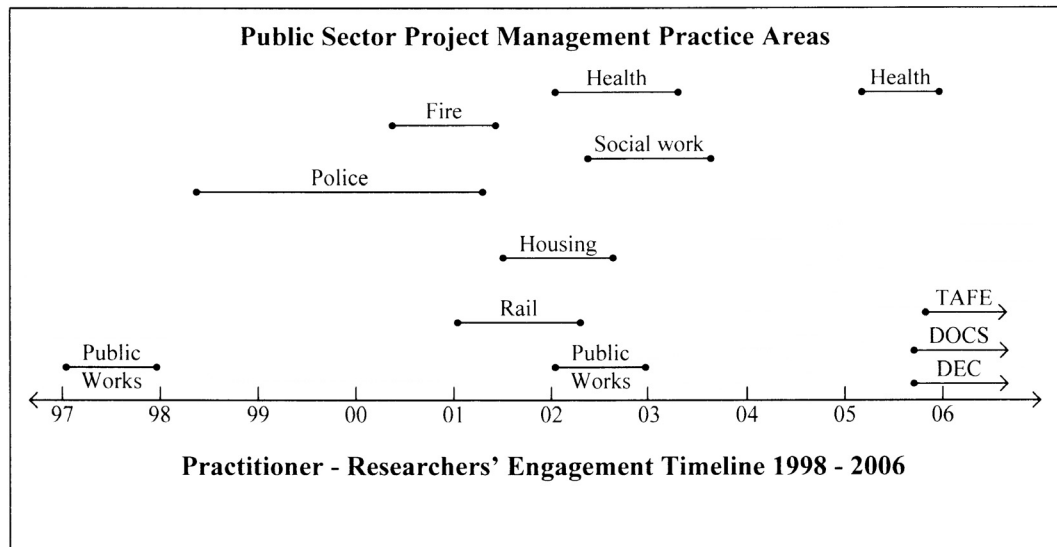


FIGURE 1.1: Project Management practitioner-researcher affiliation's practice areas (Pollack et al., 2006)-*Public Works* (Department of Public Works and Services, subsequently incorporated into the Department of Commerce); *Police* (NSW Police Service); *Fire* (NSW Rural Fire Service); *Housing* (Department of Housing); *Rail* (Rail Infrastructure Corporation); *Health* (NSW Health Professionals Registration Boards); *Social work* (an interagency project initiated by the Southern Sydney Sexual Assault Service); *TAFE* (Technical and Further Education); *DOCS* (Department of Community Services); *DEC* (Department of Environment and Conservation).

Between 1998 and 2006 the affiliation produced some 27 publications (APPENDIX 1), although its members did not necessarily work together at the same time or in the same agency. As noted by Wenger et al. (2002, p. 6) when expanding on the nature of such communities, they meet because of the value they find in their interactions-

As they spend time together they typically share information, insight, and advice. They help each other solve problems...They may create tools, standards, generic designs, manuals and other documents - or they may simply develop a tacit understanding that they share. However they accumulate knowledge, they become informally bound by the value they find in learning together...Over time, they develop a unique perspective on their topic as well as a body of common knowledge, practices and approaches.

My aim when developing my research inquiry was to review the affiliation's emerging perspective (reflective hindsight), particularly as it developed during our Soft Systems for Soft Projects collaboration with the NSW Police Service (NSW Police) and subsequently at the NSW Rural Fire Service (RFS). I would then apply the lessons we learned (reflective foresight) to inform my PM practice at the Health Professionals Registration Boards (HPRB). Influencing my approach in a fundamental way would be the complex political, social and policy contexts of the case study agencies (Peters, 1998; Pinto, 2000; Dixon, 2001-2002; Stokes and Clegg, 2002; Sense, 2003; Friend, 2006; Hodgson and Cicmil, 2007) as exemplified for the Soft Systems for Soft Projects collaboration in Figure 1.2.

Uni to rescue reforms

By CHARLES MIRANDA
Police Reporter

\$345,000 package to keep police on track

UNIVERSITY academics have been brought in to rescue NSW Police Service anti-corruption reforms.

The reforms are at risk of collapse because of a lack of coordination.

Police Commissioner Peter Ryan has more than 120 projects aimed at cleaning up policing in the State.

But there is no clear co-ordinating plan to implement them.

A \$345,000 rescue package will see academics from the University of Technology Sydney develop an effective management

system to oversee the reforms. UTB staff have met police chiefs including Assistant Commissioner Christine Nixon to discuss the plan which began on Monday.

UTB director of post graduate project management programs Lynn Crawford said Mr Ryan's reforms were complex and aimed at changing a generation of culture.

Ms Crawford said a big problem facing the reforms was that Mr Ryan's team had no suitable project management practice to guide such an important cultural change.

As such, police did not understand or distrust the changes created by the Wood royal commission.

Ms Crawford said her team of academics would ensure the 120 anti-corruption projects now under way were interactive and managed properly.

The move follows claims by Mr Ryan that his authority was being "white-anted" by senior officers and his reforms stymied by a lack of communication.

"Any organisation undergoing change will face some resistance and it is about how

you communicate and manage the change process," Ms Crawford said.

"The fact the NSW Police Force has opened itself up to work with university academics for its reform agenda, that they are prepared to allow external scrutiny, demonstrates how genuine they are in what they want to do.

"There is a major problem confronting the police ... and letting a pile of researchers in can be a pain in the neck.

"But that openness in the form of external scrutiny shows genuineness. They ipot-

ice] have to get it right and have a management structure in place to meet the demands of the 2000 Olympics and in the longer term ensure transparency and accountability."

The Federal Government made the \$345,000 grant.

Last month, Mr Ryan said his immediate task to keep his reforms on track and stop the "white-anting" was to look at communication between Police Service members.

Senior police sources confirmed most of the disgruntlement from senior staff came from a lack of understanding about the reforms and confusion over their implementation.

FIGURE 1.2: Press report of the award of the Soft Systems for Soft Projects ARC / SPIRT grant in the *Daily Telegraph* 17/3/1998.

The scope of my inquiry is mapped in Figure 1.3. My focus would be on a project management information system (PMIS) as it was developing across the three agencies between 1998 and 2006. I would be seeking to translate my experience of the affiliation's emerging practice and theory with a view to eliciting "shared learning" associated with the term 'advancement of knowledge' and 'advancement of practice' (Bourner and Simpson, 2005, p. 133). My approach was adapted from Checkland and Holwell's (1998b, p. 170) model of the process of inquiry which Mode 2 use of Soft Systems Methodology (SSM) facilitates. It is a process oriented to action being taken rather than simply the gaining of understanding.

Checkland and Scholes (1990, pp. 280-284) distinguish between Mode 1 and Mode 2 as marking two ends of a spectrum of the ways in which SSM can be used (Table 1.1). Checkland and Holwell (1998b, p. 165) refer to Mode 1 as being how SSM is usually described in the secondary literature while Mode 2 use is trickier to describe: "Its form and content will be appropriate not only to the particular situation addressed, with its own unique history, but also to the particular investigators involved with their particular attitudes and experiences." Accordingly, they were reluctant to provide a prescriptive account of its use. Describing an NHS application of their Mode 2 inquiry model, Checkland and Holwell (1998b, p. 171) refer to the process as "necessarily rather abstract". Nevertheless, they considered their example potentially transferable to many situations where qualitative research is conducted.

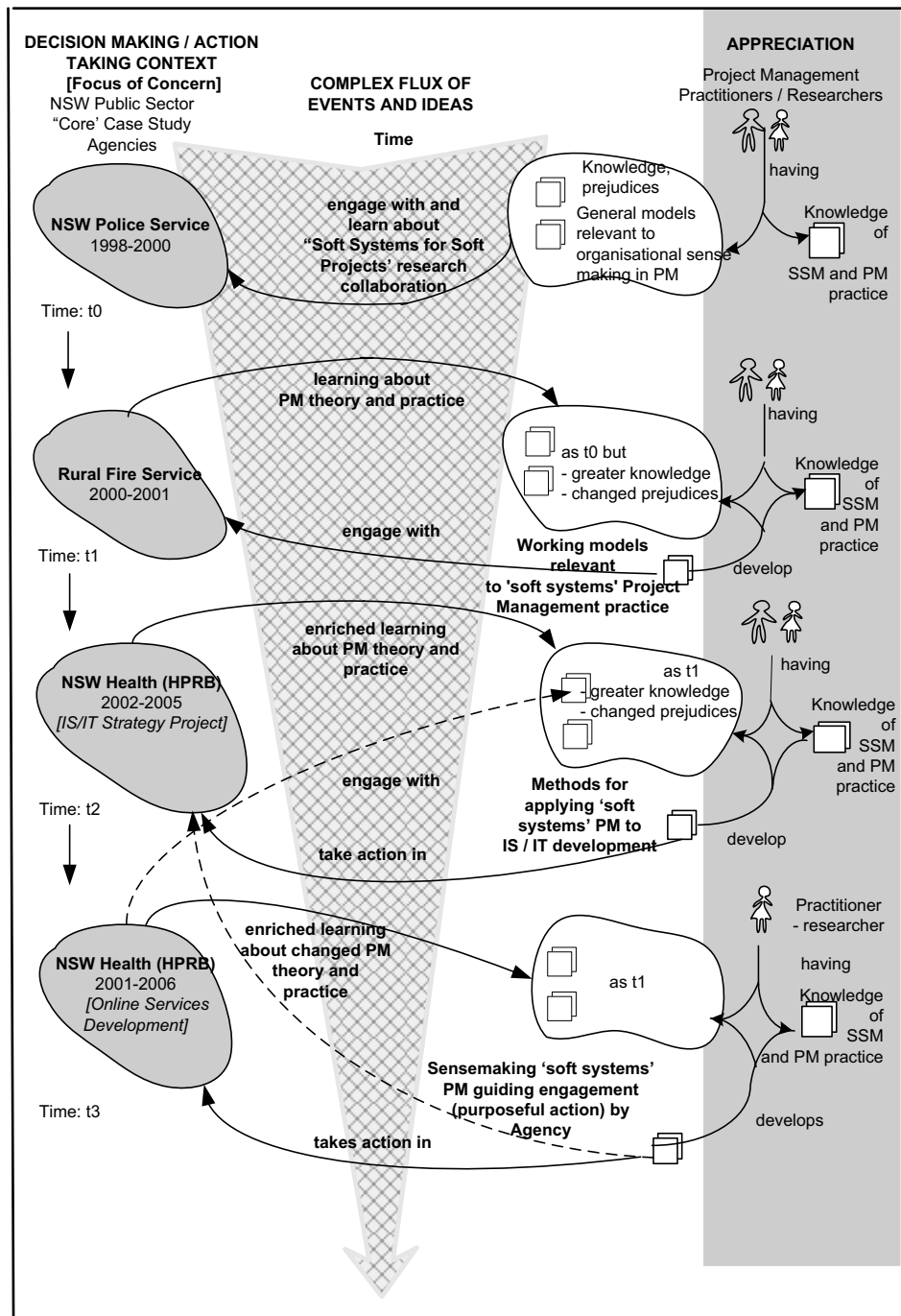


FIGURE 1.3: Scope of the author's practice and research between 1998 and 2006 mapped as a process of inquiry which Mode 2 use of SSM facilitates. After Checkland and Holwell (1998b, p. 170)

Mode 1 SSM	Mode 2 SSM
Methodology-driven Intervention Sometimes sequential SSM an external recipe	Situation-driven Interaction Always iterative SSM an internalised model

TABLE 1.1: Dimensions of Mode 1 and Mode 2 SSM (Checkland, 2000a, p. S39).

Initially, I planned to follow an action research (AR) methodology, as used in the Soft Systems for Soft Projects collaboration (Figure 1.4). Doing AR in your own organisation is, as advised by Coghlan and Brannick (2005, p. 88), a complex and demanding process because what “appears clear at the outset may lose its apparent clarity as the project unfolds”. In their view, important learning comes from how a project is framed and reframed. “The critical issue for you is to be able to frame and select a project from a position of being close to the issue.”

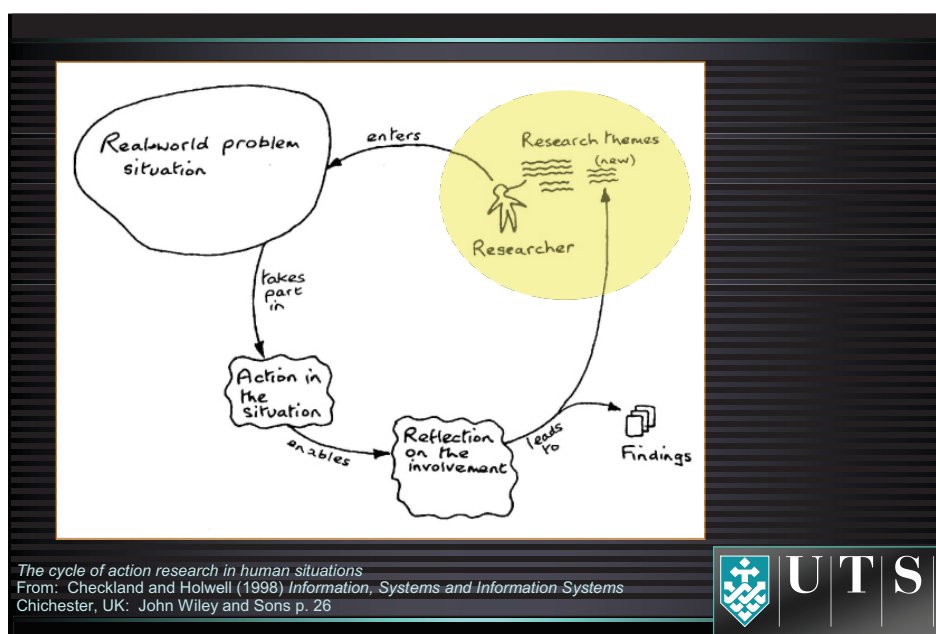


FIGURE 1.4: The cycle of action research in human situations (Checkland and Holwell, 1998b, p. 26 as referenced in Crawford and Costello IRNOP IV Conference presentation, 2000).

Over time, the complex flux of events in my practice environment meant my research inquiry would not proceed along AR lines as, for example, demonstrated by Zuber-Skerritt and Perry (2002) Figure 1.5. Although Sankaran (2001, p. 5) adopted the terms “core action research project” and “thesis action research project” from this model to identify the elements of his research, he also included their interaction with two external “learning sets” that had a significant impact on his research questions (Sankaran, 2001). In his model, Sankaran (2001, p. 6) identified three intertwined cycles: individual; participatory; and external. His individual cycle covered not only the “thesis action research project”, but also his own personal learning and transformation while he was able to draw conclusions about his secondary research questions from his participatory and external research cycles.

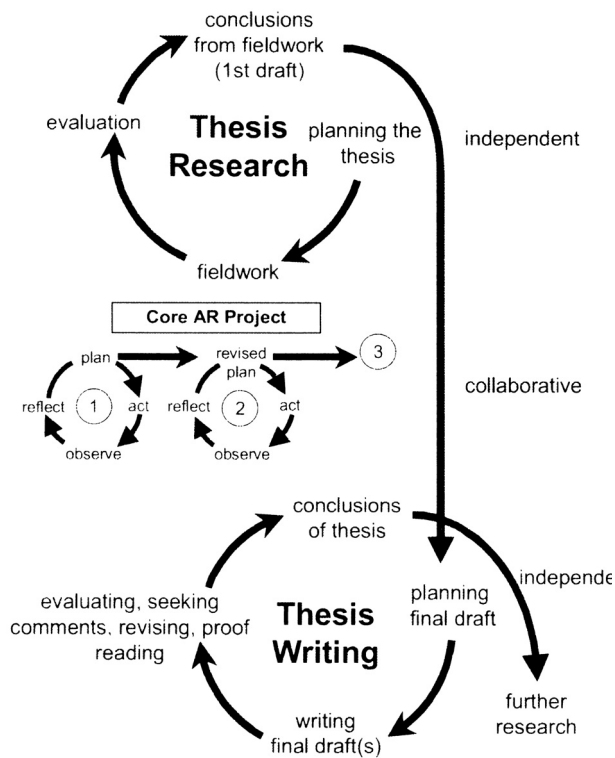


FIGURE 1.5: Model of the relationship between thesis research, core action research and thesis writing Zuber-Skerritt and Perry (2002, p. 177)

As the complexity of the process of framing my research approach increased, this became of itself an emerging action learning (AL) cycle (Coghlan and Brannick, 2005, p. 88; Bell, 2008) and my inquiry would evolve to become more akin to AL (Perry and Zuber-Skerritt, 1992; Sankaran, 2001; Sarah et al., 2002; Zuber-Skerritt, 2002; Bourner and Simpson, 2005; Coghlan, 2007; Davis, 2007) than traditional research (Table 1.2). AR and AL, as noted by Zuber-Skerritt (2001, p. 1), are not absolute or static terms:

They emerged in the 1920's and have been developed since then constantly and in a dynamic way...They have proven to be appropriate methodologies and processes for (re)creating change, innovation, leadership and personal, professional and organisational learning.

Action learning	Traditional research
1. Problem	1. Topic / field
2. Action	2. Literature
3. Reflection and reframing	3. Field work (action)
4. Making sense / literature	4. Findings
5. Account of practice of personal and organisational learning	5. Conclusions

TABLE 1.2: Typical differences between action learning and traditional research (Coghlan and Pedler, 2006, p. 129)

Therefore, my construction of the affiliation's lived experience begins with an outline of our scope of action within my case study agencies. The improvement being sought in these agencies would inform the *purposes* expressed in my questions (Midgley, 2000, p. 309 in the context of systemic intervention).

1.1.1 NSW Police Service (1998-2000)

Although affiliation members had some prior engagement in NSW public sector agencies (including Crawford et al., 1999), the start of my research inquiry was the award of a grant by the Australian Research Council (ARC) / Australian Department of Employment, Education, Training and Youth Affairs Strategic Partnerships with Industry (SPIRT) to the Project Management Program at the University of Technology, Sydney (UTS) and NSW Police, to commence in 1998. As included in the ARC / SPIRT application (Costello, 1998, *Personal Research Papers, Vol.1*):

The discipline of project management was initially developed for more effective management of 'hard' projects in the construction, engineering, defence and aerospace industries. Increasingly, organisations in other industries are adopting the project management approach for implementing change and improving performance. However, 'hard' project management approaches are proving inadequate for dealing with multiple, interdependent 'soft' projects. This research project aims to enhance the theoretical understanding of interdependent 'soft' projects as the basis for developing improved management systems. It will use project management and systems theory as a framework and the Reform Agenda of the NSW Police Service as a case study.

NSW Police had come "under public scrutiny and pressure over the legitimacy of its practices because of the publicity attached to reports of scandals and corruption in the media and through a Royal Commission of Inquiry" (Gordon et al., 2009a, p. 15; Wood, 2000; Dixon, 2001-2002; Karp, 2008). Established by the NSW Government in 1994, the Royal Commission was a catalyst for major reform within the Service. In his *Interim Report* the Royal Commissioner, The Hon. Justice J.R.T. Wood (1996b), emphasised the need for attention to the processes by which the reforms should be implemented. He observed (1996b, p. 1) that evidence to the Royal Commission had shown fundamental problems that could not be corrected by patching up the old system. What was needed was "a substantial revision of management practices and of a way in which the Service makes use of the skills of its members". The NSW Police response (Ryan, 1996, p. 43) had included advice that:

...with the help of the University of Technology officers are being trained in both the technical aspects of project management as well as the thinking and reasoning processes associated with the preparation of a project outline. In the process they are refining a system of project management to fit the specific needs of the Police service.

Referring to the challenging task of coordinating and implementing multiple projects, all sub-projects of a major organisational change project, Commissioner Ryan (1996) said experience had shown PM systems are not always easy to understand and simple to implement. He identified the need for a PM system to facilitate coordination and reporting requirements for the Reform Agenda and also to contribute to improved management of policing throughout the Service. As experienced by affiliation members, the Soft Systems for Soft Projects collaboration would prove to be a multi-faceted and multi-level PM engagement that was challenging on a number of levels. Subsequently, we carried forward our experience to support change management initiatives within other public sector agencies as depicted in Figure 1.1, including the RFS (2000-2001) and HPRB (2001-2006).

1.1.2 NSW Rural Fire Service (2000-2001)

The RFS engagement required affiliation members to facilitate and support development of a process for reconstruction of key administrative processes within a 12-month timeframe without any interruption to core business (Bentley, 2001b; Costello et al., 2002a). The RFS is a community-based agency founded on some 70,000 volunteers (NSW Rural Fire Service *Annual Report*, 2001) linked through a complex network delivering emergency fire fighting services. The change process would require careful implementation to ensure significant volunteer and community involvement. In undertaking this program, the RFS recognised an opportunity to address change in the wider context of the New Public Management (NPM) reforms taking place in NSW. The RFS Commissioner, with the agreement of NSW Police and the UTS Chief Investigator became a partner in the ongoing research and development of the methodology and systems associated with the Soft Systems for Soft Projects collaboration. Approval was given for secondment of NSW Police personnel to the RFS, transfer of the PMIS and my engagement as a UTS researcher. Under the agreement, the RFS would provide feedback on its experience implementing and evaluating the methodology and associated software (Costello, *Personal Research Papers* 2000, RFS correspondence).

1.1.3 NSW Health Professionals Registration Boards (2001-2006)

Constituted under the *NSW Health Administration Corporation Act 1982*, HPRB was responsible for professional, policy and administrative support for nine independent statutory health professionals Boards (Figure 1.6). Stakeholders included the people of NSW who require the services of registered health professionals, the Boards' registrants, members of the Boards and their Committees, the Minister for Health and the Department of Health. I began my employment with HPRB as Special Project Officer in 2001. Under my position statement¹, my focus was "overall management of a change management strategy to position the organisation to meet the Government's commitment concerning online services".

In 2001, HPRB was one of five lead agencies selected by the (then) NSW Office of Information Technology for implementing the Government Licensing Project (GLP), a whole-of-government project to create a new business and occupational licensing management system (GLS) across some 19 agencies (involving over 300 license types). The GLP (Figure 1.7) was to "capture all the benefits the Government is striving for in e-government, saving taxpayers money, cutting red tape, improving choice and convenience, and delivering better service" (NSW Government *connectingBusiness* Licensing Project, <http://www.oict.nsw.gov.au>, accessed November, 2004). Phase 1 of the GLS was to commence early January 2003 with an online renewal facility for one lead agency. Phase 2, replacement of existing agency systems, was (in 2002) to commence in 2003-04 and in HPRB one year later. Phase 3, comprising third party verification and photo licensing, was to commence in 2005.

Ending my research inquiry in 2006 was in accordance with my research timeline. While my employment in HPRB continued beyond that time, ending a soft systems study needs to be seen as an essentially arbitrary act (Checkland and Holwell, 1998b, p. 173). Nevertheless, I continued to reflect upon practice as I was writing up my thesis. Freshwater and Rolfe (2001, p. 528) refer to reflective practice as an adjunct to professional and organisational development and to the notion of reflexivity being a turning back of reflection on itself, a kind of meta-reflection. As Fletcher et al., (2010, p. 489) observe, critical reflection on one's own practice can be confronting and difficult and an important enactment at the meta-level is reflecting on others' reflections as well as our own.

¹ Used with the permission of the Director, Health Professionals Registration Boards.

<ul style="list-style-type: none"> Home A-Z Health Topics Consumer Info Health Professionals Health Services 	<p>Home >> Health Professionals >> Registration boards</p> <h3>Health professionals</h3> <ul style="list-style-type: none"> ▶ Acute Care Best Practice ▶ Centre for Mental Health ▶ CIAP ▶ Forms ▶ Scholarships, grants & funding ▶ Data collections ▶ Dental professionals ▶ Doctors ▶ Health Promotion ▶ Hospital information ▶ Information privacy ▶ Nurses ▶ Registration boards ▶ Rural Health Training Units ▶ Pharmaceutical Services ▶ Public Health Officer Training Site ▶ Quality & Clinical Policy ▶ Student clearances ▶ Telehealth ▶ Useful links
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Registration boards

Policies

- Right of Private Practice - Allied Health Professionals

Individual boards

- Psychologists Registration Board of New South Wales
- Chiropractors Registration Board NSW
- Dental Technicians Registration Board
- Nurses Registration Board
- New South Wales Optical Dispensers Licensing Board
- Osteopaths Registration Board NSW
- Board of Optometrical Registration NSW
- New South Wales Physiotherapists Registration Board
- Podiatrists Registration Board

Complaints

Each Board has its own complaints handling process. If you have a complaint, contact the registrar of the relevant Board. If your complaint is more general, contact the Health Professionals Board by email or by post to PO Box K559, Haymarket NSW 1238, Australia. You can also lodge a complaint with the Health Care Complaints Commission.

Legislation

- Health Care Complaints Act 1993
- Mutual Recognition (New South Wales) Act 1992
- Trans-Tasman Mutual Recognition (New South Wales) Act 1996


Licensing

- [NSW Government Licensing Project](#)

Multilingual Resources :: [Chief Health Officer Alerts](#) :: [Health Calendar](#)
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FIGURE 1.6: NSW Health website with list of Boards supported by the Health Professionals Registration Boards (<http://www.nsw.healthgov.au> accessed 8/12/2003).

Our Vision



State of the art, accessible and easy to use licensing services across NSW Government

<p>Our Values</p> <ul style="list-style-type: none"> Customer Focus Outcome Focus Professionalism Integrity Innovation Partnership 	<p style="text-align: center;">We will Partner with Licensing Agencies to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Quickly improve customer service by adding online licence renewals to existing Department of Fair Trading Licensing systems. <input type="checkbox"/> Acquire and implement state of the art Licensing systems to provide cost effective licensing services across Government. <input type="checkbox"/> Introduce innovative solutions to continuously improve the quality of licensing processes and associated information services. <p><i>For example:</i></p> <ul style="list-style-type: none"> • Improve the integrity of licensing services by verification of licensing information against source databases. • Improve consumer protection by introduction of photo licensing and online public registers. • Improve operational efficiency by introduction of online licensing, uniform licensing legislation and business process improvement. 	<p>Key Result Areas</p> <p>Service Culture</p> <ul style="list-style-type: none"> ✓ Takeup of online services ✓ Reduced turnaround times <p>Benefits Realisation</p> <ul style="list-style-type: none"> ✓ Licensing systems decommissioned ✓ Cost effectiveness <p>Continuous Improvement</p> <ul style="list-style-type: none"> ✓ Licensing services – agency, licensee and consumer services ✓ Service Level Agreement and contract management
---	---	--



FIGURE 1.7: NSW Government Licensing Project: vision, values and key result areas, Office of Information Technology, NSW accessed 12/3/2003.

1.2 Positioning the Research Approach

This thesis follows various metaphorical threads of my research inquiry. In an example of the thread metaphor, Horsfall et al. (2001, p. 5) refer to the challenges of trying to fit the lived experience of researching into conventional methodological frameworks, likening methodology to “a patchwork quilt, created and stitched up during the research”. Other authors using the thread metaphor include Jorgensen and Phillips (2002, p. 202), Patton (2002, p. 76) Parsons (2004), Anderson (2005), Lawrence (2005) and Denzin and Lincoln (2008, p. 5).

The threads I follow are drawn from multiple discourses about practice and research proceeding across four applied domains as represented in Figure 1.8: Project Management; Information Systems Development; Public Administration; and Soft Systems Methodology. Between 1998 and 2006, these discourses were shaping the context our local practice and research. On the relationship between discursive activity and context, Hardy et al., (2000, p. 1228) have observed discursive activities must be placed within a meaningful context if they are to shape and construct action.

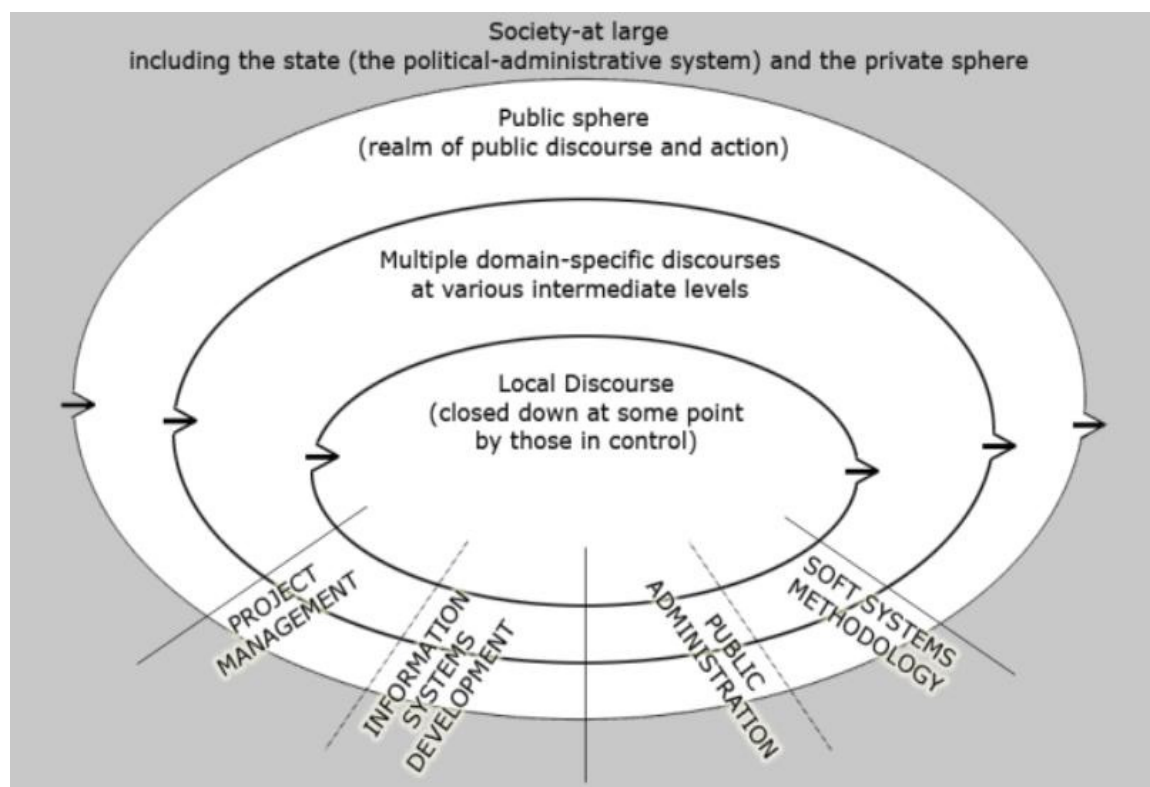


FIGURE 1.8: Ulrich's (2003, p. 331) multiple sphere model of discourse adapted for four domains that were subject to the local practitioner-researcher affiliation's discourse.

Figure 1.8 encompasses the following principles:

- any particular discourse is embedded within spheres of other discursive changes located at different levels of exposure and relevance;
- at each level there will be many partly overlapping discourses concerning the object domains and audiences and multiple discursive chances may arise for articulating a certain issue;
- what happens at one level may be the subject of discourse at another level (the arrows in the diagram symbolise the interdependence of the spheres); and
- although accessibility to each local discourse is limited and will be closed at some point, what matters is that together the different discursive spheres and domains offer multiple chances for the articulation of concerns that may be suppressed in some discourses.

Ulrich's model is located within the context of a philosophical argument for a more dialogical or discursive understanding of the systems approach and a view that "reflective practice depends more on a framework of critical argumentation and discourse than on a framework of methodology choice" (Ulrich, 2003, p. 325). A discursive approach, he argues, would shift the emphasis on the way methodologies are used and understood from "problem solving" to learning and solution questioning. It will focus on facilitating systematic processes of examining the validity of claims that underpin solutions" (Ulrich, 2003, p. 326). Ulrich observes that there is nothing wrong with hard or soft methodologies; what he was taking issue with was the prevailing conceptions of "complementarism" between them.

I found discourse to be a popular term across various literatures, although one without an agreed-upon definition (Alvesson and Kärreman, 2000, p. 1127). Discourse encompassed a number of approaches that are informed by a wide variety of disciplines (Hardy and Palmer, 1999, p. 3; Jørgensen and Phillips, 2002; Kaplan and Grabe, 2002) and practice contexts. Within public administration (PA), I found dominant discourses to reflect a continuing dynamic of reform / change (Johnston, 2000; Stivers, 2000b; Barzelay, 2001; Doolin, 2003; Forsyth, 2003; Wettenhall, 2003; Spicer, 2005; Thorne and Kouzmin, 2007; Wyatt-Nichol and Abel, 2007; Dunston et al., 2009; Edwards, 2009).

Grant and Ledema (2005, pp. 37-38) distinguish between discourse as a field of inquiry emerging from organisational and management studies, a field characterised by Grant

et al., (1998, p. 1) by its diversity, dichotomy and multi-disciplinarity, and organisational discourse analysis emerging from more linguistic-oriented research. In this thesis I engage with the conception of discourse emerging from organisational and management studies.

My aim was to explore the affiliation's lived real-world practice through examining textual material (research and practice) created by members between 1998 and 2006 (the inner level in Figure 1.8) in the context of published material on discourses impacting at the organisational context level (particularly the middle level of Figure 1.8), as they may contribute to generating Mode 2 knowledge (Checkland and Scholes, 1990; Checkland and Holwell, 1998a; Gibbons, 2000; Connell, 2001; MacLean et al., 2002; Aram and Salipante, 2003; Ferlie et al., 2003; Fernie et al., 2003; Kumar and Sankaran, 2006; Coghlan, 2007) with a view to applying what we had learned to my new site. Although I would be proceeding from the affiliation's Soft Systems Methodology "world outlook" as outlined below, unlike our previous engagements I would not be specifically developing upon the hard versus soft systems methodologies issue (Crawford and Costello, 2000; Costello et al., 2000a and 2000b; Crawford et al. 2003; Crawford and Pollack, 2004; Pollack, 2005; Pollack, 2007) which was a significant thread in our local discourse. Also, I would not be addressing in detail the Information Systems Development (ISD) discourses / literature included in Pollack's (2005) inquiry or other co-located practice and research threads. These were concentrating on practitioner competence and developing profiles or benchmarks of PM knowledge and the use of practices (Crawford, 2000a and 2000b, 2004, 2007; Crawford and Pollack, 2007 and 2008) and applying theoretical advances in understanding complexity to PM (Remington and Pollack, 2008).

1.2.1 Engaging with Project Management

My thinking about PM, initially and over the time of our various affiliation collaborations, was of an applied discipline (Costello et al., 2002a, p. 48), a field of practice "brought into being through the conversations, writing and collaborative activities of practitioners, consultants and academics with a shared interest in dealing with phenomena that are perceived to have similar characteristics and challenges" (Crawford, 2006, p. 74). In my early review of the literature I found "a field that is very practice based, and concerned with the integration of information and experiences rather than being highly analytical and theoretical" (Betts and Lansley, 1995, p. 215; also observed by

Themistocleous and Wearne, 2000). Also, I found issues continuing in the literature about PM's status as:

- *a discipline* (Morris, 2000; Maylor, 2001; Pellegrinelli, 2002; Morris, 2002; Cicmil and Hodgson, 2005; Williams, 2005; Bredillet, 2008; Geraldi et al., 2008; Hodgson and Cicmil, 2008, p. 142 who refer to its coming of age);
- *a domain for the exercise of professional expertise* (White and Fortune, 2002 p1; Turner, 2000; Wideman, 2000; Hodgson, 2002; Koskela and Howell, 2002; Thomas et al., 2002; Morris, 2003; Hodgson, 2005; Crawford, 2006; Morris et al., 2006a and 2006b; Crawford and Pollack, 2008); and
- *an academic research field* (Urli and Urli, 2000; Soderlund, 2002; Soderlund, 2004b; Cicmil, 2006; Winter et al., 2006b; Bredillet, 2007a; Walker et al., 2008a and 2008b).

PM is arguably a professional discipline nevertheless, albeit with a question about its maturity (Morris et al., 2006a), for the following reasons (Morris, 2002, p. 90):-

- a substantial and, in places, significant literature on it;
- defined bodies of knowledge, and many universities that research and teach it;
- many people who believe that they practice it; and
- professional societies that promote it and examine and qualify people in it.

According to Cleland and Ireland (2006, p. 71), the “principal reason to use project management is to provide an organizational focus and philosophy on how to deal with the inevitable changes facing contemporary organizations... Projects are inexorably related to the design and implementation of strategic and operational change initiatives”. PM has been discussed and researched as appropriate for organisational change (Partington, 1996; Levene and Braganza, 1996; Cicmil, 1999). Nevertheless, after an extensive literature search, Stretton (2000, p. 1) had reported that “the project management literature has surprisingly little material on organisational change processes, and certainly no universally accepted guidelines for undertaking organisational changes as projects”. This finding was consistent with a review of the literature on key organisational change models and associated evidence relevant for use in the United Kingdom (UK) National Health Service (NHS), wherein the authors found “little explicit evidence on the effectiveness of project management as a means to secure organisational change” (Iles and Sutherland, 2001, p. 70).

At the outset of the study period, we were finding that classic hard PM techniques and tools were not meeting our needs as we were attempting to implement government change policies and public service initiatives – soft bureaucratic projects as elaborated in Table 1.3. Soft systems thinking offered tempting frameworks to inform development of new PM approaches in our workplaces, or in areas where we were engaged as contractors.

Technical Projects Paradigm T (“hard”)	Bureaucratic Projects Paradigm B (“soft”)
A project is a unique, one off set of objectives, which has a specific start and an end. No two projects are exactly the same and must be managed individually.	A program or project is a convenient name given to an objective which needs to be achieved.
A project is made up of a number of tasks, which are connected together by interdependencies. These tasks take specific times to complete and are done in the order determined by the interdependency.	A project is made up of a number of processes, which have to be put in place, usually in a specific order but not necessarily.
Modern projects are complex and require sophisticated tools and techniques such as PERT.	A significant part of the project work is “organisational political” stakeholder management to keep the project moving against forces that would have it “derailed”.
Once the project has been agreed, and the specifications and contracts have been finalised, this is the Scope baseline, which is only varied after considerable consultation and agreement on changes because of the implications for cost and time factors.	Time, that is calendar time, is not always of the essence. The organisational calendar, that is when the next Board meeting, or Interdepartmental Co-ordinating Committee sits, may be more relevant. A good project manager may hold off, until the time is “right”, rather than push for a strict schedule.
Risk is a well defined, if inexact, science with a focus on probabilities that original time, cost and resource estimates will be achieved in practice.	Because the bureaucratic process controls the flow of materials and decisions, there is little need for a PERT / Gantt Diagram. In fact these tools have a tendency to stifle creativity or innovation and micro-manage professional staff.

TABLE 1.3: Technical and bureaucratic project paradigms (Hassen, 1997 p. 281).

1.2.2 Engaging with Soft Systems Thinking

Setting out in 1998 to explore how PM practice could benefit from engagement with a soft systems approach, our first question was the methodology, or mixture of methodologies, to use (for example Jackson, 1997; Midgley, 1997; Mingers, 1997; Mingers and Brocklesby, 1997). The ARC / SPIRT application had been made with particular reference to the SSM developed by Professor Peter Checkland and colleagues (Costello, 1998, *Personal Research Papers* Vol.1), one approach, albeit an influential one (Midgley, 2000, p. 35; Paucar-Caceres, 2003, p. 66), in the diverse systems thinking field (Figure 1.9).

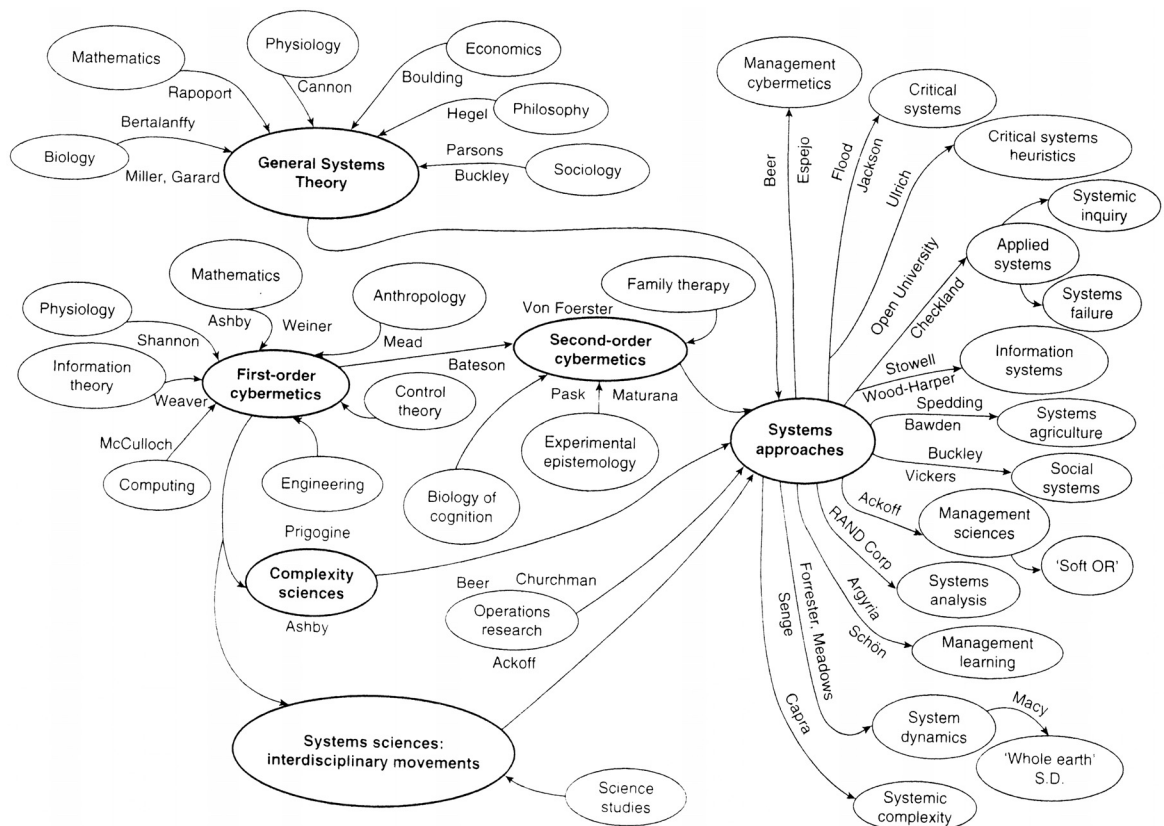


FIGURE 1.9: A model of different influences that have shaped contemporary systems approaches (Ison, 2008, p. 145).

Systems thinking offered a range of theoretical frameworks for modelling approaches to complex organisational interventions (Jackson, 2000; Bennetts et al., 2000) and development of systems-based methodologies had made a major contribution to management practice (Figure 1.10). As observed by Midgley (2003, Volume 1, p. xviv), however, “different systems paradigms embrace significantly different stories about what constitutes systems thinking”.

We had found some literature on SSM use in UK police services (Ellis and Green, 1996), however, this related to problem definition (Crawford, 1998, p. 3). In other areas, particularly the UK NHS, SSM had been applied in dealing with complex and contested environments (Checkland and Scholes, 1990; Checkland and Holwell, 1993; Hindle et al., 1995; Lehane and Paul, 1996; Burgoyne et al., 1997; Checkland, 1997; Rose, 1997). NHS practice guides citing Checkland include Iles and Sutherland (2001) and Speller and Kelly (2003). Within the PM field, by 1998 there were some 20 articles citing Checkland’s published work. In one, Yeo (1993) argued a case for reuniting PM practice with the extended body of knowledge in systems thinking, particularly soft systems thinking, “to offer new perspectives on how to improve project managers’ creative problem-solving capabilities” (Yeo, 1993, pp. 112-113).

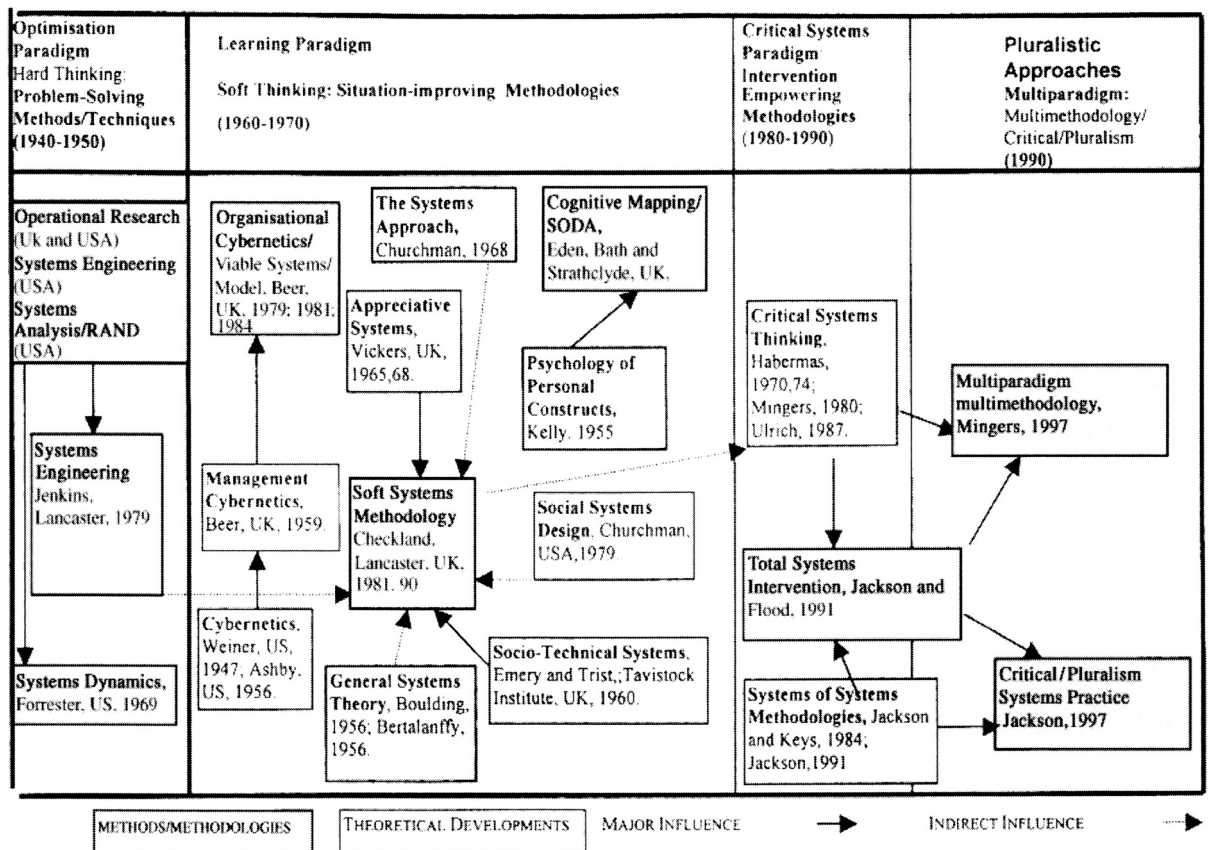


FIGURE 1.10: Development of major management science methodologies in the UK 1940-90 (Pauca-Caceres, 2003, p. 67)

Having begun with Checkland and colleagues in 1998, my research approach would remain grounded in SSM. As Checkland and Holwell (2004, p. 46) point out, however, distinguishing between hard and soft systems thinking on the basis of appropriateness for different situations “tells us nothing about the difference between them and how they relate to each other”. Checkland and Holwell (2004) refer to the inevitable relation between the two kinds of thinking which follows from their definition, including the assumptions made (Table 1.4). Midgley (2000, p. 310), noting that mixing methods was central in most of his interventions, felt in some cases it was appropriate to draw upon just one source.

Hard systems thinking	Soft systems thinking
○ Oriented to goal seeking.	○ Oriented to learning.
○ Assumes the world contains systems that can be “engineered”.	○ Assumes that the world is problematical but can be explored using systems models of concepts of purposeful activity to define “action to improve”.
○ Assumes systems models to be models of (part of) the world (<i>ontologies</i>).	○ Assumes systems models to be devices: intellectual constructs to help debate (<i>epistemologies</i>).
○ Takes the language of “problems” and “solutions”.	○ Takes the language of “issues” and “accommodations”.
○ Philosophically: positivistic.	○ Philosophically: phenomenological.

Hard systems thinking	Soft systems thinking
○ Sociologically: functionalist.	○ Sociologically: interpretive.
○ Systemicity: lies in the world.	○ Systemicity: lies in the process of inquiry into the world.
○ Advantages: allows the use of powerful techniques	○ Advantages: is available to all stakeholders including professional practitioners; keeps in touch with the human content of the problem situations.
○ Disadvantages: may lose touch with aspects beyond the logic of the problem situation.	○ Disadvantages: does not produce the final answers; accepts that inquiry is never-ending.

TABLE 1.4: Hard and soft systems thinking compared. After Checkland, 1985 (Checkland and Holwell, 2004, p. 56 and Ison, 2008, p. 146).

1.2.3 Engaging with Project Management and Soft Systems Methodology

Experience with the Soft Systems for Soft Projects collaboration brought into sharp focus problems in PM theory and practice in complex public sector contexts. At a fundamental level, we had to shift our mind set to accommodate both hard (command and control) and soft (socially constructed sense-making and learning) thinking as indicated in Figure 1.11 (Costello et al., 2002a and 2002b; Crawford et al., 2003).

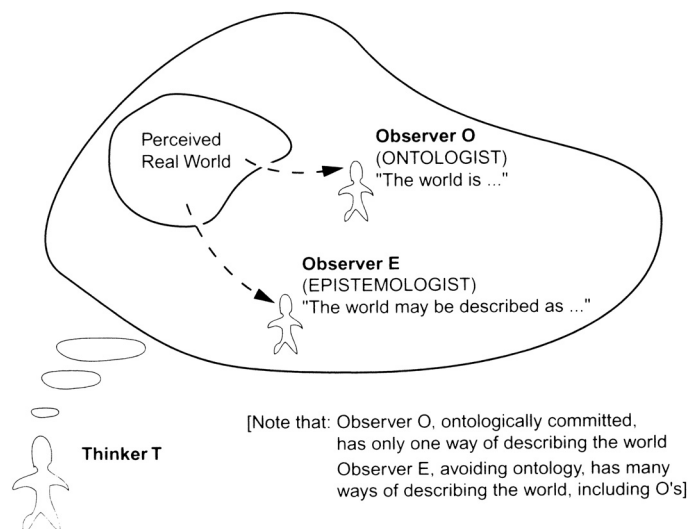


FIGURE 1.11: Thinking about the perceived world. “System” is seen by Observer O as a name for (parts) of the real world and by Observer E as a useful intellectual device to help structure discussion, debate and argument about the real world (Checkland and Holwell, 2004, p. 57)

Initially, the hard and soft distinction we adopted was developed from Turner and Cochrane’s (1993) framework in Figure 1.12, although they had not used the term hard or soft in their paper. We pragmatically combined their model with elements from other models particularly Obeng (1994), and equated their Type 4 projects with soft, as depicted in Figure 1.13. Our interpretation would represent a major challenge to views about hard and soft in PM (Crawford and Pollack, 2004; Pollack, 2007). From the

affiliation's perspective, it would enable location of soft projects within a context which could potentially connect with the dominant PM discourse (Hodgson, 2002; Fernie et al., 2003; Clegg and Courpasson, 2004; Williams, 2005; Winter et al., 2006a and 2006b; Maylor et al., 2006; Morris et al., 2006a; Bresnen, 2006; Cicmil and Hodgson, 2006; Hodgson and Cicmil, 2007). Furthermore, it would distinguish soft as applied to projects from gendered interpretations, for example Buckle and Thomas (2003) and Andersen and Jessen (2003). In a list of illustrative errors and misunderstandings from secondary SSM literature, Holwell (2000, p. 782) included under legacy notions, hard as a practical and soft as an emotional perspective.

FIGURE 1.12: Goals and methods matrix (Turner and Cochrane, 1993, p. 95).

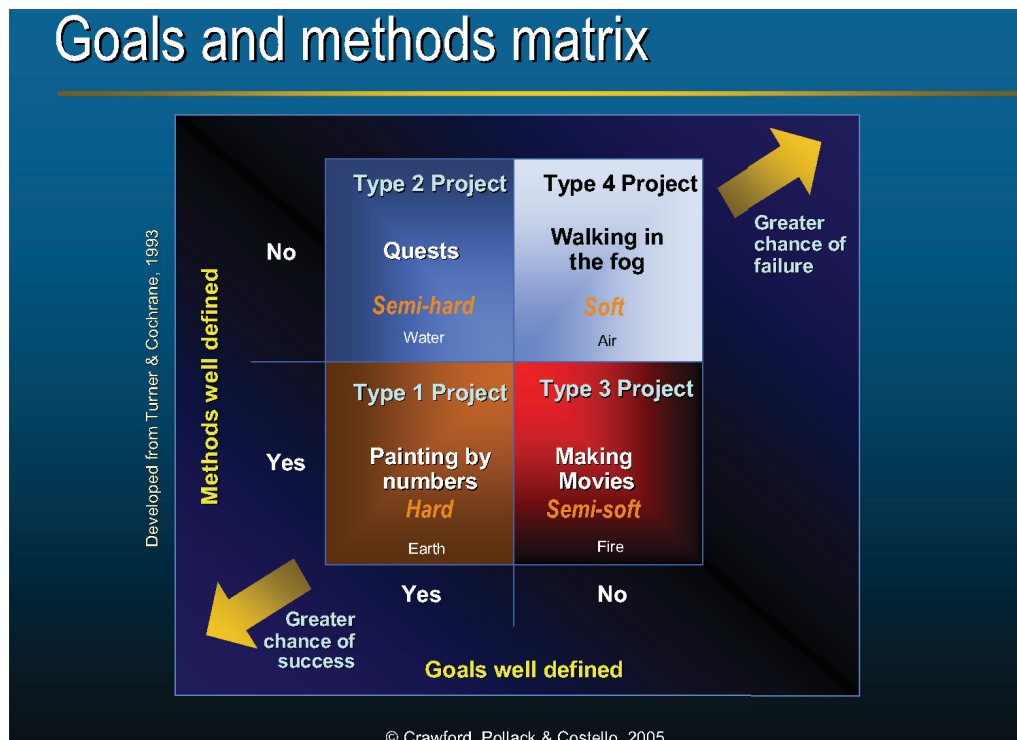
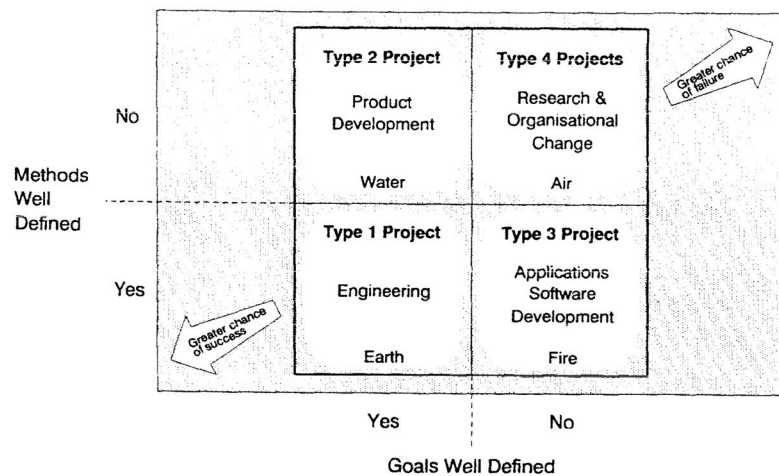


FIGURE 1.13: Goals and methods matrix as interpreted by the practitioner-researcher affiliation (Crawford and Costello, 2002, *International Federation of Operational Research Societies (IFORS) Presentation*; included in Crawford, Pollack and Costello, 2005, *Australian and New Zealand Systems Society (ANZSYS) Presentation*).

Our categorisation in Figure 1.13 raised both practice and research issues. First, there were two other categories, semi-hard and semi-soft, which raised the question of how varying types and degrees of softness in projects may sit within the hard and soft paradigms as indicated in Table 1.5 when applied in practice. Further, having located PM practice within hard and soft paradigms, affiliation members carried this assumption about the division into our research approaches. On the distinction, Checkland (2000a, p. S17) said “it is a slippery concept which most people find it very hard to grasp; or grasped one week is gone the next”, a condition he attributed to the way we use system in everyday language.

	Hard OR	Soft OR
Methodology used	Based on common sense, taken-for-granted views of analysis and intervention.	Based on rigorous epistemology.
Models	Shared representations of the real world.	Representation of concepts relevant to the real world
Validity	Repeatable and comparable with the real world in some sense.	Defensibly coherent, logically consistent, plausible.
Data	From a source that is defensibly there in the world, with an agreed or shared meaning, observer-independent.	Based on judgment, opinion, some ambiguity, observer-dependent
Values and outcome of the study	Quantification assumed to be possible and desirable. From option comparison based on rational choice.	Agreement (on action?) shared perceptions. Informing action and learning.
Purpose of the study	For the study: taken as given at the start. For the model: understanding or changing the world, linked to the purpose.	For the study: remains problematical. For the model: a means to support learning.

TABLE 1.5: Practical aspects of hard and soft Operational Research (Pidd, 2004, p. 10).

Secondly, application of our model in Figure 1.13 was within the context of my case studies. Some agencies, for example police services, may be assumed to have discernable organisational cultures and hence one discursive space (Leishman et al., 2000; Vickers, 2000; Vickers and Kouzmin, 2001; Karp, 2008) although this has been subject to challenge (Prenzler, 1997; Fleming and Lafferty, 2000; Mead, 2002; Davies and Thomas, 2003; Bradley et al., 2006; Wood et al., 2006; Gordon et al., 2009b). Others, typified by health services, may comprise many discursive spaces with multiple and often incongruous discourses where organisational meaning is being created. Iedema (2003, p. 1) refers to these as “organisational lines of force”. Public servants implementing project and program management face organisational contexts “marked by agency demarcations, overlapping jurisdictional responsibilities, and public accountability within an environment of fierce political contest and public scrutiny”

(Shergold, 2006, p. 2). For these agencies, PM “is not just a matter of planning, designing and delivery. It is not something that can be set down neatly on a Gantt chart. Implementation is necessarily a learning process”.

1.2.4 Engaging with organisational concepts and processes

Affiliation members’ experience applying PM best practice in NSW public sector agencies would lead us to search for a different concept of organisation and organisational processes, especially as applying to project-based work under New Public Management (NPM) and beyond (Phillips and Hardy, 2002; Iedema, 2003; Clegg and Courpasson, 2004; Hodgson, 2004; Josserrand et al., 2006; Budd, 2007; Pollitt, 2009). Within this thesis, I have used the Project Management Institute’s (PMI) *PMBOK® Guide* (2000 and 2004), described as one of the most influential publications on what constitutes the knowledge base of the profession (Morris et al., 2006b, p. 461), as the exemplar of “traditional” PM best practice. It is reported to be the most widely distributed of the PM bodies of knowledge and standards (Figure 1.14).

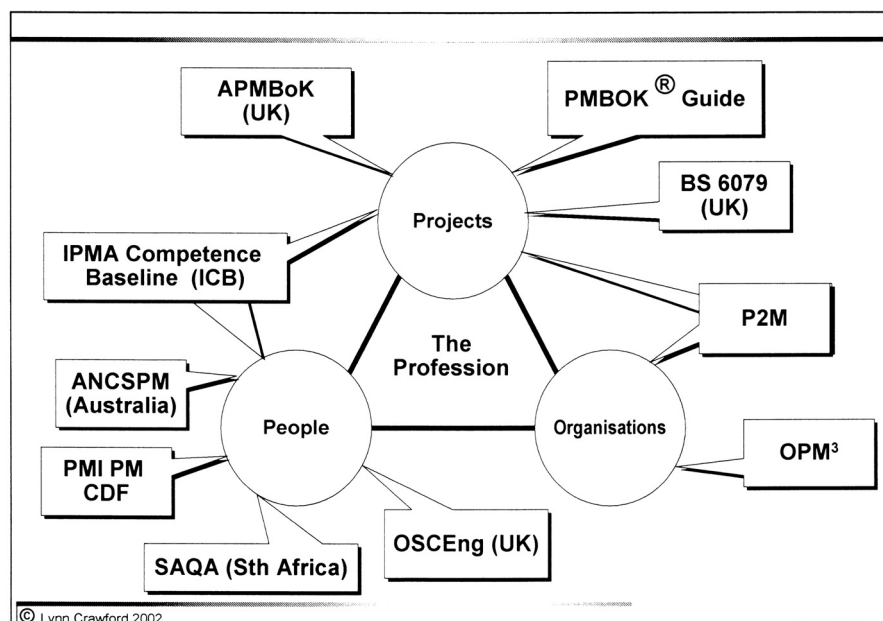


FIGURE 1.14: Summary of available standards that focus on projects, people and organizations (Crawford initial copyright 2002, reproduced in Crawford, 2007, p. 246, also refer Crawford and Pollack, 2008, p. 75)

As Crawford and Pollack (2008, p. 75) note, while “the PMBOK® Guide focuses on projects, not people or organisations, it is often considered a de facto standard for the profession as a whole, based on its overall market dominance”, a point confirmed by other authors including Morris (2003), Reich and Wee (2006) and Hodgson and Cicmil,

(2007). While I found no published material on PM methodologies in use in the NSW public sector, a 2008 review of the Australian Government’s use of Information and Communications Technology (ICT) reported the *PMBOK® Guide* as one of the main PM methodologies used for managing ICT projects (Gershon, 2008, p. 16). Also, *PMBOK® Guide* content was included in the PM course provided by the Institute of Public Administration Australia, NSW Division (2009, p. 35 at www.nsw.ipaa.org.au).

Three pragmatic reasons, however, decided my choice when designing my inquiry. First, the *PMBOK® Guide* was one of the PM approaches NSW Police was using when the Soft Systems for Soft Projects collaboration began. Secondly, submitting the RFS reform program for consideration for an award by the Australian Institute of Project Management required demonstration that all nine units of the Australian National Competency Standards for PM, equivalent to the nine knowledge areas in the *PMBOK® Guide*, had been met (Costello et al., 2002a). Thirdly, my HPRB practitioner-researcher colleague had used the 2000 version of the *PMBOK® Guide* in establishing the “traditional position of PM as a field” (Pollack, 2005, pp.104-105).

Within the *PMBOK® Guide* (PMI, 2004) the basic concept of organisation is of a structure, as indicated in Table 1.6. Two categories are distinguished according to whether or not their operations consist primarily of projects (PMI, 2004, p. 27). The attributes of non-project based organisations are briefly noted, including absence of project-oriented systems. The *PMBOK® Guide* advises that “the project management team should be aware how its organization’s structure and systems affect the project” (PMI, 2004, p. 27).

Organization Structure Project Characteristics	Functional	Matrix			Projectized
		Weak Matrix	Balanced Matrix	Strong Matrix	
Project Manager's Authority	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Resource Availability	Little or None	Limited	Low to Moderate	Moderate to High	High to Almost Total
Who controls the project budget	Functional Manager	Functional Manager	Mixed	Project Manager	Project Manager
Project Manager's Role	Part-time	Part-time	Full-time	Full-time	Full-time
Project Management Administrative Staff	Part-time	Part-time	Part-time	Full-time	Full-time

TABLE 1.6: Organisational structure influences on projects (The *PMBOK® Guide*, Project Management Institute, 2000, p. 19; 2004, p. 28; 2008, p. 28)

The *Government Extension to the PMBOK® Guide Third Edition* (PMI, 2006, p. 5) does refer to unique characteristics distinguishing government from private sector projects, for example, relating to budgeting, governance, record keeping and communication. The PM knowledge and practices are, however, with only some modifications, those set out in the *PMBOK® Guide*.

NSW public sector agencies are not project-based organisations in the *PMBOK® Guide* sense. While they are funded on an agency, program or portfolio basis, the latter two are terms with specific meanings as indicated in the NSW Treasury *Budget Paper No.3* (2005-06). Over the time of my research inquiry these agencies were continuously subjected to ongoing reform (e.g. NSW Premier's Department, 2001b, and NSW Government Premier's Department, 2006) and to internal restructuring.

The Soft Systems for Soft Projects research thread had looked beyond the dominant hard PM ontology, as represented by the *PMBOK® Guide*, with its worldview of command and control and conceptions of organisation from a rational-linear perspective (Bresnen, 2006, p. 73), which leads us to talk and think about organisation structure in an objectified manner. As noted by Linehan and Kavanagh (2006, pp. 52-53), PM descriptions "privilege static accounts of group structuring". Models of organisations from other traditions (Brown and Eisenhardt, 1997; Weick and Quinn, 1999), however, suggested organisations (public and private) are always in flux (David Lewin, 2009, p. 135) and not operating in a stable state as traditionally assumed (as for example attributed to Kurt Lewin, albeit challenged in Burnes, 2004, p. 996).

Although the ARC / SPIRT application had been made with reference to SSM as presented in Checkland (1981) and Checkland and Scholes (1990), the practitioner-researchers found Checkland and Holwell (1998b) offered a richer concept of organisation. This provided a soft interpretive stance to be set alongside the hard goal-seeking machine model of organization (Checkland and Holwell, 1998b, pp. 68-71). They conceptualise action as managing a multiple and changing set of relationships rather than taking rational decisions to achieve goals. Differences between this richer model and conventional models (Checkland and Holwell, 1998b, p. 83) are summarised as between: consensus and accommodations; taking decisions and managing relationships; pursuing goals and seeking desirable / eluding undesirable relationships; and unthinking reification and conscious reification. Synthesis of Checkland and Holwell's arguments led to the 'processes for organization meanings' (POM) model (Figure 1.15).

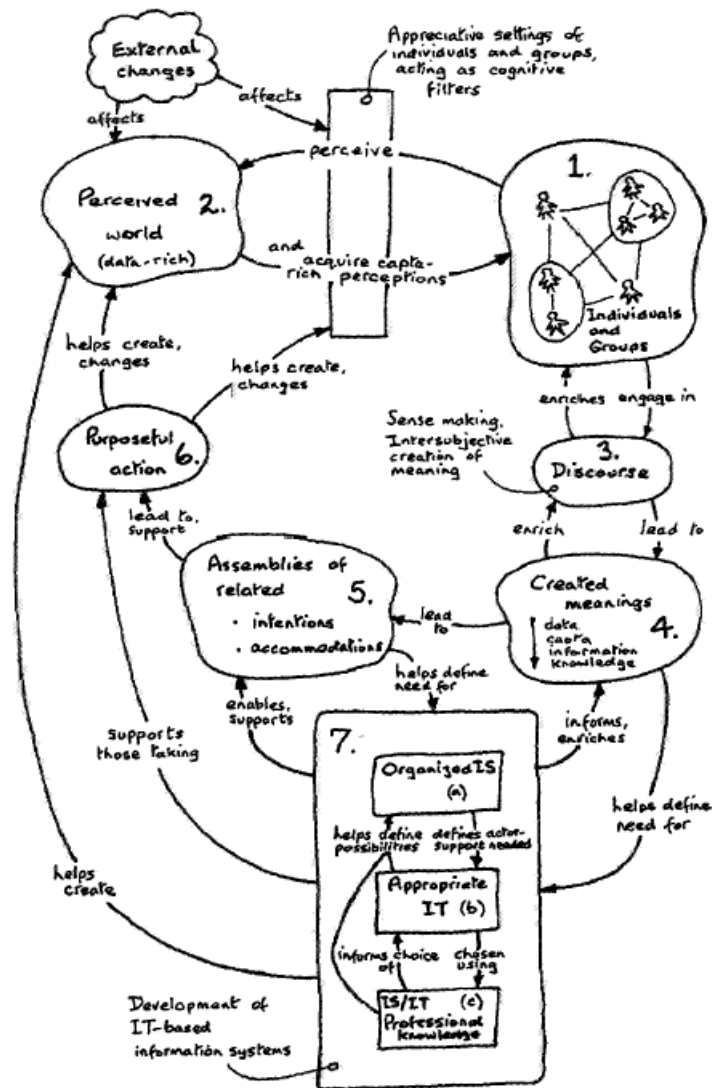


FIGURE 1.15: The “processes for organization meanings” (POM) model (Checkland and Holwell, 1998b, p. 106).

Checkland and Holwell (1998b, p. 204) refer to the POM model as “an account of the holistic process in which people form intentions in line with their perceptions of the world and take purposeful action to realise those intentions supported by relevant information and knowledge”. Elements 1-5 relate to the organisational context in which people create meanings and intentions that lead to purposeful action (element 6). Element 7 relates to information support. The model is viewed as cyclic, with pathways linking all of the elements. Organisational discourse, element 3, is:

...the arena in which meaning is created inter-subjectively, leading to the attributions of meaning which yield information and knowledge, element 4. This is a very complex social process in which persuasion and/or coercion is attempted and battles are fought and scores settled – the whole process embodying politics as well as, perhaps, rational instrumental decision making (Checkland and Holwell 1998b, p. 105).

1.2.5 Recovering lessons learned

Project-based learning has been recognised as a subset of organisational learning (Keegan and Turner, 2001). Within the PM literature, learning and knowledge creation in the context of organisational change is considered a complex and dynamic process (Cook and Seely Brown, 1999; Thiry, 2002; Bresnen et al., 2003; Turner and Keegan, 2004) wherein project personnel gain knowledge through experiential learning (Turner et al., 2000; Ayas and Zenuik, 2001) that can be difficult in project-based organisations (Sense, 2004; van Donk and Riezebos, 2005; Adenfelt and Lagerstrom, 2006).

However, we had found little in the PM literature explicitly addressing the processes by which individual knowledge translates into learning at the organisational level and how that knowledge may be transferred to other organisations (Pollack et al., 2006).

As observed by Morris (2004), work in project-based organisations has largely concentrated on process good practices, many directed at improving project performance. Figure 1.16 is an example of opportunities for project-based learning within the process of the project life cycle, including project reviews and gate reviews.

Opportunities for Project Based Learning

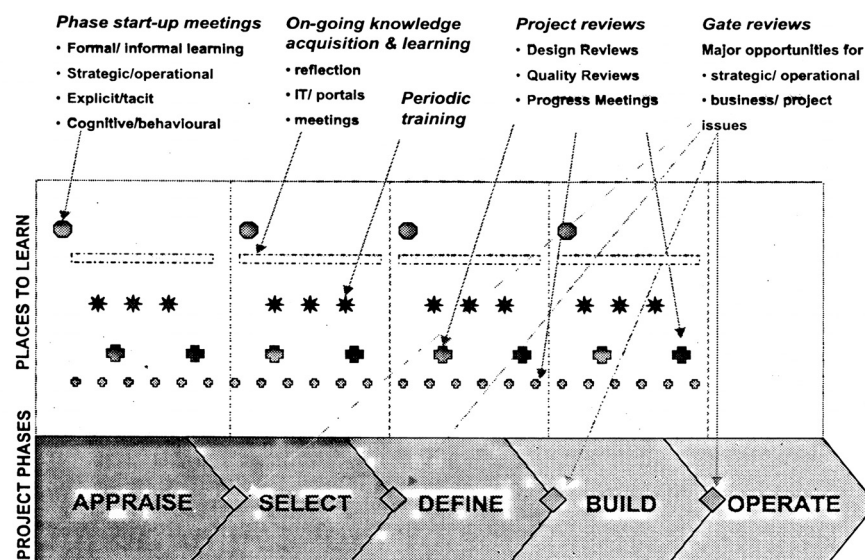


FIGURE 1.16: Project-based learning opportunities within the process of the project life cycle (Morris and Loch, 2002, p. 12). This charts a progressive move from strategic / institutional issues in the early phases to more operational ones in the later phases.

According to Morris and Loch (2002, p. 1), “it is generally rare for project lessons to be reviewed during the progress of the project; there is too often inadequate review of the project on completion; and only infrequently are attempts made to utilize such insights elsewhere in organisations”. Their observation is consistent with Crawford and Cooke-

Davies (2000) who reported a falling-off in transferring lessons learned with each step in over 50 major organisations in global knowledge networks.

The *PMBOK® Guide* (PMI, 2000, p. 202) does not expand on the process, defining lessons learned as the “learning gained from the process of performing the project. Lessons learned may be identified at any point. Also considered a project record”. Lessons learned are included under outputs to a number of the 39 project processes under five process groups and nine knowledge areas. The processes can be assumed to be well defined, have unambiguous objectives and be amenable to quantitative measurement (Cicmil and Hodgson, 2006). Later editions (PMI, 2004, p. 363; 2008, p. 429) refer to “a project record, to be included in the lessons learned knowledge base”. This is defined as a “store of historical information and lessons learned about the outcomes of previous project selection decisions and previous project performance”.

Engaging with SSM, by contrast, offers a “consciously constructed learning system to explore the complexity of real world action” (Checkland and Holwell, 2004, p. 52). Centred on the concept of the adaptive whole (Atkinson and Checkland, 1988), its learning strategy proceeds through iterative modelling, the models being concepts that help structure thinking not real world representations. The form of SSM varies in use (Holwell, 2000) reflecting the circumstances in which it has been applied (Mingers and Taylor, 1992; Ledington and Donaldson, 1997; Mingers, 2000; Paucar-Caceres, 2003; van de Water et al., 2007), for example in the NHS as in Figure 1.17.

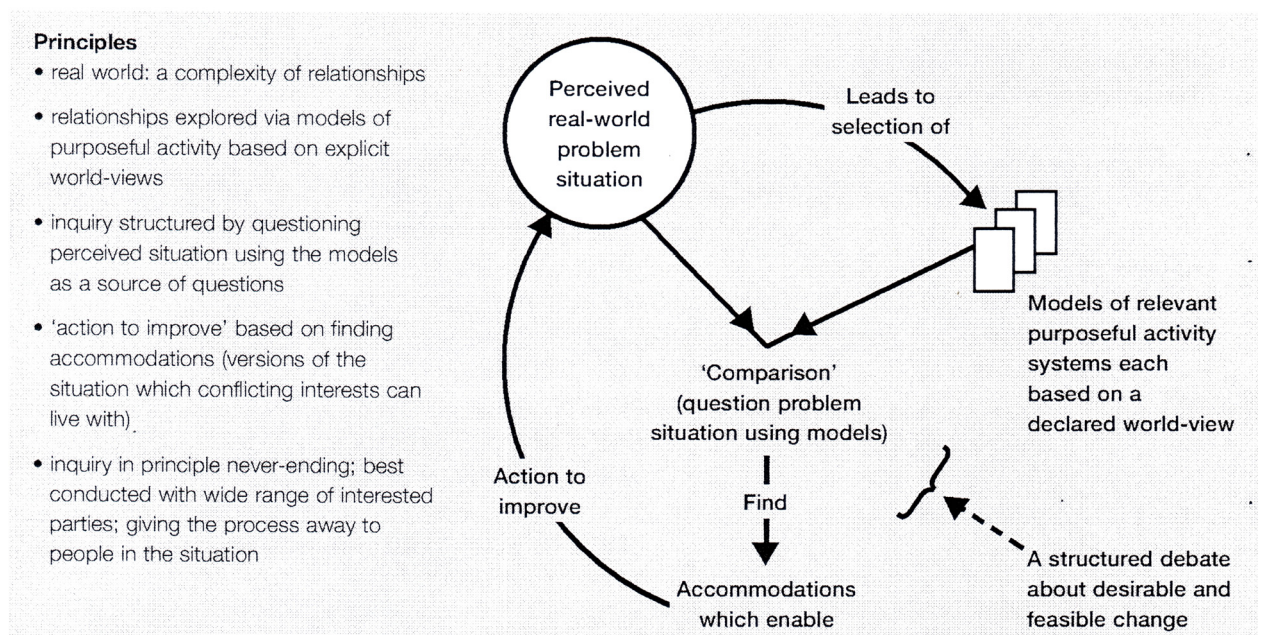


FIGURE 1.17: The inquiring / learning cycle of Soft Systems Methodology, from Checkland and Scholes (1990), in Iles and Sutherland (2001, p. 34) guide to *Managing Change in the NHS*.

1.3 Designing the Research Inquiry

From the Soft Systems for Soft Projects collaboration, affiliation members found SSM a relevant and useful approach to apply to the complex PM issues in the developing the PMIS (Costello et al., 2002a; Crawford and Costello, 2000; Pollack et al., 2006). Proceeding to research these experiences over time through an AR methodology (Pollack et al., 2006) required involvement in the PM problem situations and a “readiness to use the experience itself as a research object about which lessons can be learned by conscious reflection” (Checkland and Scholes, 1990, p. 16).

1.3.1 Practitioner-researcher role and voice

Unlike the positivist researcher, who is arguably deemed independent of what is being researched (Johnstone, 2004, p. 261; Orlikowski and Baroudi, 1991; Fitzgerald and Howcroft, 1998; Morris, 2002; Patton, 2002; Jorgensen and Phillips, 2002; Mingers, 2003; Bredillet, 2004; Hay, 2004; Brannick and Coghlan, 2007), I had been engaging as a practitioner, researcher and a practitioner-research student within the case study agencies that would be the subject of my thesis throughout the period of study. Early on, therefore, I decided to write parts of my thesis “in the personal and relatively informal voice of a naturalistic researcher, rather than the formal, impersonal voice that characterizes logical, positivist research reports” (Johnstone, 2004, p. 262; Winter, 1998; Brearley, 2000; Grundy et al., 2003; Leigh, 2003). Accordingly, I was regularly reviewing the epistemological and methodological implications of my approach (Hanrahan et al., 1999; Patton, 2002; Jorgensen and Phillips, 2002).

Deciding to write in a personal voice raised another issue, the degree of my engagement with the text (Rolfesen et al., 2007). There was also the question of the authority of the account I could give as one participant in the practice being constructed by the affiliation (Ragsdell, 1998; Kemmis and McTaggart, 2000; Finlay and Gough, 2003; Sankaran et al., 2007; Alvesson et al., 2008). Raelin and Coghlan (2006, p. 679) refer to three voices through which managers can participate and inquire into their experience and which can shape their thinking about how they develop as learners and researchers:

Through first person inquiry and/or practice, they can reflect on themselves, on their own values and assumptions, and on how they behave. Through second person inquiry and/or practice, they can engage with inquiry with others on issues of mutual concern and can work to create a community of action and inquiry. Using the second-person voice,

they are better prepared to manage change while in the middle of it. Through third-person inquiry and/or practice, they can move beyond immediate first- and second-person audiences to the impersonal wider community and contribute to the body of actionable knowledge.

Subsequently elaborating on these “voices” in the context of reflective action research, Marshall (2011, p. 245) says that these are not discrete research threads. Instead, “they represent multiple simultaneous attentions, potentially fleeting, scanned and glimpsed in action, challenging to reflect in writing”. As explained (Marshall, 2011, p. 2466), the reflexive qualitative researcher “engages in first-person inquiry as they pay attention to themselves in action and interpretation”. Also, as a member of the affiliation I would be engaging in “second-person” inquiry into issues of mutual interest. As Marshall observes (2011, p. 246), collaborative forms of inquiry are often “nested in other activity patterns within an organizational or social setting”. In her view, writing is “third-person” inquiry if it seeks to generate debate and may be characterised as a form of “capacity-building” if there is an aim of stimulating a broader sensibility of inquiry among participants in a wider community such as an organisation. The challenge is to achieve the required scale of involvement and impact.

How I endeavoured to observe reflective / reflexive practices (for example as in Rose, 2000; Freshwater and Rolfe, 2001; Jorgensen and Phillips, 2002; Sanderson, 2002; Alvesson et al., 2004; Phelps, 2005; Clegg and Hardy, 2006; Mann and Clarke, 2007; Midgley et al, 2007; Mutch, 2007; Stuttford and Coe, 2007; Alvesson et al., 2008; Walker et al., 2008a) is developed throughout the thesis. Self-reflection on my role as an actor and sense-maker within the scope of my practice and research became a critical part of my engagement. This encompassed looking at managing learning and work from a number of perspectives (for example Dilworth, 1996; Kerosuo and Engstrom, 2003; Kuhn and Marsick, 2005; Sense, 2005; Somerville et al., 2006; Halford and Leonard, 2006) and dealing with inter-organisational settings (for example Williams, 2002a; Fernie et al., 2003; Coughlan and Coughlan, 2004; Jensen et al., 2006; Checkland and Holwell, 2006). Also, I would be complying with public sector accountability requirements and values (for example Horrigan, 2000; Carr, 2003; Cameron, 2004; Maesschalck, 2004; Lawton, 2005; Pasquier and Villeneuve, 2007; Briggs, 2009).

At the outset, I decided to use, to the greatest possible extent, research and practice material that was published / accessible in the public domain. By 2006, there were

some 27 published research outputs by the affiliation (APPENDIX 1) that included some aspect of the thread that began with the Soft Systems for Soft Projects collaboration. Also, there was relevant contextual material in government reports and journal articles. One exception was the *HPRB Information Systems and Information Technology Strategic Plan (2002; 2006)* which I obtained formal permission to use. Also, I was given permission to use for the purposes of my research documentary material generated during trial of the PMIS in HPRB as well as my personal *Coaching and Performance System (CAPS) Agreement*. Other exceptions, while observing appropriate ethical considerations were: where journals / unpublished material I had been writing in my various practitioner-researcher capacities between 1998-2006 and could clarify an aspect in the published material; where I could use my personal journals to critically reflect on my own practice as an active human agent in the situation (Checkland and Holwell, 2006, p. 65), or where a colleague practitioner-researcher gave permission for material produced during our collaborations to be included.

1.3.2 Initial research plan

My research plan comprised looking back to reflect on lessons learned from previous action engagements as a practitioner-researcher / research student while concurrently endeavouring to apply a SSM sense-making model in an emerging area of PM practice. I would be seeking to determine what difference affiliation members' past project engagements had made and what contribution they could potentially make to my approach in my new practice domain.

My research hypothesis was that the conceptual underpinnings of SSM could be effectively applied to guide application of PM practice in ISD support for organisational change projects in dynamic and complex environments such as the NSW Public Sector. Initially, I proposed to test this by building, applying and evaluating a model, founded on SSM concepts as distinguished from a modelling-based view of PM as having "well-defined foundations posing precise well-defined problems" (Williams, 2003a, p. 1) and the Systems Dynamics PM models coming out of the work of Eden and Ackermann and colleagues (Eden, 1994; Eden and Ackermann, 2000; Ackermann and Eden, 2001; Howick and Eden, 2001; Williams, 2002b; Morton et al., 2003; Howick et al., 2004; Williams et al., 2005). As initially formulated, my research questions were:

- Can SSM, in particular the POM model provide an effective framework to capture knowledge about lessons learned from previous research about engaging with soft projects?
- How does the outcome compare with standard project management lessons learned frameworks?
- What recovered knowledge can be transferred to further develop an interpretive project-shaping model previously applied in NSW public sector agencies?
- How can the enhanced model be used to guide (communicate knowledge about) project shaping in the electronic workspace at the Health Professionals Registration Boards?

Subsequently, with a change in my practice context, my inquiry focus shifted to the organisational level. As elaborated in Chapter 4, following Holwell (2004) I would reframe my inquiry according to research themes for taking relevant action (Table 4.2): conceptual models; lessons transfer; and practical guidance.

1.4 Setting the Research Scope

Framing a research journey involves “matching goals and strategies, understanding paradigms, addressing the issue of credibility by embedding the research in methodological understanding, and creating a coherent research framework” (Higgs 2001, p. 47). While the theory and practice dimensions of my PM practitioner-researcher role were equally important, indeed both theory and practice are essential for a discipline to develop (Checkland, 1985; Midgley, 2000; Johnston, 2000; Fitzgerald, 2001; Soderlund, 2004a; Bredillet, 2004; Winter and Smith, 2006; Turner, 2006a-d; Sauer and Reich, 2007), my decision to lead with the “primacy of practice” (Ulrich, 2001, p. 10) was influenced by my understanding of PM as an applied discipline.

Applied disciplines use knowledge from well-established source disciplines (Avison and Myers, 1995; Jackson, 1999; Moody and Buist, 1999; Mingers, 2001; Morris, 2002; Lowry et al., 2004; Barton and Tusting, 2005; Wade et al., 2006). In this respect, I found similarities between PM and literature from the Information Systems field (Baskerville and Wood-Harper, 1998; Rose, 2000; Adam and Fitzgerald, 2000; Baskerville and Meyers, 2002; Chen and Hirschheim, 2004; Lee et al., 2004; Avison and Elliot, 2006; Gregor, 2006; Hirschheim and Klein, 2006). Also, I found this to be

the case with PA (Stivers, 2000b). PM was not, however, through its neglect of political, social and ethical dimensions (Hodgson and Cicmil, 2007), as encompassing as the vast and heterogeneous range of paradigms, schools of thought, theories, narratives and guiding ideas in PA (Abel and Sementelli, 2002).

Also influencing me were changes being reported in the nature of work and workplace learning, their implications for understanding connections between research and practice and the pragmatic nature of the actionable knowledge produced (Jarvis, 1999; Casey, 1999; Boud and Middleton, 2003; Engestrom, 2004; Sense, 2004; Fuller et al., 2005; Coghlan, 2007). Practical knowledge is the practitioner's own knowledge that has been legitimated in practice (Jarvis, 1999, p. 46), albeit in the philosophical sense of praxis (practical discourse), a term expressed in different ways in different eras and in different contexts (for example Bawden and Packham, 1993; Johnston, 2000; Zuber-Skerritt, 2001; Ulrich, 2001; McIntyre, 2004; Connor, 2004; Kilpatrick, 2008). Within the context of PM, Cicmil et al., (2006, p. 678) saw praxis as "a form of action which is fundamentally contingent on context-dependent judgement and situational ethics".

Figure 1.18 is my initial conception of the scope of my research inquiry. I would be charting the affiliation's experience with the aim of establishing how far it was possible to capture lessons from past project engagements and apply them to guide emerging practice in a new context where the PMIS was being deployed. As noted by Partington (1996, p.13), referring to research into project organisations, there was little research "into the detailed *model* or *system* of project management being used in a particular situation and how the particular model came into existence...the...framework of analysis tends to bypass the question of whether the model being used on a particular project is appropriate". In particular, I would be seeking to:

- Promote an interest in the dynamics / alignment of cross-project learning within and between NSW public sector agencies that would entail engaging with interpretive (soft) sense-making models.
- Contribute to the development of the practitioner-researcher affiliation's (community's) learning transfer approach which could, nevertheless, be aligned with NSW public sector agency PM policies and practices.
- Develop an inquiry and explanation building process appropriate for the context which would incorporate a systemic / systematic review and an interpretive research approach involving AR / AL.

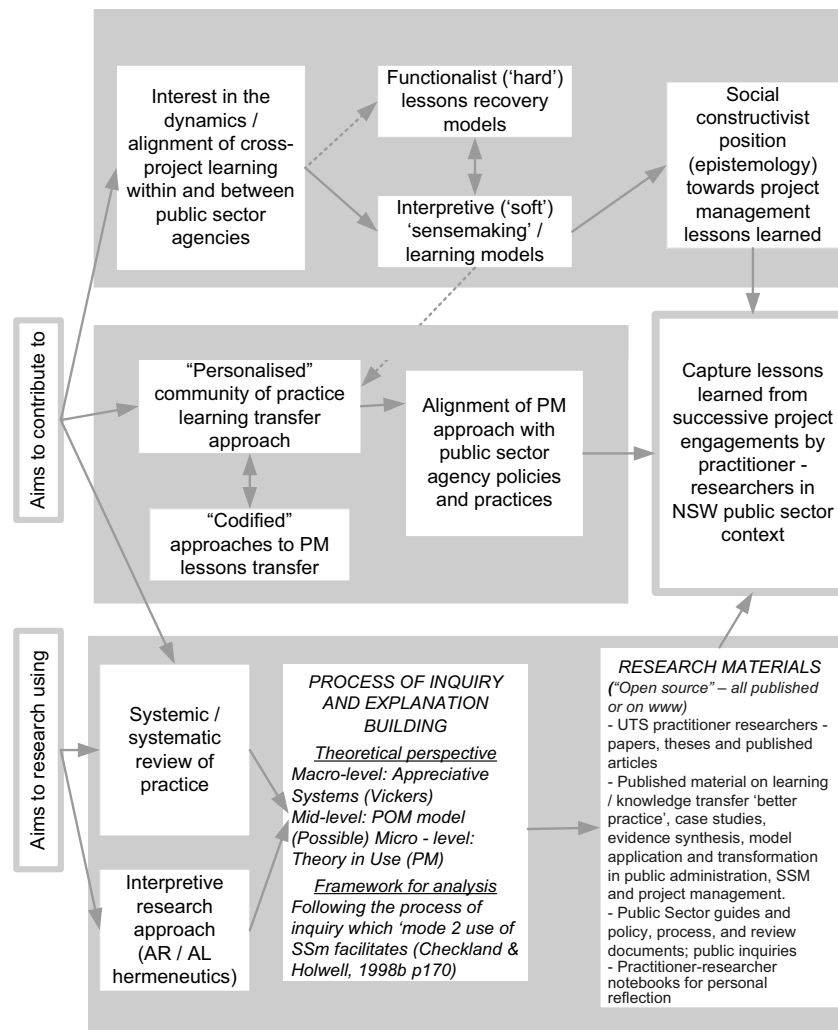


FIGURE 1.18: Map of proposed practice / research (with acknowledgement to Venters, 2003, p. 26 for the concept for the structure of the diagram).

1.5 Thesis Chapters Outline

Chapter 1 has provided a high-level perspective on my PM practice / research context in the NSW Public Sector. It encompassed the scope of PM action within my three case study agencies as a member of a practitioner-researcher affiliation, the conceptual underpinnings of my approach and an outline of my planned inquiry process for looking back to recover lessons learned from past engagements and then apply them to my emerging area of practice / research.

Chapter 2 reviews significant threads in literature informing our developing discourse on the potential of PM and the SSM of Professor Peter Checkland and colleagues to inform our approach to practice and research. Within the PM literature, I found a consistent albeit fragmented engagement with SSM extending over two decades but little on-going dialogue about its assumptions and concepts and issues with its

implementation in practice. In particular, I consider Checkland and Holwell's (1998b) 'processes for organization meanings' (POM) model, in the context of development of a project management information system (PMIS) in my case study agencies.

Chapter 3 reviews literature on general public and local domain specific discourses, particularly concerning NPM and Government reforms and their implementation which were setting the contextual rules of the game for my practice and research engagement at HPRB. Emerging public sector management approaches were looking to apply PM to the transition from policy / recommendations for reform into service delivery. The literature encompassed NSW Public Sector policies and practices for recovering PM lessons learned / knowledge at organisational, project team and individual practitioner level. Generally, I found these to be prescriptive whereas our affiliation's experience that began with the Soft Systems for Soft Projects collaboration had found no "one size fits all" answers

Chapter 4 positions the elements of my research approach towards eliciting "situation-driven" ("Mode 2") management knowledge as an insider practitioner-researcher in an agency participating in a major public sector e-business project. Carrying forward the affiliation's experience, I would be aiming to juxtapose other perspectives, which a reflexive researcher uses to address limitations in a single frame of reference, against traditional control notions of PM to tackle the emerging problems and puzzles of my practice context. Appreciating the dynamics of my situation, I conceptualise the outcome as a "bricolage" – a complex, dense, reflexive, collage-like creation representing the researcher's images, understandings and interpretations of the situation under analysis.

Chapter 5 frames the process of my research approach within Checkland and colleagues' FMA model, the elements of which can be thought of as applying to any piece of research (Checkland and Holwell, 1998b, pp. 23-24). My Framework of ideas (appreciative systems, the POM model as praxis and hermeneutics) and Methodology (reflexive practice, the POM model and Action Learning) would be applied to an Area of concern (recovering lessons learned and public sector PM guides) to produce an emergent, interpretive construction ('bricolage') for addressing a dynamic / "messy" *problematique*. This would be a process of sense-making and explication, constructed through analysing ("reading") documents in the public domain through a model I had developed for exploring the actions, texts and discourses that were setting the scope of my PM action, rather than hypothesis testing.

Chapter 6 examines the Soft Systems for Soft Projects collaboration between the NSW Police Service and UTS PM researchers (the first iteration of my inquiry), which explored how traditional PM practice may benefit from applying SSM to managing interdependent soft projects. The collaboration produced a practical PM system and demonstrated the possibilities for applying SSM, including the POM model, to its PM research and practice. It also raised questions about PM practice and its theoretical foundations that affiliation members carried forward into later PM engagements.

Chapter 7 carries forward lessons learned from the first iteration to the RFS (the second iteration) which became a partner in development of the PM methodology and supporting PMIS. While the initial Soft Systems for Soft Projects engagement had entailed pushing the boundaries of PM research and practice, the RFS engagement represented more of a consolidation than a new direction.

Chapter 8 gives my personal insider account of the third iteration of the inquiry - the *HPRB Online Services Development Portfolio*. Previous learning was applied to support development of organisational PM capability as distinct from an individual skill. I used two frames for “appreciating” my engagement from different epistemological perspectives according to the affiliations conceptualisation of “hard” and “soft” as applying in PM. The first was a “hard” governance model and the second a “soft” POM model informed frame for holistic appreciation of the dynamic organisational processes occurring that would inform deployment of the PMIS in HPRB. Also, I applied the POM model in a novel approach to “appreciating” the contextual documents as an alternative to the hierarchical “discursive ladder” concept incorporated into my “reading” model.

Chapter 9 deliberates upon the affiliation’s collective and my individual experience with, and contribution to, our co-located research and practice according to the research themes / questions I had established for my inquiry. This I conceptualised as a “situated appreciation”, sensitive to context, that is an ongoing collective capability being constituted and reconstituted through recurring engagement in (reflexive) practice that yields “performative knowledge”. Succeeding as a project manager practitioner in this context would require me to move outside “traditional” PM thinking and adopt a participative, collaborative, facilitative approach that entailed the crossing of professional boundaries. Succeeding as a researcher would require me to continually re-balance relevance and rigour in developing an inquiry and explanation building process that could be successfully applied to dynamic and complex public sector reform programs / projects.

CHAPTER TWO: Reviewing Literature Connecting Project Management and Soft Systems Methodology

Selecting a base bibliography for review of these “other voices” is far from being straightforward. References to SSM and citations of Checkland’s work are found in the literature of many disciplines, as diverse as: agriculture, geography, and nursing, for example, as well as management and IS. (Sue Holwell, 2000, p. 773)

2.1 Summary

In this Chapter I follow significant threads in the literature informing the practitioner-researcher affiliation’s local discourse as we attempted to relate SSM, as developed by Checkland (1981) and colleagues (Checkland and Scholes, 1990; Checkland and Holwell, 1998b) to our PM practice. I particularly focus on literature that connects, or offers a conceptual basis that may help us to connect, PM and SSM as they may be applied to our practice sites.

Between 1998 and 2006 the affiliation had located a huge body of secondary literature from the PM, SSM, ISD and PA fields and associated disciplines. Reflecting the multi-disciplinary nature of our practice and research engagements, the breadth and fragmentary nature of this literature precluded detailed evaluation to establish the state of the art in a particular discipline as would be expected in a literature review conducted according to a traditional research design.

Therefore, I would not be engaging with this literature on the basis of eliciting knowledge that is out there in the world. Instead, I would be examining its potential to inform my PM practice and research approach. I would be seeking out different perspectives as a means of advancing my understanding of the diverse accounts I was finding in the literature. To focus my inquiry, I selected exemplar authors who have variously contributed to informing my approach prospectively or my retrospective reflection on my engagement. As I had located few accounts in the journal literature of the POM model (Checkland and Holwell, 1998b, p. 106) being applied, my search extended to non-conventional literature. In assessing its relevance, I would be applying a framework I developed from an evidence-based medicine model.

Within the PM literature, as represented by the International Journal of Project Management, I found a consistent albeit fragmented engagement with SSM extending

over two decades. There was little on-going dialogue about the assumptions and concepts of SSM with the exception of Yeo, who in 1993 had thought it was time for SSM and PM to re-unite. A decade later, Morris (2002) and Winter and Checkland (2003) discussed how this might be approached. A recent review by Mingers and White (2010) has confirmed the importance of SSM in the systems field; however, diverse research and practice literature has identified many issues with its implementation in practice.

2.2 Scope of the Literature Reviewed

Under a traditional research framework (Table 1.2) a literature review would be expected early in the process to locate the research topic / issue / question in the field (Fitzgerald, 2001, p. 121). This would be a critical evaluation of published material to demonstrate the state of the art in a particular area (Fitzgerald, 2001, p. 128). As Holwell observes (2000, p. 773), no significant contribution to thinking occurs without a secondary literature developing. For a doctoral candidate the aim is to find a gap and if able to fill it, at least partially, she/he can reasonably claim to have produced evidence of an original contribution to knowledge. Bourner and Simpson (2005, p. 141) contrast this with the starting point for practitioner-centred research, which is the problem being experienced.

Between 1998 and 2006, the affiliation compiled an extensive, eclectic body of academic and practice literature. Besides PM, SSM, ISD and PA, it included various disciplines such as systems thinking and management science. The span of journals covered is indicated in APPENDIX 2. Figure 2.1 maps the scope secondary literature I particularly engaged with during my inquiry. As I had located few accounts in the secondary academic literature directly relating SSM to our field of PM practice and research, I would be examining primary literature wherein Checkland and colleagues provide general guidance on SSM. This literature spans:

- Action research (Checkland and Holwell, 1998a; Checkland, 2000a; Holwell, 2004).
- SSM development (Checkland, 1981; Checkland and Scholes, 1990; Checkland and Holwell, 1993; Checkland and Holwell, 1998b; Checkland and Holwell, 2004; Checkland, 2000a; Checkland, 2000c; Checkland and Poulter, 2006).
- Practitioner experience (Checkland and Holwell, 1993; Checkland and Holwell, 1998b; Checkland, 1997; Checkland, 2000a; Checkland, 2000b; Holwell, 2000; Checkland, 2001; Checkland and Poulter, 2006).

Applying Project Management and Soft Systems Thinking in Public Sector Contexts

Non-Conventional [“Grey”] Literature

- Government change management strategies
- Implementation guidelines
- Project Management post-project review and lessons learned guidelines
- Public sector evaluation frameworks / guidelines (including systematic review)
- “Open source” working papers

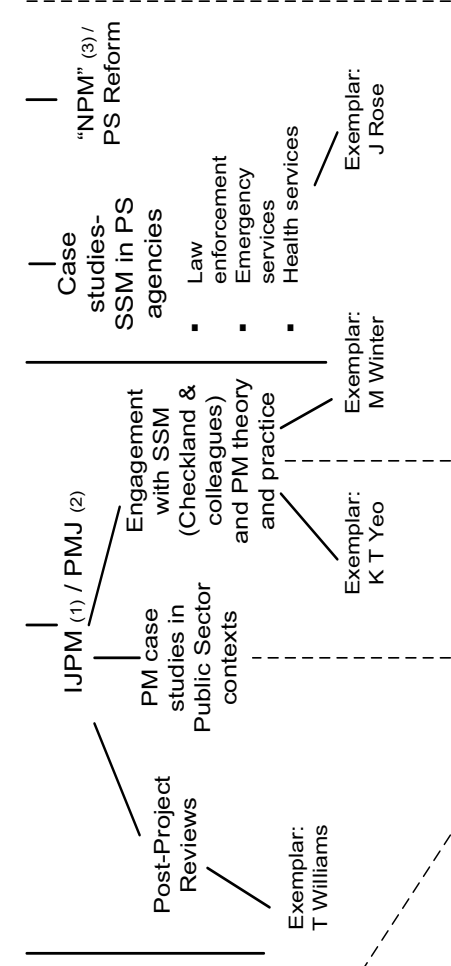
Post-Graduate Theses

Engaging with SSM:

- as POM model (5); and / or
- as action research and
- other author publications

J Rose (2000); P O’Meara (2002);
A McIntosh-Murray (2003);
W Venters (2003); P Crawford
(2004); M Holst (2004 and 2007);
J Hardy (2006).

Academic Journals



Conference Papers (refereed)

- IRNOP
- PMI
- UKSS
- ANZSYS

Practitioner-Researcher Community Published Outputs (4)

1. *International Journal of Project Management*
2. *Project Management Journal*
3. *“New Public Management”*
4. *Listed in Appendix 1*
5. *“Processes for Organization Meanings (POM)” Model (Checkland and Holwell, 1998b, p. 106)*

FIGURE 2.1 Map of the secondary literature considered in this thesis.

2.2.1 Academic literature

As a strategy for focusing, I selected four authors for particular consideration while developing my approach prospectively or reflecting on my engagement retrospectively. The boundary between these phases was very permeable and I tend to reference articles as I considered them in the context of particular issues rather than by date.

- *K.T. Yeo* who engaged for over a decade with applying SSM approaches in the PM field (Yeo 1990; Yeo 1992; Yeo 1993; Yeo 1995a; 1995b; Hsu and Yeo, 1996; Yeo and Tiong, 2000; Yeo, 2002).
- *T.M. Williams* whose research has included recovering lessons, post-project reviews and evaluation and risk management in PM contexts (Williams, 1999; Williams, 2003b; Williams, 2004; Williams et al., 2005; Williams, 2005; Williams, 2007; Williams, 2008; O'Leary and Williams, 2008).
- *M. Winter* who has been contributing to the development of SSM generally and its application to PM and facilitating the charting of future directions for the PM field (Winter et al., 1995; Winter, 2000; Winter and Checkland, 2003; Checkland and Winter, 2006; Winter and Smith, 2006; Winter et al., 2006a, 2006b; 2006c; Crawford et al., 2006a; Winter and Szczepanek, 2009).
- *J. Rose* who has applied SSM to practice areas within the NHS, researched IS and engaged with the POM model, including in his doctoral thesis (Rose, 1997; Rose, 1999a and 1999b; Rose and Haynes, 1999; Rose and Meldrum, 1999; Rose, 2000; Rose and Lewis, 2001; Rose and Scheepers, 2001; Rose, 2002; Rose and Elphick, 2002; Rose and Kraemmergaard, 2003; Rose et al., 2004).

Also, from the academic literature, I considered representative published studies / surveys of journal articles including those undertaken to:

- Map the coverage of and shifts occurring within a field, for example Crawford et al. (2006b) on reviews undertaken in PM between 1984 and 2003 and Paucar-Caceres (2010) on changes in management science between 1973 and 2008.
- Establish relationships with allied disciplines, for example Kwak and Anbari (2009) on PM and the management field and Paucar-Caceres and Pagano (2009) on systems thinking and knowledge management.
- Survey areas of application of particular approaches / methodologies / methods, for example van de Water et al. (2007) on SSM and Artto et al. (2009) on the differences between project and program management.

- Investigate the theoretical base / research profile of a field, for example Lee et al. (2004), Avison et al. (2008) and Dwivedi and Kuljis (2008) on the IS discipline.
- Measure the contribution of particular authors, for example Paucar-Caceres' (2003) survey of articles citing the work of Checkland and Jackson and Dwivedi (2009) on e-Government research.

Considering PM as an applied discipline arguably raised a question about the weight of relevant literature. As noted by Turner (2010, p. 1) the practitioner orientation of PM research had resulted in it:- lacking rigour because it was not based on sound methodologies; not being based in the literature; being case-study based, with the aim of giving guidance to practitioners rather than developing theory; and being very narrow in its scope. Nevertheless, over the preceding 20 years there had been a substantial improvement in research quality and rigour. In support, Turner refers to the number of citations of papers published in the International Journal of Project Management (IJPM) as measured in 1987, 1997 and 2007.

Mingers and Xu (2010, p. 1) refer to journal citations as an increasingly popular index for measuring the impact of a scholar's research or the quality of an academic department, albeit there is great uncertainty as to what drives citation rates for a given paper. Citations may influence rating in some journal ranking lists, for example, under the Journal Quality List published by the University of Melbourne (Harzing, 2007). There are nine rankings provided in this list (Harzing, 2007, p. 9) for the IJPM, generally at the middle or lower end of the range². Examples in other fields include: Geary et al. (2004) for business and management; Lowry et al. (2004), Levy and Ellis (2006) and Willcocks et al. (2008) for Information Systems; McWilliams et al. (2005) for organisational research; Olson (2005) for operations management; and Clark and Wright (2007) for management studies. Baskerville (2008, p. 156) observes much has been written about the lists, how they are constructed, compiled etc, but discussions about how the lists are used are less prevalent. While this might have been an issue if I had alternative sources of literature to consider, weighing journal articles was not an issue for me. My challenge was to find any journal literature directly on point.

² In one set, based on a survey of academics in business administration in the Netherlands (Harzing 2007, p. 3), *IJPM* is rated a good academic journal, the second lowest on a six point scale. In another set, the British Journal of Management rankings, *IJPM* is given an intermediate score. This ranking is based on the premise that academic staff in institutions with a higher rating will tend to publish in higher quality journals (Harzing, 2007, p. 5). The other seven rankings place *IJPM* on the middle or lower ends of their range, except for the Vienna University of Economics and Business Administration, which ranked it second on a five level scale on the basis, inter alia, of it being a world-wide distributed journal.

2.2.2 Non-conventional literature

A literature review may serve other than academic purposes, including informing professional practice. “This process is a core-activity for developing evidence-based practice...it can supply data for a research project where the analysis of written materials (secondary data) is a legitimate form of research” (Fitzgerald, 2001, p. 121). Evidence-based practice brought out through systematic reviews may be distinguished from academic reviews as being less focused and more wide-ranging. This has implications for what may be accepted as evidence. For example, Simons (2004, p. 420) argued for lived experience (narratives of personal experience) and Head (2008, p. 1) suggested three, albeit overlapping, types of evidence-based knowledge as relevant for what works in public administration: scientific research; professional practices and political judgement. Citing Wenger (1998), Head (2008, p. 4) defines practical knowledge as “the ‘practical wisdom’ of professionals in their ‘communities of practice’ and the organisational knowledge associated with managing program implementation”.

Iles and Sutherland (2001, p. 75) refer to responsibility in health practice settings to adopt practices that are supported by evidence or by well-formulated concepts that draw upon well-tested theory in other settings. They note the relative rarity of empirical publications in change management and health services research, however:

...formalized research evidence is not the only source of knowledge about “what works”. Managers argue that much of the knowledge about the effectiveness of change management techniques in the context of the NHS is tacit in nature, yet to be codified and rigorously studied. This suggests that the evidence most practitioners currently use is derived from their own and colleagues’ experience.

Accordingly, my secondary literature encompassed so termed non-conventional (grey) literature. My assessment approach (Figure 2.2) had regard to the fact that evidence-based practice, as applied to management / public administration, was derived from evidence-based medicine (Morrell, 2008, p. 614) and to my employment within NSW Health. I would also consider various academic / practitioner publications, for example one developed by Hindle and Braithwaite (2001) for people wanting to use SSM in the context of problem solving in the Australian health care sector. Their guide provides comparative material on SSM and included a Mode 2 model as its refined form. It is representative of working papers, practice guides and reports and other resources prepared by academic authors often in association with practitioners.

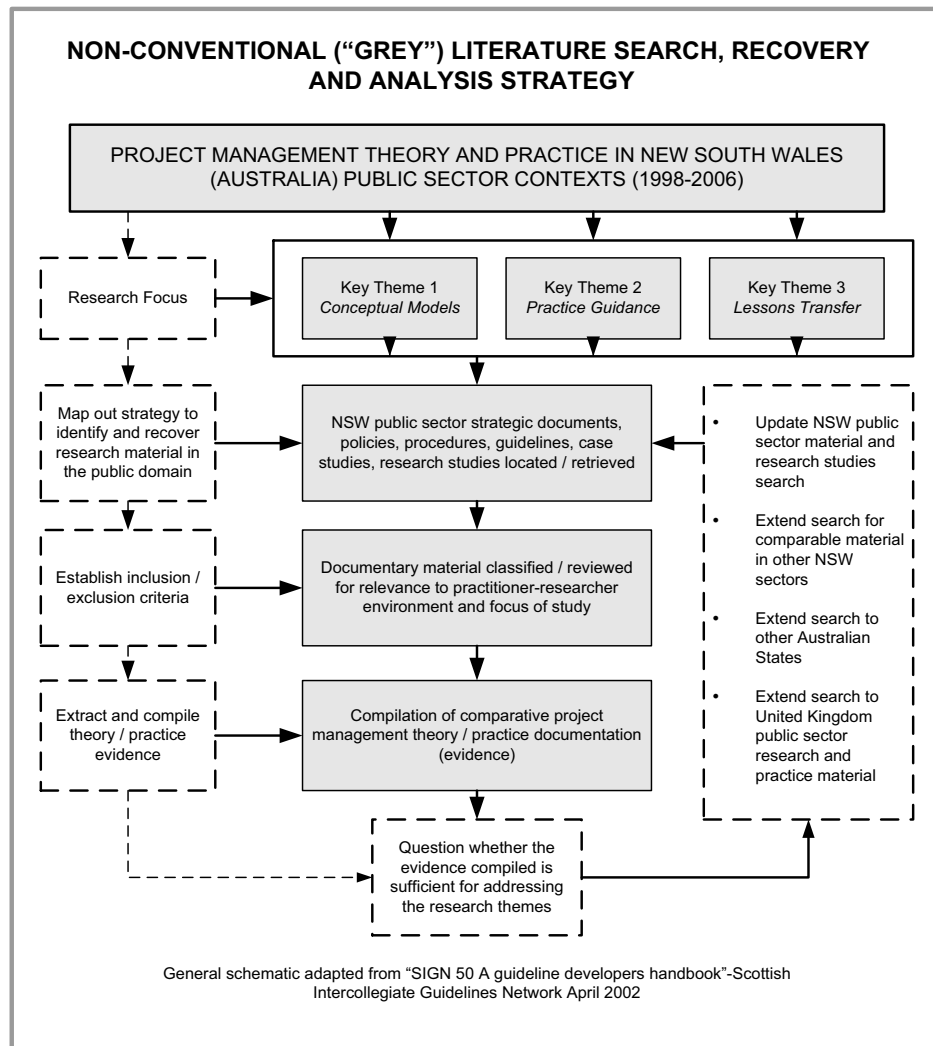


FIGURE 2.2: Non-conventional literature search strategy. The concept came from the Scottish Intercollegiate Guidelines Network *Guideline Developers Handbook* (first accessed in 2002).

Other examples from evidence-based practice / systematic review I considered included Popay and Roen (2003), Dixon-Woods et al. (2004), Pawson (2002a and b), Mays et al. (2005a and 2005b) and Popay (2006). Some were funded by public sector agencies, including the UK Health Development Agency and others by the Engineering and Physical Sciences Research Council (EPSRC). This was the case with the *Rethinking Project Management* EPSRC Network 2004-2006 (Winter and Smith, 2006) and the Interdisciplinary Research Network on Complementarity in Systems Modelling (INCISM) Network, wherein researchers from different disciplines developed an agenda for future research into systems theory (Pidd, 2004).

2.2.3 Practice guides

One guide I particularly examined, due to its relevance to many of the threads in my inquiry, was Iles and Sutherland (2001) on *Managing Change in the NHS*. They were

commissioned by the UK Department of Health to develop a resource and reference tool to help health care managers, professionals and researchers find their way around the literature on change management and consider the evidence available about different approaches to change (Figure 2.3). Their report was a response to a national listening exercise that included a question on why there was so often a gap between research evidence and implementation at policy and local levels. It remains a seminal publication in the UK Department of Health's guidance on change management, its extensive uptake being confirmed in follow-up studies (Cranfield and Ward, 2002).

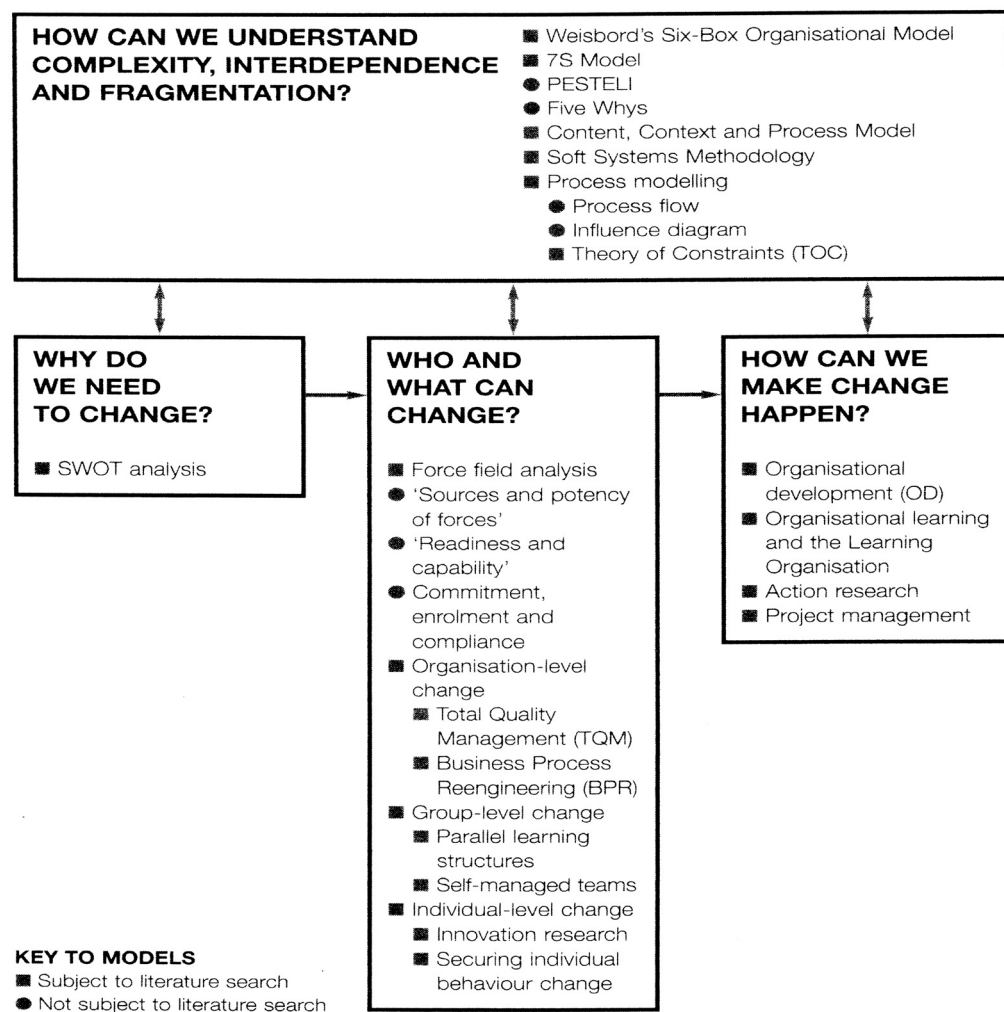


FIGURE 2.3: NHS change management tools, models and approaches (Iles and Sutherland, 2001, p. 23) from multiple disciplines spanning 50 years clustered around four key questions

Iles and Sutherland (2001, p. 34) referred to SSM as a “means of articulating complex social processes in a participatory way, allowing people’s viewpoints and assumptions about the world to be brought to light, challenged and tested”. They found its use widespread but published evidence was limited to case study reports, most providing descriptions and analyses of modelling processes and learning experiences. Some studies raised concerns about the time and cost of using SSM and questioned whether

organisational members can be energised and motivated sufficiently to carry the process through to its conclusion (2001, p. 36). Also, they reviewed PM, referring to it (2001, p. 68) as “an overall approach to a defined change process and a set of tools that help structure and impose a discipline on this”. They found (2001, p. 70) little explicit research on the effectiveness of PM to secure organisational change:

Project management methods are designed for projects – situations in which there is a defined beginning and end and in which a discrete and identifiable set of sub-tasks must be completed. They allow monitoring of completion of those activities. They do not in themselves aim to achieve changes in organisational culture, for example, although activities that contribute to such change may be scheduled in this way.

Later NHS case studies illustrating the practical application of theories and tools, for example Iles and Cranfield (2004), did not include SSM or PM. They reported (2004, p. 9) some comprehensive concepts, for example SSM, were difficult to illustrate in the space available while some like PM were sufficiently familiar or had a good, accessible literature.

2.3 Applying Soft Systems Methodology

In 1997 Ledington and Donaldson reported SSM as appropriate for research into the management practice of Systems Study Group members within the Queensland (Australia) Department of Primary Industries because: it was well-established in the management science research literature; it was distinctly non-traditional in philosophy and operation; it had a recognisable degree of formal structure; it had had a clear profile in the literature over sufficient time for some impact upon practice; and there was some evidence of its use outside the research community. They concluded (1997, p. 239) a positive impact could be demonstrated, although its nature remained unclear. SSM could be adopted as a sense-making methodology or fully utilised to facilitate action and improvement in the situation. Their results suggested some SSM elements assimilated more readily than others, supporting Mingers and Taylor’s (1992) conclusion that SSM requires a reasonable amount of time and training.

For Professor Checkland, the year 2000 was an occasion for review and reflection by himself (Checkland, 2000a), academic colleagues (including Holwell, 2000), contemporaries / commentators (including Flood, 2000; Mingers, 2000, Fuenmayor, 2000) and practitioners (Checkland, 2000b) on SSM’s achievements over 30 years. In 1999 Checkland’s seminal works, *Systems Thinking and Systems Practice* (1981)

and *Soft Systems Methodology in Action* (1990 with Scholes) had been reprinted. Looking back to when there was only one kind of systems thinking, “a mathematically expressed general theory of systems”, Checkland (2000a, p. S12) said it was expected to provide a meta-level language and theory for many disciplines. Setting out to tackle messy management problems:

...we found ourselves having to develop some new systems concepts as a response to the complexity of the every day problem situations we encountered, the kind of situations we have to deal with in both our professional and private lives. The aim in the research process we adopted was to make neither the ideas nor the practical experience dominant. Rather the intention was to allow the tentative ideas to inform the practice which then became the source of enriched ideas – and so on, round the learning cycle.

As elaborated in Checkland (1985), hard systems methodologies are predicated on a goal-seeking model of human behaviour, while the orientation of SSM is relationship-maintaining (Table 2.1). In summary, the former is concerned with achieving known goals with prediction, control and optimisation while the latter emphasised what ought to be done and participation and learning.

	The ‘Hard’ Tradition (Simon)	The ‘Soft’ Tradition (Vickers)
Concept of organization	Social entities which set up and seek to achieve goals.	Social entities which seek to manage relationships.
Concept of information system	An aid to decision making in the pursuit of goals.	A part of interpreting the world, sense making with respect to it, in relation to managing relationships.
Underlying systems thinking	‘Hard’ systems thinking: the world assumed to be systemic	‘Soft’ systems thinking: the process of inquiry into the world assumed to be capable of being organized as a system.
Process of research and inquiry	Predicated upon hypothesis testing; quantitative if possible	Predicated upon gaining insight and understanding; qualitative.
Social theory	Functionalism (stemming from Durkheim)	Interpretive (stemming from Weber)
Philosophy	Positivism	Phenomenology

TABLE 2.1: Two broad traditions, versions of which underpin much IS work (Checkland and Holwell, 1998b, p. 48).

Within their publications, Checkland and colleagues chart SSM emerging as a consciously constructed learning system to explore the complexity of real world action (Figure 2.4). Checkland (2002, p.106) advises that what ought to be done in practice is user dependent and situation specific, which made generalisations about methodology-use found in the literature meaningless, albeit that different methodologies embody

different principles. SSM is, therefore, based on the notion that social reality is not a given but is continuously constructed and reconstructed in talk and action.

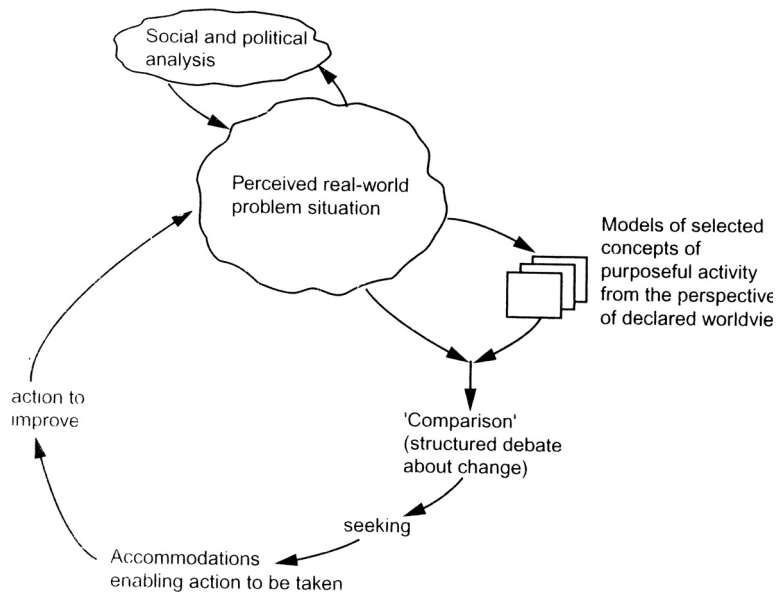


FIGURE 2.4 The learning cycle of SSM (Checkland and Holwell, 2004, p. 52).

Outlining SSM as an AR methodology, Checkland and Holwell (1998b, pp. 158-159) refer to the process of novice SSM proceeding through models of purposeful activity to help coherent exploration of a situation, considered problematical by at least one person, where people are trying to take purposeful action. Checkland (2000a, p. S12) refers to Checkland and Scholes (1990) describing use of mature SSM:

...it moves beyond the 'seven-stage' model of the methodology (still useful for teaching purposes and – occasionally – in some real situations) to see it as a sensemaking approach, which, once internalized, allows exploration of how people in a specific situation create for themselves the meaning of their world and so act intentionally.

Reviewing emergent properties of SSM-in-use from the perceptions of eight reflective practitioners, Checkland (2000b, pp. 821-823) refers to SSM as having four elements:

1. *The perceived problem situation* which will not exist in any intrinsic sense.
 “Multiple perspectives and judgments will always exist in human affairs, and there will never be complete agreement on the situation’s precise contents and boundaries. Also, the situation will not remain static – the confusion of events and ideas will continue to unroll.”
2. *The process for tackling the situation* which will be action-oriented and trying to answer the question “What should we do?” It will be a continuous learning process about the situation and the intervention, structured through use of systems ideas.

3. *The group of people involved in the process* who, ideally, should be those with a concern for the problem, or can help change it, or can veto the change or will be affected. They do not have to be familiar with SSM, but should have the feeling “that the process being followed is a natural one, highly relevant to the issues being addressed but subservient to them rather than an imposition upon them”.
4. *The combination of situation process and people* which will be more than the sum of the parts. Its “structured conversation enables people as a group to construe their world and themselves, and the relation between the two; and in the light of that they can decide on purposeful action”.

Reviewing management and systems literature, Holwell (2000, p. 792) concluded Checkland’s work as a whole was not well understood. Referring to errors, confusion and misunderstanding, she found the “most fundamental and common error is that systems exist”. Also, she explained there are two SSM discourses:

..the developed discourse is more concerned with assumptions and concepts, whereas modeling is the prime focus of the less sophisticated discourse, although the interpretive argument and characteristics are recognized. This emphasis on modelling, together with the decoupling of the argument and process, results in impoverished versions of the seven stages of SSM which unduly emphasize modeling at the expense of process - although they may have been preceded by expositions of Checkland’s argument about problem solving in organizations (Holwell, 2000, p. 788).

2.3.1 Public sector contexts

Checkland and Holwell (1998b, p. 172), report SSM being applied in industry and the public sector. They considered SSM’s early industrial focus helped its development because industrial organisations have some kind of power structure which was not necessarily the case in many public sector organisations. To make sense of their NHS experiences, they had to think of it as a complex network of autonomous and semi-autonomous professional groups through which the delivery of health care emerged, thanks to dedicated professionalism, rather than being routinely managed in a professional sense (1998b, p. 173). Iedema (2003, pp. xxi) refers to a similar situation in a NSW context where it took him “several years to come to terms with working in a research Centre with a focus on public services whose management was not management, and whose organization was not organization” and where (health) managers “have to learn to be comfortable with embodying and encompassing multiple and often contradictory voices”.

Checkland and colleagues' experience in the NHS (Checkland and Holwell, 1993; Checkland, 1997; Checkland, 2000a and 2000b; Holwell, 2000; Checkland, 2001; Checkland and Poulter, 2006) would inform my engagement with the Mode 2 SSM AR inquiry process. From their NHS experience, Holwell (2004) identified three concepts important to the practice of AR: recoverability; research themes; and iteration. She referred to her reflection on the process as *emerging action research* (Chisholm and Elden, 1993; Elden and Chisholm, 1993) "because it involves multiple levels of the organization engaged in the change process and a wide degree of openness in the research process overall...Moreover, because of the number and range of participating organizations, it illustrates the concept of critical mass, of doing research in multiple sites, to increase the overall validity".

While infrequently reported, I found some publications locating SSM in Australian Health contexts (Cromwell, 2000; Hindle and Braithwaite, 2001; Hughes, 2001; Braithwaite et al., 2002; O'Meara, 2003) and practice publications³. However, these were isolated, unlike in the agricultural field (Bawden and Packham, 1993; Attwater, 1999; Bawden et al., 2007). Noting SSM was little used in Australian health care contexts, Hindle and Braithwaite (2001, p. 15) saw a reason being "that Australia does not have a large academic base in systems analysis". Nevertheless, van de Water et al. (2007, p. 280) had found research on SSM was mainly being conducted in the UK and Australia, concluding this may due to SSM having its roots in the English (and Australian) soft OR research community. Other reasons given by Hindle and Braithwaite (2001, p. 15) for SSM being little used included:

- As its most obvious application area is difficult problem situations, likelihood of progress is much less regardless of the approach.
- Thinking about difficult problems requires a grasp of inherently difficult ideas and many people find the methodology too complicated to understand.
- Few people are experienced in being reflective and most are uncomfortable with being reflective.
- In the health research context, based on the reductionist view of physical sciences, many people have no experience in soft systems ideas.
- Powerful players in health care have no background in ideas central to SSM.

³ Examples were NSW Health *Embracing Change: Report of the Greater Metropolitan Transition Taskforce* (2004) and The Royal Australian College of General Practitioners 'Green Book' Project Advisory Committee: *Putting prevention into practice: Guidelines for the implementation of prevention in the general practice setting* (2006).

- SSM may encourage perspectives running counter to official policy or practice, thus threatening the status quo, so commitment may not be easy to obtain.
- Mutual recognition of diverse interests and achieving a degree of accommodation may not accord with the view of some players.
- SSM may be seen as time consuming.

On this last point, Hindle and Braithwaite's (2001, p. 53) response is that SSM encourages consideration of difficult matters. If these are ignored, the problem may be addressed badly. In the long run, several rapid, unsatisfactory studies may use more resources and result in little or no progress.

2.3.2 Project Management

Searching the IJPM for articles citing Checkland and colleagues in 1998 and earlier, I located 20 articles covering a ten-year span. The spread of application areas is in Table 2.2. PM and IS/IT systems were the most common application, followed by organisational problem solving / change and learning and problem structuring / framing / project definition / modelling. Only two were concerned with extending the intellectual and philosophical underpinnings of PM and systems thinking. Between 1999 and 2005 there were nine articles citing Checkland and colleagues, including Crawford et al. (2003) and Crawford and Pollack (2004). There were five in 2006, four related to the EPSRC *Rethinking Project Management Network* (Winter and Smith, 2006). Subsequently (until mid-2009), eight were published, one by Pollack (2007). All of these articles are listed in APPENDIX 3.

SSM Application	Author (<i>Checkland citation</i>)
Problem structuring / framing/ project definition / modelling (5 references)	Davies and Saunders, 1988 (<i>Checkland, 1981</i>); Neal, 1995 (<i>Checkland & Scholes 1990</i>); Yeo, 1995a (<i>Checkland 1981</i>); Yeo, 1995b (<i>Checkland & Scholes 1990</i>); Chapman, 1998 (<i>Checkland 1981, 1983, 1987</i>).
Plan / develop / build / evaluate a project management system / IT system (9 references)	Robinson, 1989 (<i>Checkland, 1981</i>); Yeo, 1990 (<i>Checkland, 1988</i>); Saunders, 1992 (<i>Checkland, 1981</i>); Yeo, 1992 (<i>Checkland 1981; 1988; Checkland & Scholes 1990</i>); Yeo, 1995a (<i>Checkland 1981</i>); Yeo, 1995b (<i>Checkland & Scholes 1990</i>); Lai, 1997 (<i>Checkland 1981; Checkland & Scholes, 1990</i>); Remenyi & Sherwood-Smith, 1998 (<i>Checkland 1981</i>).
Help with multiple perceptions / application to human behaviour (1 reference)	Daniel, 1990 (<i>Checkland, 1981, 1983, 1985</i>).
Manage risk / uncertainty (5 references)	Daniel, 1990 (<i>Checkland, 1981, 1983, 1985</i>); Yeo, 1995a (<i>Checkland 1981</i>); Yeo, 1995b (<i>Checkland & Scholes 1990</i>); Stewart & Fortune, 1995 (<i>Checkland, 1981</i>); Ramsay et al., 1996 (<i>Checkland 1981</i>).

SSM Application	Author (<i>Checkland citation</i>)
Extend the intellectual and philosophical underpinnings of PM / systems thinking (2 references)	Saunders, 1992 (<i>Checkland, 1981</i>); Yeo, 1993 (<i>Checkland 1981; 1988 Checkland & Scholes 1990</i>).
Value management (1 reference)	Green, 1994 (<i>Checkland 1981; 1989</i>).
Organisational problem solving / change / learning / business process re-engineering (6 references)	Russell-Hodge, 1995 (<i>Checkland 1981</i>); Stewart & Fortune, 1995 (<i>Checkland, 1981</i>); Partington, 1996 (<i>Checkland 1981</i>); Sherman et al., 1996 (<i>Checkland 1981</i>); Ramsay et al., 1996 (<i>Checkland 1981</i>); Hsu & Yeo, 1996 (<i>Checkland 1985; Checkland and Scholes, 1990</i>).

TABLE 2.2: Application areas in articles in IJPM citing Checkland and colleagues- 1988 to 1998.

On the basis of numbers, SSM was not featuring as a dominant discourse in PM. Nevertheless, over some 20 years, 42 articles with 65 citations of Checkland and colleagues (Table 2.3) had appeared in a journal in a field located in the hard paradigm. As could be expected from its time in print, Checkland's seminal 1981 work was found to be the most frequently cited. Also, as suggested by Checkland (2000a, p. S12), the seven-stage model is still useful for teaching purposes, and occasionally in some real situations. Figure 2.5 is a PM example. Another reason, suggested by Holwell (2000, p. 774) is it might be a general honorific citation. Few citations were of Checkland and Holwell (1998b): Yeo (2002); Crawford et al. (2003); Fernie et al. (2003); Crawford and Bryce (2003). The first two refer to the POM model (Checkland and Holwell, 1998b, p. 106) while the latter two are general citations. In Crawford and Bryce (2003) this is in relation to organisational processes / structures. In Fernie et al. (2003), the citation context is the difficulty of distinguishing knowledge from data and information.

Author	1988-1998	1999-2005	2006	2007-2009	Total
Checkland (1981)	16	3	1	5	25
Checkland (1983)	2				2
Checkland (1985)	2		1	1	4
Checkland (1987)	1				1
Checkland (1988)	3				3
Checkland (1989)	1	1	1		3
Checkland & Scholes (1990)	6	4	2		12
Checkland & Holwell (1998b)		4			4
Checkland (1999a / 2000a)		3	1	1	5
Checkland (1999b)				1	1
Checkland (2001)			1	1	2
Winter & Checkland (2003)			1	2	3
Total	31	15	8	11	65

TABLE 2.3: Checkland and colleagues' citations- International Journal of Project Management (1988-2009 including in press and subsequently dated 2010): details in APPENDIX 3.

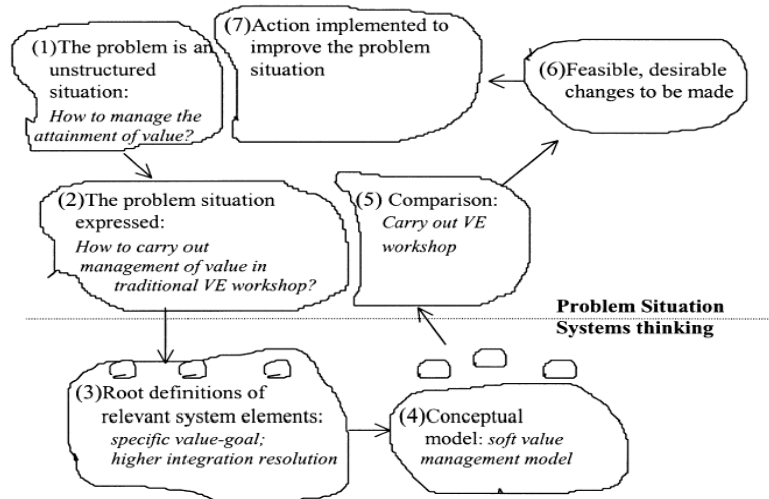


FIGURE 2.5: Use of a model based on Checkland's seven-stage SSM model in a project management practice area (Liu and Leung, 2002, p. 342).

Most authors citing Checkland and colleagues in IJPM produced one paper referencing SSM. Yeo (1990, 1992; 1993; 1995a; 1995b; 2002), Crawford et al. (2003); Crawford and Pollack (2004) and Pollack (2007) appeared to be the only ones engaging with a continuing dialogue. Authors were publishing in other journals on SSM informed project practice (for example Lai, 2000; Oura and Kijima; 2002; Ishino and Kijima, 2005). However, I found no consistent published thread of development or application related to my research focus that I could follow over time.

Yeo (1993) had been an early influence on affiliation members. In his view:

- Hard and soft systems methodologies were complementary and inseparable.
- Hard systems thinking, as adapted and translated into management policies and procedures, was essentially what is to be done (systems analysis) and how to do it, (systems engineering).
- The value of using SSM (referenced as Checkland, 1981 and Checkland and Scholes, 1990) was in “the purposeful and focused debating, learning, and conceptualization process initiated by comparing the real-world problems with the idealized or rationalized conceptual model(s)” (Yeo, 1993, p. 114).

Yeo's continuing inquiry into the use of SSM proceeded through case studies in a variety of contexts, particularly involving risk management, including in technology acquisition (Yeo, 1995a), major infrastructure development projects (Yeo, 1995b) organisational change in two research institutes (Hsu and Yeo, 1996) and eleven case studies concerning Build-Operate-Transfer infrastructure projects (Yeo and Tiong,

2000). He found engagement with multiple perspectives to add value to the pre-project planning and development stages through the development of a more balanced view of the situation (Yeo, 1995b, p. 287). Also, he found it of value for diagnosing and resolving problems when dealing with different levels of projects (Hsu and Yeo, 1996, p. 387) and for learning and debate (Yeo and Tiong, 2000, p. 260). Yeo (2002, p. 244) considered the POM model to be an important conceptual reference model for sense-making in the highly complex field of IS study in general, and systems failure in particular and based his “triple-S” framework upon it (Figure 2.6).

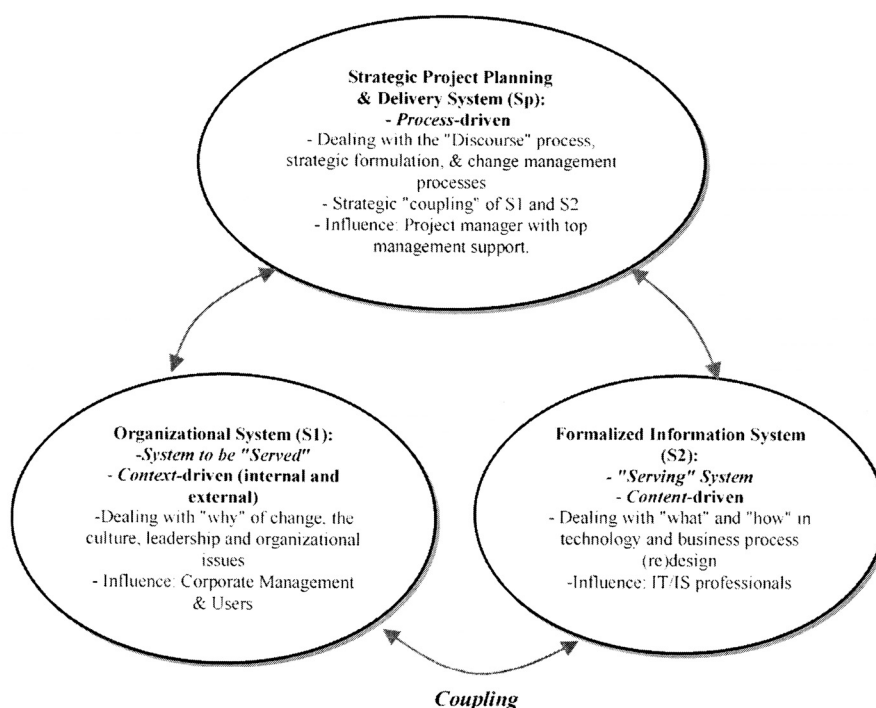


FIGURE: 2.6: Yeo's "triple-S" framework for IS planning (Yeo, 2002, p. 244) as adapted by adding "strategic project planning" (Sp) to Checkland and Holwell's (1998b, p. 111) model. This had comprised "the system which serves" (processing of selected (data) / capta relevant to undertaking of purposeful action), which supports people taking action in "the system which is served".

2.3.3 Finding connections

As we probed into the possibilities that soft systems thinking offered for enriching PM theory and practice, affiliation members began to re-examine the relationship between PM and systems, for example Crawford and England (2004). Their search of the journal literature found that, while the amount of attention to and discussion of PM had generally increased, attention to the systems field was declining in the literature on PM. Nevertheless, they thought this did not necessarily reflect a rejection of systems by PM. They found the hard and soft strands of the systems field moving in different ways in relation to PM. As they explained, the systems ideas and techniques originally

associated with PM were by and large hard systems and these are gradually making way for softer approaches. Anecdotal and observational evidence suggested soft methodologies and ways of thinking were becoming more prevalent in journal literature, with management taking an increasingly qualitative approach.

Crawford and England (2004, p. 2) concluded that while PM had drawn much of its conceptual basis from the systems field, particularly systems engineering and systems analysis, a desire to create a clear and independent identity for PM could be seen as “encouraging an inward focus with a tendency more toward exclusion rather than inclusion of influence from other fields”. By contrast, they saw the systems field as taking a more externally focused, inclusive approach as it endeavoured to retain its relevance (Crawford and England, 2004, p. 2). Also, they acknowledged not all authors credit PM development to the systems field, referencing Stretton who argued, on the basis of research and personal experience, that outside the military much PM development has been unconnected with systems.

Searching PA literature, I had noted Barzelay’s (2001, pp. 3-5) division of the “amorphous” NPM literature into research and argumentation. “ ‘Research’ refers to scholarly works intended to explain facts and events... ‘Argumentation’ refers to scholarly dialogues about what-to-do-ideas and actual policies concerning government, policy and management. Contributions to these dialogues often resolve, reformulate, or incite doctrinal controversies.” Adopting the distinction for my inquiry, I found an argumentation example looking across the PM / SSM divide to be provided by Morris (2002) and the reply by Winter and Checkland (2003). In Morris’ assessment (2002, p. 82), while there was reasonable agreement on most of the formal tools used for managing projects, there is a range of views on what constitutes the PM discipline. Morris’ (2002) examination of the knowledge in the discipline, particularly how testable and public it is, suggested that while hard systems approaches had a seminal impact, soft systems thinking could have important role, particularly at the front end of projects. According to him, if the life cycle (Figure 2.7) is only thing really distinguishing projects from non-projects, arguably the only thing distinguishing PM from other forms of management is the management skills and actions involved in going successfully through that life cycle (Morris, 2002, p. 83). He saw PM at its most basic (2002, p. 84) as involving a combination of scope management, activity scheduling, and cost and resource management; in effect, basic control and the discipline varied according to the nature of the project, the role of the project manager and the stage of the project life cycle at which the project manager was operating.

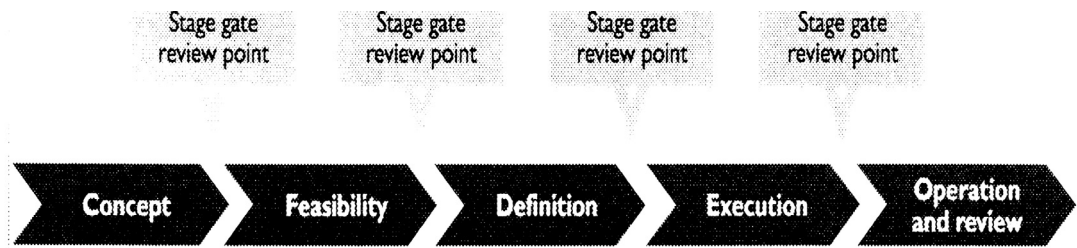


FIGURE 2.7: Project life cycle that distinguishes projects from other (non-project) activities (Morris, 2002, p. 83).

In general, the nearer to the definition stage of the project and the higher the organisational level, the broader the range of issues that one would find oneself dealing with, these encompassing “strategy, finance, organisation, technology, control, people and culture, commerce and contracts, community and environment, process and timing and so on” (Morris, 2002, p. 84). He saw SSM as being developed for such situations, the fuzzier aspects of PM which included messy, poorly structured situations where there are unclear objectives and constituencies with conflicting aims. Also, he saw the organisational context within which projects are conceived and delivered as being increasingly decentralized and fluid.

In 2003, Winter and Checkland (2003, p. 188) responded to Morris (2002) on the need to augment the ideas and assumptions of hard systems thinking in PM with developments in soft systems thinking. They referred to discussions elsewhere, citing Yeo’s (1993) paper and our paper (Costello et al., 2002a) delivered at the United Kingdom Systems Society (UKSS) Seventh International Conference, York University, 7-10 July 2002 and proceeded to consider different PM practice perspectives. The soft systems perspective was introduced (Winter and Checkland, 2003, p. 189) through Obeng’s (1994) matrix of different project types, which had also influenced the affiliation’s re-interpretation of Turner and Cochrane’s (1993) goals and methods matrix (Figure 1.12). However, Winter and Checkland (2003, pp. 189-190) argued that, rather than managing discrete project types, as in Obeng’s (1994) matrix:-

...most project managers have to deal with complex “situation” in all four quadrants and at different levels and at different stages in a project, and furthermore these situations are rarely straightforward...Moreover, such situations are not only found at the front end of projects...the “soft” systems image of managing projects and programmes is that of trying to cope with an ever-changing flux of “messy” situations and complex issues, as opposed to the image of following a pre-defined sequence of life-cycle stages. In other words, the image here is based on...a broad concept of “managing” and it is this notion of managing that leads us to focus *not* on the engineering process or construction process, etc., but on the social process of *managing* in complex situations.

The implications of seeing the practice of managing projects from a soft systems perspective are summarised in Figure 2.8 according to context, content and process. Citing Pettigrew (1987), Winter and Checkland (2003) refer to this as a framework consisting of three dimensions that can be recognised in any practical activity. Within the hard perspective, there is a clear objective or goal to be achieved, within some specified scope, schedule and cost. “Moreover, achieving this – the *process* dimension...- is the primary task of project management which, according to much of the literature is carried out through a sequence of stages as defined by the project life cycle” (Winter and Checkland, 2003, p. 189). They do note (2003 p188) that any real-world practice is much more complex and dynamic than the dimensions of context, content and process suggest. However, experience showed they were distinguishable, and separating them out for analytical purposes enabled consideration of the ideas and assumptions of the different theoretical perspectives.

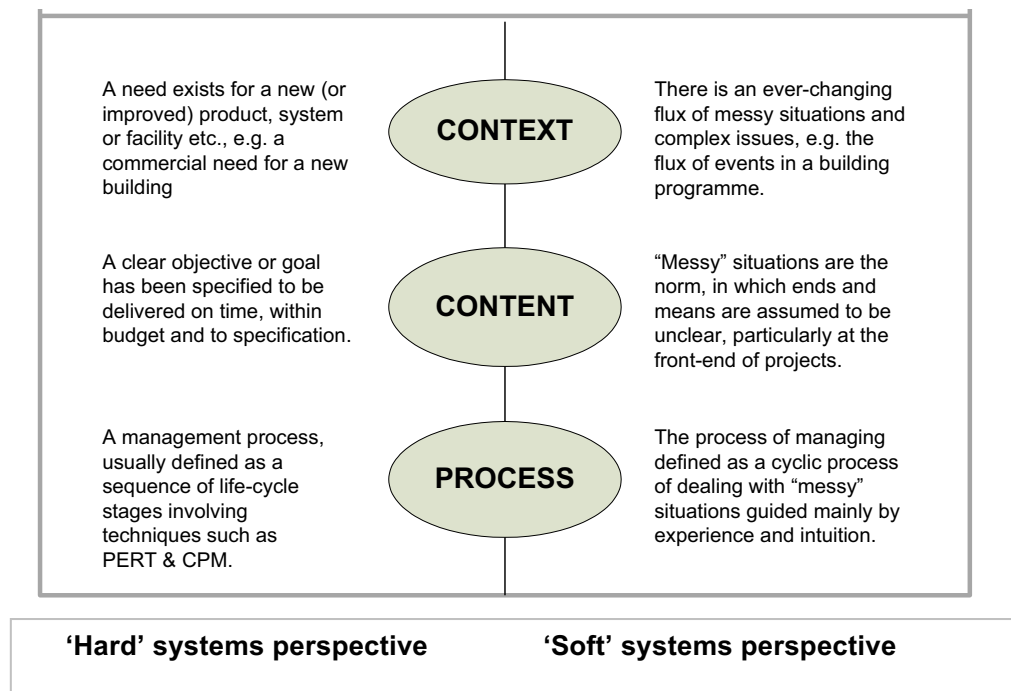


FIGURE 2.8: Two contrasting images of project management practice (Winter and Checkland, 2003, p. 189).

Iles and Sutherland (2001) also refer to Pettigrew and colleagues’ Content / Context / Process Model and later variants, and say it has been widely used in analysing and learning retrospectively from change programs in organisations. As elaborated in an NHS case study (Iles and Cranfield, 2004, p. 186), this model identified three essential dimensions of strategic change (Figure 2.9) and an astute manager would be constantly scanning all three dimensions. Presenting a holistic perspective, the model requires as much attention to the inter-relation of its constituent parts and their relation to the whole as to the individual components. Iles and Cranfield (2004, p. 187) are of

the view that the model is best considered as an “umbrella” approach to leading, managing or influencing change rather than a prescriptive template. Also, it could complement and incorporate other change management tools and methods. In their case study they were looking at its value as a diagnostic tool to inform decision making, an approach that required perceptiveness and creativity when drawing conclusions and devising interventions that would increase receptivity.

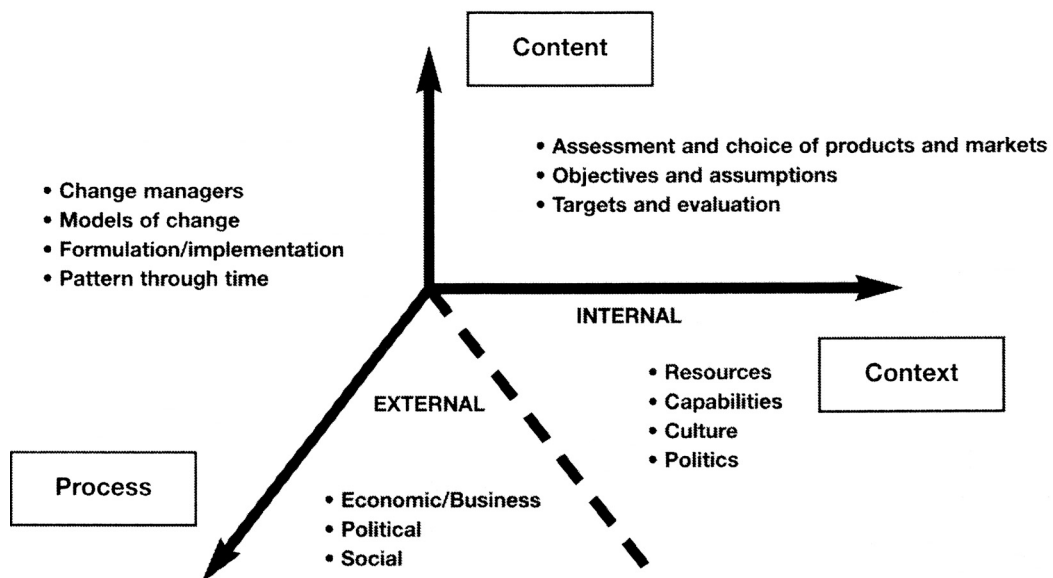


FIGURE 2.9: Three essential dimensions for understanding strategic change (Iles and Cranfield, 2004, p. 186).

Winter and Checkland (2003) would be considered by Mingers and White (2010) when reporting on researchers in recent years (2010, p. 17) “showing how systems thinking (in particular SD and SSM) can be the basis for analyzing complex operations...and project management”⁴. Also citing Costello et al. (2002a), Mingers and White (2010, p. 18) refer to the rationalistic view of PM coming under criticism:

It is assumed that behind the decision to initiate a project there is supposed to be a well-thought-out strategy, against which the outcome of the project can be objectively evaluated. However, in practice, projects can be initiated for unclear reasons, undertaken with the process in mind rather than the outcomes and pursued despite environmental changes which leave the project objectives obsolete or even undesirable. It is being increasingly recognised that decisions and actions are neither sequential nor mutually coherent”.

⁴ Mingers and White (2010, p. 17) refer to the considerable attention PM has received in the OR literature, saying that PM had developed from different fields of application including construction, engineering and defence. The contribution of traditional OR to PM had been mainly concerned with techniques and tools to understand how the transformation involved in fulfilling the task can and should be handled in an efficient way, given the (often limited resources) at hand. Nevertheless, projects have become increasingly common in all kinds of organisations and are increasingly large, complex and constrained and may involve large numbers of interested parties and professional and technical disciplines.

Referring to systems thinkers contributing to the debate, Mingers and White (2010, p. 18) note the claim in Winter and Checkland (2003) that PM management in the future will provide a way for organisations to release the innovative forces within themselves rather than to plan and will encourage the means to enhance participation rather than to control. Also, they refer to the contribution being made by systems thinkers to theories on learning in projects.

2.4 Engaging with the “Processes for Organization Meanings” (POM) Model

Introducing *Information, Systems and Information Systems (ISIS)* (Checkland and Holwell, 1998b) in his 30-year retrospective paper, Checkland (2000a, p. S12) said *ISIS* stemmed from the relevance of IS in many of the Lancaster AR projects:

...it attempts some conceptual cleansing of the confused field of IS and IT, treating IS as being centrally concerned with the human act of creating meaning, and relates experiences based on a mature use of SSM to a fundamental conceptualization of the field of IS / IT; it carries forward the discussion of SSM as a methodology.

ISIS is thereafter generally referenced by Checkland (2000a) in a number of contexts, including activity modelling (2000a, p. S28-S29), application in health services (2000a ppS34-S35) and action research (2000a, p. S42). Discussing SSM as a learning process, he refers to a key thought “that models of purposeful activity can provide an entry to work on information systems (which are less than ideal in virtually every real-world situation)” as not being of concern in his paper because it is the detailed subject of *ISIS* (Checkland, 2000a, p. S16). Therefore, it would appear that in Checkland’s view, whatever contributions *ISIS* was making to carrying forward discussion of SSM as a methodology, its prime application area was IS /IT. Apart from Checkland and Holwell (2006), no specific reference is made in later publications developing SSM thinking and practice (Checkland and Poulter, 2006, Checkland and Poulter, 2010) to the POM model as an SSM process as presented in *ISIS*. Academic commentators refer to *ISIS* as concerned with IS, including Mingers (2000, p. 744), Jackson (2000, p258), Pidd and Dunning-Lewis (2001, p. 3) and Mingers and White (2010, p. 15). Also they refer to the different concept of organisation in *ISIS*. As observed by Jackson (2000, p. 250), “Checkland and Holwell (1998), seeking to develop a richer concept of organization for the purposes of guiding information systems work, are brave enough to set out the model of ‘organization’ that SSM has come to adopt as a result of the action research”.

2.4.1 POM model fundamentals

Checkland and Holwell (1998b, p. 204) say the POM model (Figure 2.10) and its higher-level representation, the COAT model (Figure 2.11), is “an account of the holistic process in which people form intentions in line with their perceptions of the world and take purposeful action to realize those intentions supported by relevant information and knowledge”. They define the POM model as:

...a learning system which embeds IS and IT within the human process of taking purposeful action and gives IS/IT work a clear role. Above all, the process...is a single process in which each element plays a part; the learning the system achieves (either from within itself or because external happenings abruptly change element 2, the perceived world) is a product of the whole.

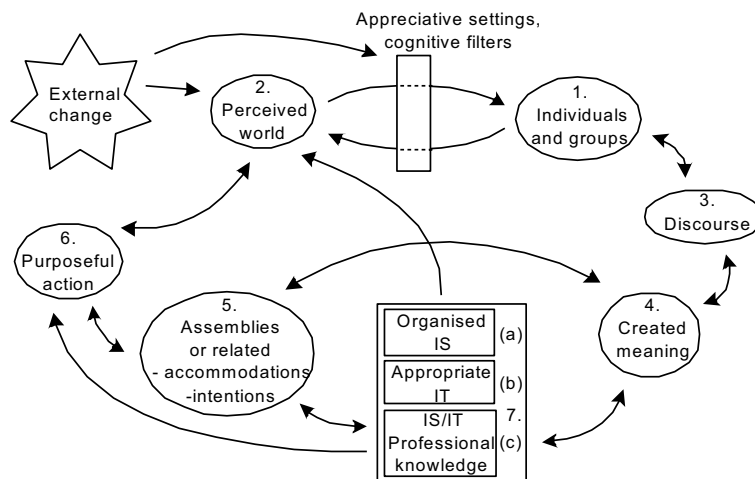


FIGURE 2.10: Representation of the ‘processes for organization meanings’ (POM) model after Checkland and Holwell, 1998b, p. 205 (Costello et al., 2002b; Crawford et al., 2003, p. 445).

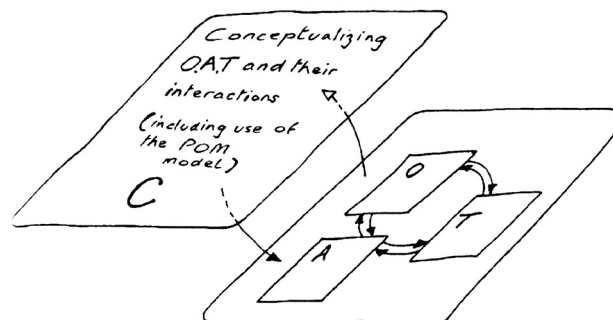


FIGURE 2.11: The COAT model depicting the elements whose interactions enact the processes of the POM model (“Organization”; “Agents”; and “Technology”). “Thinking about” is rendered as the element “C” for “conceptualizing”. Together, they capture the “business of making sense of IS” (Checkland and Holwell, 1998b, pp. 232-233)

According to Checkland and Holwell (1998b, pp. 107-109) the POM model:

1. Does not purport to be a descriptive account of the organisational process, but a defensible device with a structure and language which can be used to make sense

of life in real organisations and their IS provision. Although it broadly represents aspects we can observe and analyse, “the detailed reality will always be less clear cut than the model; a terrain is never the same as the map that relates to it”.

2. Does not imply a particular set of *structures*. Instead, its elements define a set of connected *processes*. While in a real situation these would have to somehow be embodied in structures, many different sets could be chosen to encapsulate the model's fundamental processes.
3. Because the model is cyclic, with pathways linking all the elements to each other, there is no clear starting point so the initial focus may vary according to situation.
4. Can encompass any way of conceptualising an organisation because it is not necessarily linked to the conventional wisdom.
5. Enables us to define what IS refers to and implies that the ISD process ought to exhibit certain features that may, or may not, be present in the current ISD process

On the first point, Checkland and Holwell (1998b, p. 107 acknowledging Casar) refer to representing Vickers' writings in the form of a model of what he meant by an appreciative system and to Casar testing the model as he was setting up a strategic planning function. During this time, Casar kept a detailed diary and used the appreciative system model to try to make sense of his experience. Subsequently, Checkland and Holwell (2006, pp. 70-73) re-iterated these points and expanded upon the idea, attributing appreciative settings to the whole organisation (2006, pp. 68-69):

Indeed, the conventional wisdom on organizations can be seen as a rather naïve assumption that all members of an organization share the same settings, those which lead them unambiguously to collaborate together in decision making in pursuit of organizational goals. The reality...will be more complex. Although the idea of “the (attributed) appreciative settings of an organization as a whole” is a usable concept, the content of those settings and whatever attributions are made will never be completely static. Changes both internal and external to the organization will change individual and group perceptions and judgements, leading to new accommodations relating to evolving intentions and purposes.

When the approach for the Soft Systems for Soft Projects collaboration was being developed, I found few examples of the POM model being applied. Mostly, it was an input into other models, for example Lai (2000) in Figure 2.12 and Lai and Mula (2009, p. 203). In another example (Cook et al., 2000, p. 7) the POM model was one of seven organisational analysis approaches compared against a military model.

Recently, Bredmar (2011) employed an adaptation of the POM model to describe the workings of management control in his case study company, whereby individuals in an organisation could contribute to meaningful actions through shared goals and values.

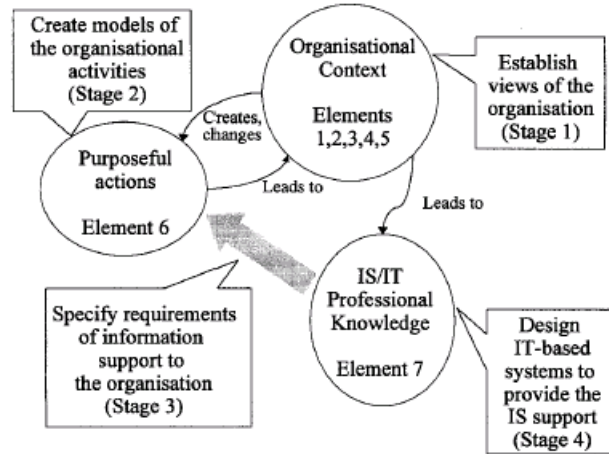


FIGURE 2.12 Core POM model structure and implications for ISD process (Lai, 2000, p. 211).

The POM model can arguably be located at the right hand side of Figure 2.13 as a model to support people thinking through difficult issues (Pidd, 2004, p. 2). Models towards the other side may be arguably exemplified by the rational schemes that underpin systems models in classical PM (for example Cleland and King, 1983, p. 23), although more recent PM modelling approaches include softer aspects. An example is Williams (2002b, p. 137) who said that although these softer aspects are harder to define and quantify, they are still important and can even be crucial to project performance.

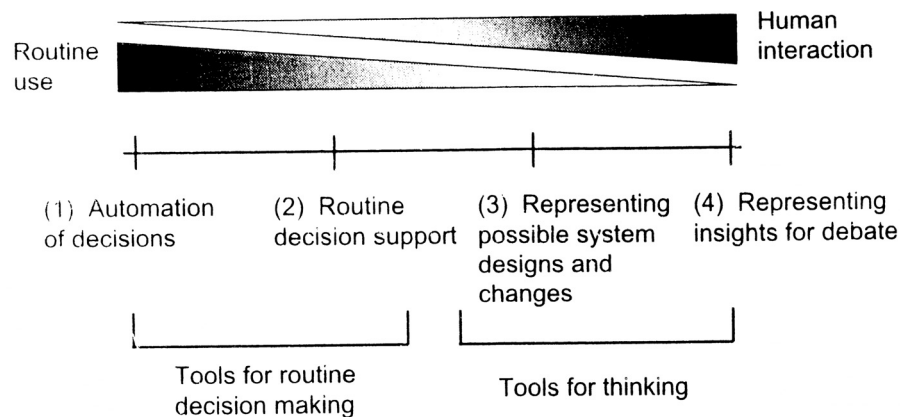


FIGURE 2.13: A spectrum of systems modelling approaches (Pidd, 2004, p. 2)

My search for examples of engagement with the POM model in research, as distinct from argumentation examples, would include doctoral dissertations. Of seven representative examples of applying SSM accessed online, four directly applied the

POM model to their research approaches (Rose, 2000; McIntosh-Murray, 2003; Crawford P, 2004; Holst, 2004 and 2007). Of the others applying SSM generally, one used Hindle and Braithwaite's (2001) SSM+ methodology (Hardy, 2006) and the other two applied SSM respectively to health service models (O'Meara, 2002) and to introducing organisational-wide knowledge management technologies (Venters, 2003). While their location spans Australia, Canada, the United Kingdom and Sweden, all involve: an aspect of IS /IT development / provision; complex organisational settings / processes that need to be addressed; a public sector, or in one case a not-for-profit, organisation, usually health; and qualitative / interpretive research approaches. Two referred to PM (Crawford, 2004 and Holst, 2007). This literature would particularly inform my initial thinking, and indeed later re-thinking, about engaging with the POM model in my PM research approach as elaborated in Chapter 5 – *Designing the Research Methodology*.

2.4.2 Critical challenges

One of my exemplar authors, Rose (1997, p. 249) had argued that SSM should be considered a candidate methodology for a wide range of social science research projects. In his view, once the circumstances for adopting SSM were favourable, it could be variously integrated into a research program as: a problem structuring tool; a good-fit research tool; a triangulation tool to confirm, refute or amplify findings from another method; or a theory-testing or generating tool. The type of theory Rose considered here was Merton's (1957) middle-range theory, "falling between the minor working hypotheses of everyday life and 'all-inclusive' grand theories" (Rose, 1997, p. 255). Also, SSM could provide a coordination or directive tool, delineating various research activities or their logical dependencies, or a common basis for transdisciplinary research.

In 1999, Rose and Haynes (1999, p. 199) reported application of SSM as a good-fit tool in evaluation and design work in a complex NHS change program that included substantial IT infrastructure and ISD. They were part of the Lancaster University team led by Professor Checkland that was commissioned by a UK Health Authority to design a process for evaluating its own projects. This reflected both the model-building epistemological premise of SSM, equivalent to the research journey the team had undertaken, as well as some aspects of evaluation theory (Rose and Haynes, 1999, p. 209). The authors concluded SSM was potentially well suited to evaluation of complex public service change initiatives.

Reviewing Rose and Haynes (1999), Hindle and Braithwaite (2001, p. 47) noted the authors describe SSM in much the same terms as Checkland (1981) and Checkland and Scholes (1990). They take issue, however, with the argument that soft is applied to distinguish approaches when human behaviour is an important factor. Hindle and Braithwaite (2001, pp. 47-49) proceeded to question other aspects of Rose and Haynes' (1999) study in terms of "careless use of the idea of softness" and other aspects of the "weaknesses in their approach" which they attributed to "the inevitable consequences of failing to adequately define the 'designing and evaluation method' as one of the systems that needed to be modelled".

In 2002, following on from the distinction Checkland and Holwell made between data, *capta*, information and knowledge and the processes by which data are turned into knowledge (Checkland and Holwell, 1998b, p. 90), Rose (2002, p. 248) argued that:-

...for those represented and selected phenomena to become information requires an act of meaning attribution by an interpreter; context and history must be added to make them useful for thinking and acting. Larger structures of information shared between actors may be thought of as knowledge. Such categories imply processes by which they are created and recreated and Checkland and Holwell further give an elaborated model of those processes in relation to formalized information provision and consequent action (the Processes of *Organizational Memory (sic)* (POM) model).

Rose (2002) then examined the relationship between Checkland's view of IS in organisational contexts and ISD and secondary work which takes SSM into the IS and ISD fields. Following from a distinction made by Mathiassen and Nielsen (2000), he argued for recognising interaction as well as transformation conceptual modelling within SSM. The latter he refers to as Checkland's well-articulated norm. In his view, however, it was interaction modelling which was consistent with Checkland's more recent thinking about organisational practice and decision making in the IS arena.

SSM is, according to Paucar-Caceres (2009, p. 448), "the most developed systems methodology in terms of its theoretical premises and philosophical underpinnings". According to Mingers and White (2010, p. 10) "SSM remains the most widely used application of systems thinking" and they refer to several hundred documented examples of its use in diverse fields, including public services. Flood (2010, p. 277), was likewise of the view that SSM is the most thoroughly documented and discussed methodological example of soft systems thinking. Mingers and White (2010, p. 10) observe that in most reviews of SSM, "it is the possibility of change in practice, the

focus on stakeholders and their views, and the process as learning that are crucial to SSM and at the same time present several areas of difficulty for use of the methodology in practice". They refer to "continued criticism of the approach in how to deal with relative views and so on", albeit noting that later publications (citing Checkland and Winter, 2006; and Rosenhead and Mingers, 2001) had gone some way towards resolving this. However, "it was through highlighting the problems and limitations of the approach that users of SSM started to revise the process and/or test its use in new situations".

Mingers and White (2010) discuss three general themes on use of SSM to tackle problems "where there is a continued recognition that traditional SE (Systems Engineering) and soft systems thinking are important and that together they may bring significant developments to problem solving". The first relates to SSM being adopted by many organisations and incorporated into other approaches. Researchers have, they say, recognized this development as "quite important but theoretically under-researched, and there have been various attempts at providing guidance for combining the methodologies".

Their second theme concerns the distinction between hard and soft systems and whether this may be, as argued by some researchers, artificial. Their third is a growing interest in understanding and exploring the design of the intervention, for if "operational research (in particular PSMs) is to have a significant role and interest, it needs to come closer to the actual concerns of practitioners (and stakeholders)." Citing Checkland and Winter (2006) Mingers and White (2010, p. 11), refer to SSM as a methodology "to support and to structure thinking about, as well as intervening in, complex organisational problems".

Issues raised in other secondary literature about applying SSM have included the way SSM was (or was seen to be) dealing with organisational transformation. Beeson and Davis (2000, p. 179) partly attributed this to the legacy of earlier systems views. Lane and Oliva (1998, p. 233), for instance, had seen "nothing in the current approach and tool kit of SSM which ensures this new form of (systemic) alignment in the proposed changes". White (2000, p. 166) had observed "the weakness of a system's perspective such as SSM is that it is more effective for internal organisational change and it can not deal effectively with turbulent environments". Another issue was the translation of SSM into a practical technique for investigation. In policy development, for example, "comprehensive (SSM) modeling proved too information intensive" (Stewart and Ayres,

2001, p. 80). A survey of SSM use by Mingers and Taylor (1992, p. 328) found it was considered “too time consuming”, although its use was widely reported. Jayaratna et al. (1999, p. 33) also said “use of SSM generally requires a considerable amount of time”. This, however, has been observed about AR generally, for example Kock and Lau (2001, pp. 6-11) say AR “requires considerably more time and effort from the researcher than using, say, experimental research to achieve the same outcomes”.

Other SSM implementation issues reported have included:

- Problems with translation into practice (Midgley, 2000; Gregory and Midgley, 2000; Mingers, 2000).
- How “success” can be determined (Connell, 2001).
- Problems with translation into research including, for example, lack of criteria as to what constituted improved perceptions coming out of SSM (Vahl, 1998).
- The modelling process, said to be problematic both in theory and practice. (Ledington and Ledington, 1999a, 1999b and 1999c; Houghton and Ledington, 2004).
- The dilemma in SSM (or any other methodology) between maintaining simplicity of concepts and expressing differences in complex environments (Mathiassen and Nielsen, 2000).

The above concerns were raised in the context of SSM generally. I found little journal literature on the application of the POM model in practice. Exceptions included Wilson (1999) who, critiquing Checkland and Holwell (1998b), questioned whether practitioners and researchers are able to learn from and adhere to the principles of relativism and, from this, able to provide an improved methodology for IS design. He refers to their “process for organization meanings methodology” (Wilson, 1999, p. 167), concluding that relativist claims “can never be finally grounded in reality” (Wilson, 1999, p. 168). Robinson and Wilson (2003), analysing Checkland and Holwell’s (1998b) account of the Battle of Britain, concluded SSM failed to provide an adequate account. They claimed use of materialist dialectics provides a more satisfactory understanding.

West (2002, p. 37-38) found that, although the POM model presents “a richer model of the concept of an ‘organisation’ than the ‘conventional wisdom’ [model]”, in practical terms it was disappointing. “It tells us about what is to be done but offers little advice or guidance about how these concepts can be put into use to help IS practitioners and

researchers improve their understanding of organizations and the information systems that may support their activities.”

Reviewers of *ISIS* include Taket (1999, p. 556) who was of the view that Checkland and Holwell (1998b) did successfully illustrate the POM model's use as a sense-making device. Other reviewers refer to problems, for example Warren (1999, pp. 105-106). She said, with respect to the generic models developed (POM and COAT), that “despite use of the word systems in the title, there are no attempts to draw comparisons or distinctions with other practical systems-based models and methodologies in IS design...The difficulty is... that models geared to structuring reflection in practice, such as COAT, are not easy to operationalize for a mass audience without giving ‘recipes’ – which clearly defeats the object”. Another reviewer, Bergvall-Kareborn (1999, p. 94), found *ISIS* was still lacking detail about how to develop information systems that correspond to the POM model.

2.5 Concluding Annotation

In this Chapter I have reviewed significant threads in literature informing the affiliation's developing discourse on the potential of PM and the SSM of Professor Peter Checkland and colleagues to inform their approaches to practice and research. Within the PM literature, I had found a consistent albeit fragmented engagement with SSM extending over two decades but little on-going dialogue about the assumptions and concepts of SSM. Diverse research and practice literature had identified many issues with its implementation in practice. In particular, I considered Checkland and Holwell's (1998b) ‘processes for organization meanings’ (POM) model, in the context of development of a project management information system (PMIS) in my case study agencies.

To focus my inquiry, I had selected exemplar authors who through argumentation and/or research have variously contributed to informing my approach prospectively or my retrospective reflection on my engagement. In Chapter 3 I review significant threads from academic and non-conventional literature which would be particularly shaping my scope of PM action and research during my HPRB engagement as I endeavoured to meet the formal and ethical requirements of my practitioner and researcher roles.

CHAPTER THREE: **Reviewing Literature Informing the Scope of Practice and Research**

Senior managers in many organizations are familiar with the promise of project management as the most effective means of performing unique work to convert new resources to new products, service or organizational change. A significant number of individuals from a variety of professions are becoming more involved with project management practices, and they are learning to employ project management techniques to achieve the desired results. The professionals seeking to use project management in their workplace include engineers, architects, physicians and nurses. (Cleland and Ireland, 2006, p. 17)

3.1 Summary

The practitioner-researcher affiliation's developing dialogue about applying SSM to inform our PM practice was embedded within the other discursive spheres in the model in Figure 1.8. In this chapter, I draw out significant threads from academic and non-conventional literature at the model's outer two (contextual) levels, "domain-specific discourses at various intermediate levels" and "public discourse and action", which would be particularly shaping my scope of PM action and research at HPRB. I have selected the threads with Ulrich's (2001, p. 11) pragmatic maxim in mind. This requires "a comprehensive effort to bring to the surface and question the implications, the actual or potential consequences that our research may have for our domain of practice".

At HPRB I would be an insider practitioner-researcher (Brannick and Coghlan, 2007) endeavouring to contribute to the building of a new organisational electronic service delivery capability within my employing agency. My challenge would be to meet the formal and ethical requirements of both roles.

Emerging public sector management approaches were looking to apply PM principles to the transition from policy / recommendations for reform into service delivery. They were also providing frameworks for recovering PM lessons learned / knowledge at organisational, project team and individual practitioner level. In my work context, the policies / practices included post project implementation reviews and the Gateway process for structured reviews at key decision points and case study reviews. As experienced early in the affiliation's collaborations (Costello et al., 2002a), our public sector PM context was characterised by uncertainty, ambiguity and stakeholder

management issues that were multifaceted and complex (Crawford et al., 2003, p. 443). During the late 1990s the NSW Government had made a substantial policy commitment to NPM reforms directed at more accessible, integrated, responsive and cost-effective services. In practice, business processes and their underpinning IS / IT were being transformed. This was driving changes in expectations about how roles and responsibilities are assigned, how legitimacy is established, how work is managed and how performance is assessed.

3.2 Appreciating the Practice Context

As Macleod and By (2009, p.7) note, the contemporary agenda for managing change in public services is rooted in shifting perspectives on the relationship between politics, administration and management. They refer to the decisive political shifts occurring in many countries from traditional notions of PA, with its emphasis on political control, collectivism and bureaucracy, towards quite different public management techniques and principles, including the importing of generic management techniques from the private sector. Before proceeding to literature on domain specific contextual issues impacting on the affiliation's developing PM practice within NSW public sector agencies, I briefly review some of the shaping discourses within PA.

3.2.1 Conceptions of governance

The search for more suitable models of governance has been central to PA reforms to which governments around the world have responded to in a variety of ways (Bourgon, 2009, p. 311). One reason for variation across contexts was suggested by a study of emerging public service issues by Edwards et al. (2003, pp. 1-2) that found "a good deal of commonality in the broad challenges in similar systems around the world, but each is responding to these in ways that are shaped and guided by the specific historical and institutional circumstances that apply in each instance."

Governance was also an evolving issue in PM, especially in view of the shift from functional to project-based organisations (Turner and Keegan, 1999). Generally, it appeared concerned with structure, control and securing stakeholder support and was one of nine schools of PM thought identified by Bredillet (2007b, p. 2). Looking to define project governance in the context of developing a theory of PM, Turner (2006b, p. 93) adopted an OECD definition, in particular, Premise 3: "Project governance provides the structure through which the objectives of the project are set, and the

means of attaining those objectives are determined, and the means of monitoring performance are determined". He added that project governance also involves a set of relationships between PM, sponsor, owner and other stakeholders. Hobbs and Miller (2002) had a similar view of the PM governance process, representing it as a nested model of communities of stakeholders "who have particular issues that they feel are important and that must be dealt with before they will lend support to the project" (Hobbs and Miller, 2002, p. 44).

In the PA literature, governance was a multi-dimensional notion that could encompass "the effectiveness of administration, the quality of regulatory systems, the rule of law and the control of corruption" (de Brouwer, 2003, p. 2) and also power / knowledge (Stokes and Clegg, 2002, p. 229). In practice, as observed by the then NSW Auditor-General (Sendt, 2002, p. 2):

Much has been written about governance. And a massive amount of research has been conducted into it. Professional bodies, Parliamentary Committees and even Auditor-Generals worldwide have conducted major examinations of the subject. Eminent reports are readily available, and guidance material is plentiful. Why then does the issue continue to haunt us? And apparently to get worse?...much of the debate centres on processes...But it is not always apparent that the "why" has been fully appreciated. Process alone, without full understanding and commitment is hollow and will not produce the desired outcomes.

Within the Australian context, Wanna and Weller (2003, pp. 63-64) observe that traditions of governance tend to be pragmatic and to blend different ideologies. They "have played a major role over the generations in establishing and adapting the public sector, inspiring reform and in assisting actors to make sense of the world and refashion their beliefs when confronted with dilemmas". As viewed by the Australian National Audit Office (2003, p. 6), public sector governance has a broad coverage (Figure 3.1) including: how an organisation is managed; corporate and other structures; culture, policies and strategies; stakeholder management; and how organisations acquit their stewardship responsibilities by being open, accountable and prudent in decision making, in providing policy advice and in managing and delivering programs.

Governance in the NSW public sector had, under one definition, "most of the elements of private sector governance, but typically involved a more complex set of influencing and controlling relationships" (NSW Auditor General quoted in *NSW Health Corporate governance in health: better practice guide*, 1999). NSW Health (2002a, p. 81) saw

corporate governance as concern with structures and processes for decision making, accountability, control and behaviour at the top of organisations. Areas of emphasis were setting strategic directions and stakeholder consultation, the former enabling clear specification of why the organisation exists (purpose) and what it wants to achieve (goals) in line with shared expectations (attributes) (NSW Health, 2002a, p. 8).

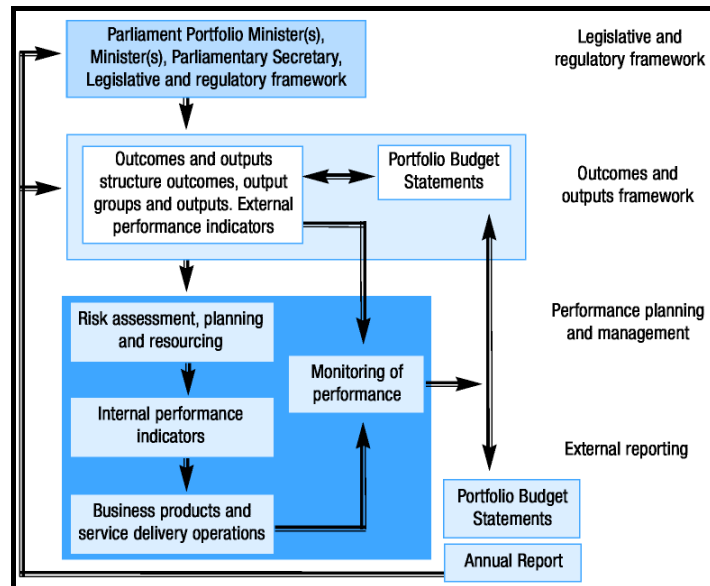


FIGURE 3.1: Relationship between agency planning, management and governance requirements for the Australian Public Service (Australian National Audit Office, 2003, p. 25).

3.2.2 New Public Management

NPM had been an important shaping discourse in PA since the 1980s (Barzelay, 2001, p. 156). In the literature, NPM has been widely viewed as a reform trend based on business management models as distinguished from bureaucratic rationality (Peters and Savoie, 1998; Rhodes, 1998; Johnston, 2000; Stokes and Clegg, 2002; Hall et al., 2003; Brunetto and Far-Wharton, 2003a). It became the conventional wisdom about how to run the modern state (Davies and Rhodes, 2000, p. 76; World Bank, 2000); it was a global paradigm (McConnell International, 2003). Bevir et al. (2003, p. 1) refer to NPM as the hollowing out of the state and the new governance:

...a focus on management, not policy, and on performance appraisal and efficiency; disaggregating public bureaucracies into agencies which deal with each other on a user pays basis; the use of quasi markets and of contracting out to foster competition; cost-cutting; and a style of management that emphasizes, among other things, output targets, limited term contracts, monetary incentives and the freedom to manage.

NPM had been identified as a driver of reform within police services in Australia (Palmer, 1997; Chan, 1999; Fleming and Lafferty; 2000; Vickers and Kouzmin, 2001) and internationally (Davies, 2000; Davies and Thomas, 2003; Butterfield et al., 2004; O'Malley and Hutchinson, 2007). Leishman et al. (2000, p. 282) refer to quality principles (managerialist and public service) that became embedded in the discourse about practices of policing. This was also the case in discourses about the change programs / projects within the RFS and the HPRB. NPM included new ways of conceptualising and communicating organisational change (Peters and Savoie, 1998; Marsh, 1999; Johnston and Callender, 2000; Stivers, 2000a; Di Francesco, 2001; Grimshaw et al., 2001). In the strategic response to NPM, roles and responsibilities of public sector agencies (Johnston, 2000; Brown and Brook, 2001; Vickers and Kouzmin, 2001; Bevir et al., 2003) and their corporate governance structures were transformed to emulate business models (Johnston and Callender, 2000; James, 2001; Hall et al., 2003). Accountability would be through increased devolution and flexibility, corporate management, budget processes, accounting standards, accrual-based information systems, service agreements and performance measurement (Armstrong, 1998, p. 16; Lapsley, 1999; Christensen, 2002; Jackson and Lapsley, 2003; Carlin, 2004; Newberry and Pallott, 2004). There was, however, no theory of NPM nor a set of theories based on the common assumptions (Gow and Dufour, 2002, p. 377).

According to Diefenbach (2009, p. 60), NPM was “a system of collectively held normative and reputedly factual ideas and beliefs and attitudes”. He considered it an ideology “advocating a particular pattern of social relationships and arrangements, and/or aimed at justifying a particular pattern of conduct, which its proponents seek to promote, realise, pursue or maintain” and argued its core ideological functions were (2009, pp. 60-61): -

- *Explaining*, thereby creating regimes of truth for beliefs about the causes and processes of events and their contiguity.
- *Providing meaning* through a sense of identity and purpose and explanatory frameworks for what organisations are meant to be.
- *Legitimising*, not only of the strategic objectives of increased efficiency and performance orientation but of all social relations.
- *Justifying* why public sector organisations should, even must be changed into business-like enterprises.
- *Convincing* through explaining the need for change, providing new frameworks of meaning and legitimacy and justifying myths.

In Australia, NPM (Table 3.1) included the “embrace of managerialist approaches derived primarily from the UK, USA and New Zealand NPM-style public sector initiatives, private sector managerial fashions especially from the USA, and, Australian public sector experience and major reviews” (Johnston, 2000, p. 350).

Dimension	Traditional Public Sector	Reform
Marketisation	<ul style="list-style-type: none"> • Service delivery generally a government monopoly. • Some use of contractors particularly in construction. 	<ul style="list-style-type: none"> • Purchaser - provider split introduced, including for services provided by the state. • Accelerating trend for APS agencies to compete with private providers for contracts to deliver public services. • This needs competitive neutrality, with agencies paying tax equivalents and made subject to <i>Trade Practices Act</i>. • Significant increase to contracting out.
Corporate Management	<ul style="list-style-type: none"> • Traditional public administration focused on probity, precedence and accountability. • Uniform provision of services with a presumption in favour of ‘one size fits all’. • Input-focused budgets. • Tight central agency controls. • Traditional clerical approach. • Merit protection through appeal processes. • Often lifetime career structures, with significant recruitment of young people. 	<ul style="list-style-type: none"> • “Managing for results”, with greater emphasis on managerial prerogative. • Introduction of choice from a menu of services and service providers. • Freedom of information and citizens charters to cover service provision, and new avenues for citizens to seek redress if dissatisfied. • Output measurements. • Deconcentration and risk management. • Widespread adoption of information technology. • Business-unit approach to measure performance coupled with strategic planning and evaluation. • SES structure, with more short-term contracts. • Contraction of recruitment; loss of junior grades.
Regulation	<ul style="list-style-type: none"> • Significant regulatory role in economic and labour markets policy. • Regulation is a core part of agencies, and integrated into agency structures. 	<ul style="list-style-type: none"> • Change in the nature of economic regulation away from command and control towards managed markets and the use of fiscal and other incentives and disincentives. • Decentralisation of labour markets in favour of collective and later individual bargaining. • Shift from regulating utilities to monitoring contracts and auditing financial performance. • National Competition Policy – shift in regulation to ensuring markets can operate. • More separation of regulatory arms from APS agencies.
Political control	<ul style="list-style-type: none"> • Westminster assumption that public service neutral, permanent and a source of “institutional skepticism”. • Monopoly of policy advice. • Merit protection systems to limit external influence on choices. 	<ul style="list-style-type: none"> • APS changes initiated by ministers to ensure they could set priorities and influence implementation. • Pluralism of policy advice. • Open competition for senior appointments. • Sporadic “personalization” of top appointments by greater ministerial involvement in selection and termination of departmental secretaries.
Privatisation	<ul style="list-style-type: none"> • Key utilities in public ownership. • Government ownership of trading companies and public corporations. • However, movement from departmental structures to corporations. 	<ul style="list-style-type: none"> • Preference for private ownership, with monopolies regulated by the <i>Trade Practices Act</i>. • Complete or partial sale of major Commonwealth assets. • Process incomplete – some commercial activity remains in public hands.

Dimension	Traditional Public Sector	Reform
Decentralisation	<ul style="list-style-type: none"> Administrative decentralisation of APS services. 	<ul style="list-style-type: none"> Extensive devolution to levels appropriate to decision. Outsourcing of client-based services. Increased demands for coordination.

TABLE 3.1: Major changes in the Australian Public Sector in the context of New Public Management (Davis and Rhodes, 2000, p. 79)

Although NPM was the dominant voice in PA from the 1980s, an emerging voice in the literature was Public Value Management (PVM), albeit a contested one (Rhodes and Wanna, 2007 and 2008; Alford, 2008). As depicted in Table 3.2, PVM offered a different narrative of reform that “demands a commitment to broader goals than those envisaged under traditional and NPM management regimes” (Evans, 2007, p. 138).

	Traditional Public Management	New Public Management	Public Value Management
Mode of operation	Planning and policy	Management and contracts	Knowledge fields
Theoretical focus	Policy studies	Management and economics	Governance philosophy
Model of governance	Procedural	Corporate	Network
Performance objective	Managing inputs	Managing inputs and outputs	Multiple objectives; service outputs; satisfaction outcomes; trust and legitimacy
Goal of managers	Responds to political direction	Meets agreed performance targets	Responds to citizen preferences; renews mandate and trust through quality services
Accountability	Upwards through departments to politicians and parliament	Upwards through performance contracts; sometimes outwards to customers through market mechanisms	Multiple: citizens as overseers of government; customers as users of services; taxpayers
Role of community	Little community involvement	Increased consultation	Community enablement and involvement.

TABLE 3.2: Comparison of public administration paradigms in Crawford and Helm (2009, p. 75)

PVM was, accordingly, centred on management by negotiation and dispersed networks rather than traditional methods of hierarchical command and control (Reddel, 2002; Reddel and Woolcock; 2004), as depicted in Table 3.3. It has been equated with the emergence of networked governance (Stoker, 2006); however, as observed by Budd (2007, p. 531) “adherents of networked governance and its variants overlook the difficulties of delivering public services on the ground in regard to the need for standardization and conforming to audited targets”.

	New Public Management	New Governance
Problem Focus	Technical – Focus on Outcomes and Outputs	Political – Focus on shared ownership with vision driving strategic change
Culture	Public Interest is ‘owned’ by Executive and Bureaucracy based on consumer choice	Build <i>ad hoc</i> coalitions for change complexity of policy issues; and open process with adequate closure
Implementation	Confrontation, Agreement and Compromise based on ‘Contract’	Coalition building but confrontation where appropriate
Skills	Technical Expertise based on Performance Assessment and the Monitoring of Contracts	Stakeholder analysis, diplomacy and communication strategies based on dialogue, deliberation and association
Infrastructure	Bureaucratic and Expert Structures with representation of directly affected interests	‘Place’ based on more centralized arrangements involving elected / community representation and <i>ad hoc</i> coalitions

TABLE 3.3: From New Public Management to a New Governance (Reddel, 2002, p. 59)

Other analyses would conclude NPM was entering middle age (Hood and Peters, 2004) or even had been replaced by digital-era governance (Dunleavy et al., 2006). In 2007, Halligan referred to the starker manifestations of NPM having less prominence and to an emergent Australian model of integrated governance, concluding that “the NPM model of the 1990s had been succeeded even though the basic ideas still underpin the new model” (Halligan, 2007, p. 234). Therefore, although a shift was evidently occurring within the PA discourse, NPM arguably remained the dominant PA reform voice throughout the period of my research inquiry.

3.2.3 Government initiatives and policies

Like many governments around the world, NSW and other Australian Governments (Johnston, 2000) made a substantial commitment to e-government reforms directed at more accessible, integrated, responsive and cost-effective services. They set ambitious goals for transforming service delivery that encompassed business processes and underpinning IS /IT. For the NSW Audit Office, transition from traditional government was possibly one of the most important public policy issues. It ran to the heart of how governments operated and interacted with the community and implementation was a huge, complex and difficult task (NSW Audit Office, 2001a, p. 2). Project failure was considered to be a main risk. Essentially, it was an information age agenda (Bellamy, 1999, p. 89; Cabinet Office, UK, 2001; Kruk and Bastaja, 2002). The NSW Government’s policy commitment, including *connect.nsw – An Internet Strategy for New South Wales*, was directed at improving government service delivery to the community (NSW Audit Office, 2001a) through four strategies:

- *Integrated government* by establishing a common infrastructure for delivering government services and sharing information.
- *Electronic service delivery* providing customer focused services through use of electronic technologies.
- *Electronic commerce* in support of NSW economic development.
- *Networked communities* that enhanced the quality of life of people living in NSW.

The NSW Government had assumed a leadership role (NSW DPWS, 1997a, p. 1):

...to lead the push for improving customer service delivery, eliminating red tape and reducing the cost of government; as a framework for using information management and technology across the whole of government, working closely with the private sector to create cost-effective solutions; and to make the NSW public sector a model of information management and technology best practice by promoting a fundamental rethink and practical redesign of business processes to improve performance and efficiency.

In NSW, a corporate services reform agenda was mapped out (NSW Premier's Department *Reform and Redirection Strategy*, 1999). Reviewing whole-of-government reform activity at that time, Vincent, 1999, pp. 51-52) concluded there was "no one 'right' model which can be applied...frequent cause of disappointments with whole-of-government ventures is the application of the wrong solution to the wrong problem, or the choice of a model when key criteria for its success are lacking".

The NSW public sector agency planning framework during the time of my PM engagement at the HPRB is depicted in Figure 3.2. It remained current until 2010⁵ albeit under review. As would be later observed by Young et al. (2011, p. 426) in the context of considering the NSW Government strategic planning framework as applying to Sydney Water, the linear and mechanistic nature of government planning provides clear guidance to agencies to ensure the government's agenda is translated into projects and programs within agencies. However, they then observe "this limits the ability to adapt to shifts in the external environment, and does not easily allow adjustments of priorities and key strategies".

⁵ Accessed at www.dpc.nsw.gov.au/publications/strategic_management_framework_on_12/1/10)

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AGENCY STRATEGIC PLANNING

Strategic planning is usually based on a 3 to 5 year outlook and is the process used by an agency to determine the results it wishes to achieve for its clients and the best way of achieving those results. Strategic planning is carried out at a high level and sets the context for the activities of the agency rather than detailing the activities themselves. In undertaking strategic planning, agencies assess their current and likely future operating environments. As part of this scenario planning and service modelling processes are often undertaken on a rolling basis by agencies to anticipate future trends and service needs.

The *Agency Strategic Plan* explains how the agency intends to use its **service delivery, back office and funding/asset strategies** to achieve its desired service delivery results. The plan typically contains the agency's vision, mission and values.

The *Service Delivery Strategy* identifies and prioritises the agency's clients and their key service delivery requirements over the next 3 to 5 years. The Service Delivery Strategy describes how the mix of services to be provided by the agency will lead to the achievement of the agency's desired results.

The *'Back Office' Strategy* describes at a high level how the agency intends to use its human resources, information and communications technology and other business processes over the next 3 to 5 years to support its service delivery strategy.

The *Financial and Asset Strategy* provides a high level description of how the agency intends to use its budget funding and asset base over the next 3 to 5 years to support the service delivery and back office strategies.

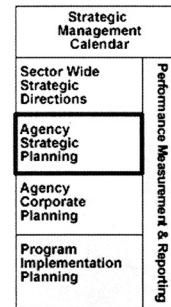


FIGURE 3.2: NSW Strategic Management Framework website (NSW Premier's Department, later the Department of Premier and Cabinet, accessed online on 22/6/2005.

3.2.4 Public sector implementation

Issues with NPM reform delivery have been acknowledged from many perspectives (Dunleavy and Hood, 1994; Armstrong, 1998; Lapsley, 1999; James, 2001; Grimshaw et al., 2001; Hall and Holt, 2002; Brunetto and Farr-Wharton, 2003a; Hall et al., 2003; Hood and Peters, 2004; Newberry and Pallott, 2004; Briggs and Fisher, 2006; Horton, 2006). These issues were reflected in figures being reported for e-government failures, for example in Heeks (2003) and difficulties in IT-enabled change projects in the UK (Gershon, 2003).

In NSW, guidelines for improving project practice (Figure 3.3) had been developed by the then NSW Department of Public Works and Services (1997b). Under later restructures, responsibility for them passed to the Office of Information Technology within the Department of Information Technology and Management and then, in 2003, to the Office of Information and Communications Technology within the Department of Commerce. Subsequently they became the responsibility of the Chief Information Officer. Accordingly, I reference them with the source prevailing at the date of access.

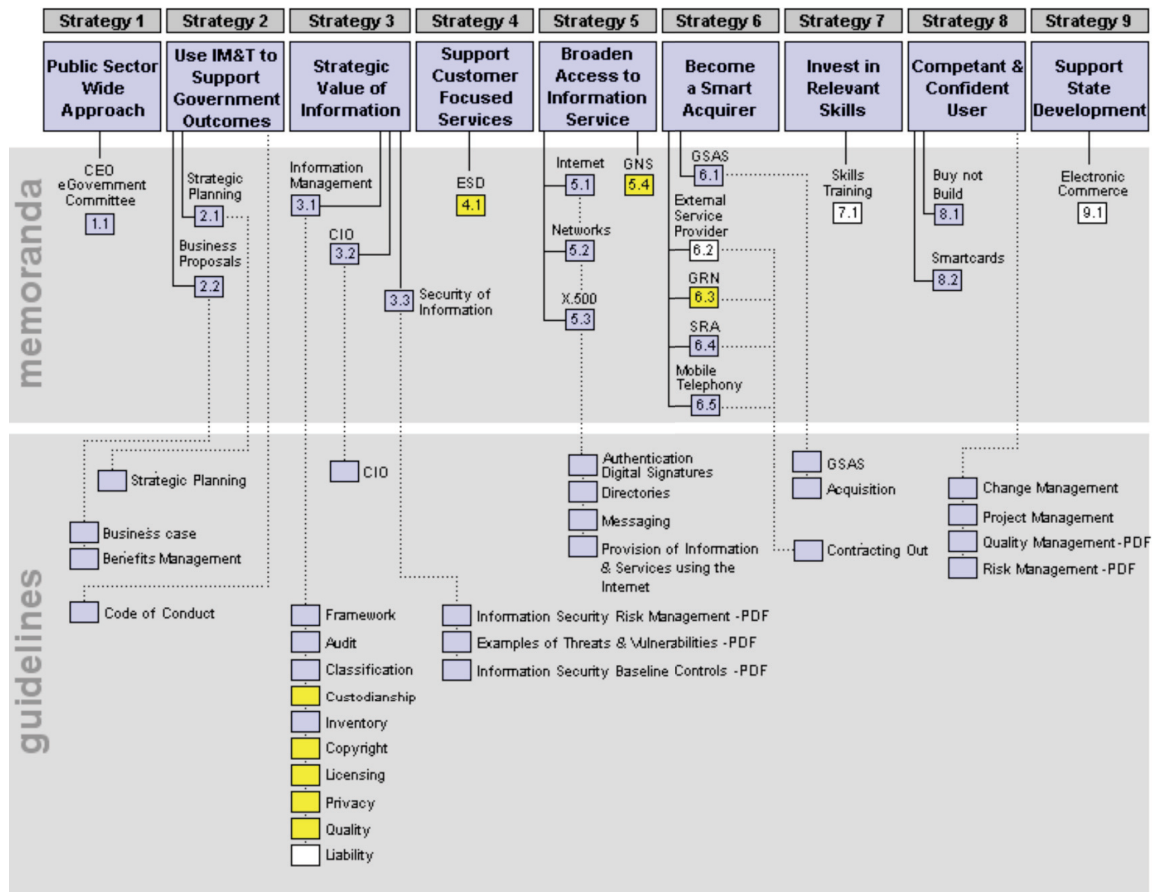


FIGURE 3.3: NSW Government Information Management and Policy Framework, including the prevailing memoranda and guidelines. Source: NSW Office of Information and Communications Technology, (2002b); available at www.oit.nsw.gov.au/pages/3.2.2.Blueprint-Map.htm (accessed 18/12/2002).

Other published guidelines included the NSW Premier’s Department (1999) guidelines for projects involving integration between services and collaboration across agencies. The latter include case studies and models; however, it was noted (NSW Premier’s Department, 1999, p. v) that these are not “one size fits all” answers but required “flexibility and a willingness to modify models and use them creatively”.

In 2001 a NSW Audit Office performance audit report found progress towards e-government maturity in NSW in line with more advanced governments. Its assessment of the NSW position is in Figure 3.4. Reviewing implementation of the *connect.nsw* strategy, the NSW Audit Office (2001a, p. 5) observed that many initiatives had been undertaken and a number of commendable achievements made. However, “fundamental change to the way the NSW public sector operates, in particular the use of technology to significantly redesign business processes and better share information, has so far been limited” (NSW Audit Office, 2001a, p. 5).

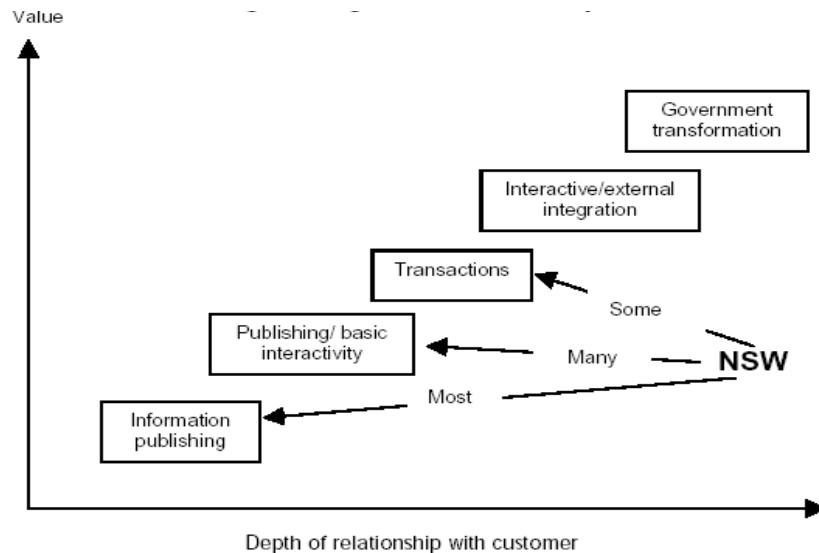


FIGURE 3.4: Stages of e-government maturity (NSW Audit Office, 2001a, p. 26)

In the *Audit Office Report*, the GLP was included under the second plank of *connect.nsw*, the NSW Government’s strategy for establishing a common infrastructure for delivering government services and sharing information within and between agencies. Reviewing progress against the strategies, the Audit Office (2001a, p. 3) identified five key issues to ensure that the Government’s vision could be achieved. Generally these concerned control (accountability) and coordination mechanisms, including more comprehensive, rigorous and systematic approaches to e-government project and risk management and agency support / funding issues.

Under “project and risk management”, the *Report* identified as better practice that e-government risks are understood and managed rather than avoided and that there were adequate skills available for effectively managing complex and /or large scale e-government projects. Insights gathered during this audit and in research by the NSW Independent Commission Against Corruption (ICAC) had indicated that NSW agencies did not generally exhibit comprehensive, rigorous and systematic approaches to e-government project and risk management. Further, global experience suggested a possible wasteland of future e-government failures unless steps were taken to improve project and risk management in agencies (NSW Audit Office, 2001a, p. 36). Key common issues for project management (PM) were lack of skills in agencies to effectively manage major ICT projects, thereby leading to cost over-runs and failure to deliver expected benefits. Better practice knowledge sharing was that mechanisms were in place to effectively share knowledge and experience about e-government issues and a foreshadowed initiative was the posting of better practice case studies on the OIT website.

As one response to emerging problems, governments in Australia and the UK promoted the role of PM and its associated skills / competencies. PM offered, according to Clegg and Courpasson (2004, p. 526), “a circuit breaker for bureaucracy, a short cut from the modern to the postmodern, from bureaucracy and hierarchy to post-bureaucratic professionalism and collaboration”. They conclude “it is easy to see why project management may appear as a beacon for jaded organization theory with the promise of a new ‘projectified’ society of organizational projects”.

In NSW, PM was included in the competency standards framework developed by the NSW Premier’s Department (2001a) in response to the National Training Reform Agenda. In the UK, the *Modernising Government* strategy referred to the critical role of PM and Programme and Project Management (PPM) were identified as key skills in improving delivery capacity (Office of Public Services Reform, UK, 2002). In practice, PPM usually meant a formal PM methodology. As later observed (Cabinet Office, UK, 2004, p. 11), increasing professionalism in PPM was expected to be matched by skills in managing the associated organisational change as well as good generic skills such as communication, teamwork and leadership (Cabinet Office, UK, 2004, p. 4).

In 2005 the Australian Government endorsed adoption of the UK OGC Gateway Review Process™ (Department of Finance and Administration, 2006a, p. 2). The process had been adopted in NSW (NSW Government, 2002) and included in the NSW Procurement Policy framework (NSW Treasury, 2004). Benefits were seen as more accurate project scoping and estimates, reduced time and cost overruns and improved alignment of service delivery with available funds, risk management and agency responsibility and accountability (NSW Department of Commerce, accessed 2006, p. 3). Table 3.4 outlines comparative Gateway Review project governance criteria.

New South Wales Government <i>Department of Commerce</i> ¹	Australian Government <i>Department of Finance and Administration</i> ²	Victorian Government <i>Department of Treasury and Finance</i> ³	United Kingdom Government <i>Office of Government Commerce</i> ⁴
The proposal is supported by the CEO.	What is the degree of ongoing leadership and involvement of Agency CEO and Minister?	Documented evidence of unequivocal commitment from top management and Ministers and a clear understanding of their continuing roles in achieving successful outcomes.	Evidence of commitment from top management, key partners and Ministers and a clear understanding of their roles in achieving successful outcomes.

New South Wales Government <i>Department of Commerce¹</i>	Australian Government <i>Department of Finance and Administration²</i>	Victorian Government <i>Department of Treasury and Finance³</i>	United Kingdom Government <i>Office of Government Commerce⁴</i>
Responsibilities for preparation of the Business Case have been allocated.	Has the project governance framework has been established and roles and responsibilities clearly articulated?	Allocation of key roles of responsible Minister, Senior Responsible Owner (SRO), Program Director, Line Managers and Program/Project Managers.	Key roles of responsible Minister, Senior Responsible Owner (SRO), Programme Director, Business Change Manager (or equivalent role) and strand/sub-programme managers with named individuals with responsibility for the transition to new ways of working.
Appropriate governance requirements are in place to manage, monitor and report on progress of the project.	Does the project manager report to a Steering Committee or a Project Board?	Evidence that all parties understand their role in the program/project and are committed to the delivery of the program/project.	For cross-cutting programmes, evidence that all parties involved know how they are engaging in the programme and are committed to its delivery.
A plan to develop the Business Case within the required timeframe has been prepared including planning for a Business Case Gateway Review	Does the project manager have the authority to make critical decisions?	Business case includes, under project organisation, key roles and governance / reporting arrangements.	Governance/reporting arrangements as expected evidence in response to: Is there a clearly defined project organisation with agreed roles and responsibilities?
A project team with appropriate skills and experience has been identified and established to develop the Business Case.	Will the project be delivered within a formal methodology?		
Plans to manage the planning stages / processes have been demonstrated to be realistic.	Have success factors and periodic review points been established for this project?		
The budget and milestones have been demonstrated to be realistic.			

TABLE 3.4 Comparative Gateway Review project governance criteria identified from representative Australian and United Kingdom documentation⁶.

⁶ 1. Governance rating scale indicators of key success factors to assist in evaluating a project from NSW Department of Commerce *Gateway Review System: Strategic Review Workbook* Issue No. 2, May 2006 (<http://www.dpws.nsw.gov.au/Government+Procurement/Gateway+Review+Process/Gateway+Review+Workbooks.htm> accessed 7/9/06).

2. Governance criteria and questions for undertaking a high-level risk assessment of projects for potential inclusion in Gateway from Department of Finance and Administration *Gateway Assessment Tool* (http://www.finance.gov.au/gateway/index.html#assessment_tool accessed 7/9/06).

3. Compiled from Department of Treasury and Finance, Melbourne, Victoria, *Gateway Review Process (2004)* (<http://www.gatewayreview.dtf.vic.gov.au> accessed 8/9/06).

4. UK OGC *Gateway Review 0: Strategic assessment (2004)* and *OGC Gateway Review 1: Business justification (2004)* (http://www.ogc.gov.uk/ppm_documents_ogc_gateway.asp accessed 8/9/06).

3.3 Recovering Project Management Lessons Learned

Within PA, a distinction has been made between recovering lessons learned at the:

- Horizontal level – working collaboratively across organisational boundaries (Hopkins et al., 2001; Rounce and Beaudry, 2002) on the basis that organisational learning is about the way the people within an organisation learn together to achieve a common objective (Stoyko, 2001; Rounce and Beaudry, 2002).
- Vertical (hierarchical) level in line with reporting accountabilities, as exemplified by project Post Implementation Reviews (PIR) and Gateway Reviews.

3.3.1 Organisational learning

In their analysis of the extent to which organisations can learn from projects, Scarbrough et al. (2004) focus upon organisational context. Their review of existing studies suggested that the transfer of knowledge and learning generated within projects to other projects, or to the organisation, did not happen smoothly or directly. They attributed this to few, if any, formal or informal mechanisms by which the learning accumulated through projects could be assimilated as knowledge, suggesting to them that projects need to be viewed in terms of their relationship with the on-going organisational activities, norms and practices.

As an employee of NSW Health I would be subject to policies and guidelines relating to learning and development, personally and at the organisational level, and other system cultural influences such as evidence-based practice. In its policy documentation, including *Workforce Learning and Development Strategy* (issued 25/1/2005), NSW Health (2005) identified itself as a learning organisation. Other NSW Health documentation aligned learning and development policy with the needs of the Department and its employees (Figure 3.5) and a coaching and performance system that linked individual performance to the Department's operational objectives, corporate and strategic directions and ethical standards (*Coaching and Performance System (CAPS) Policy*, issued 24/3/03 and accessible through <http://www.health.nsw.gov.au>).

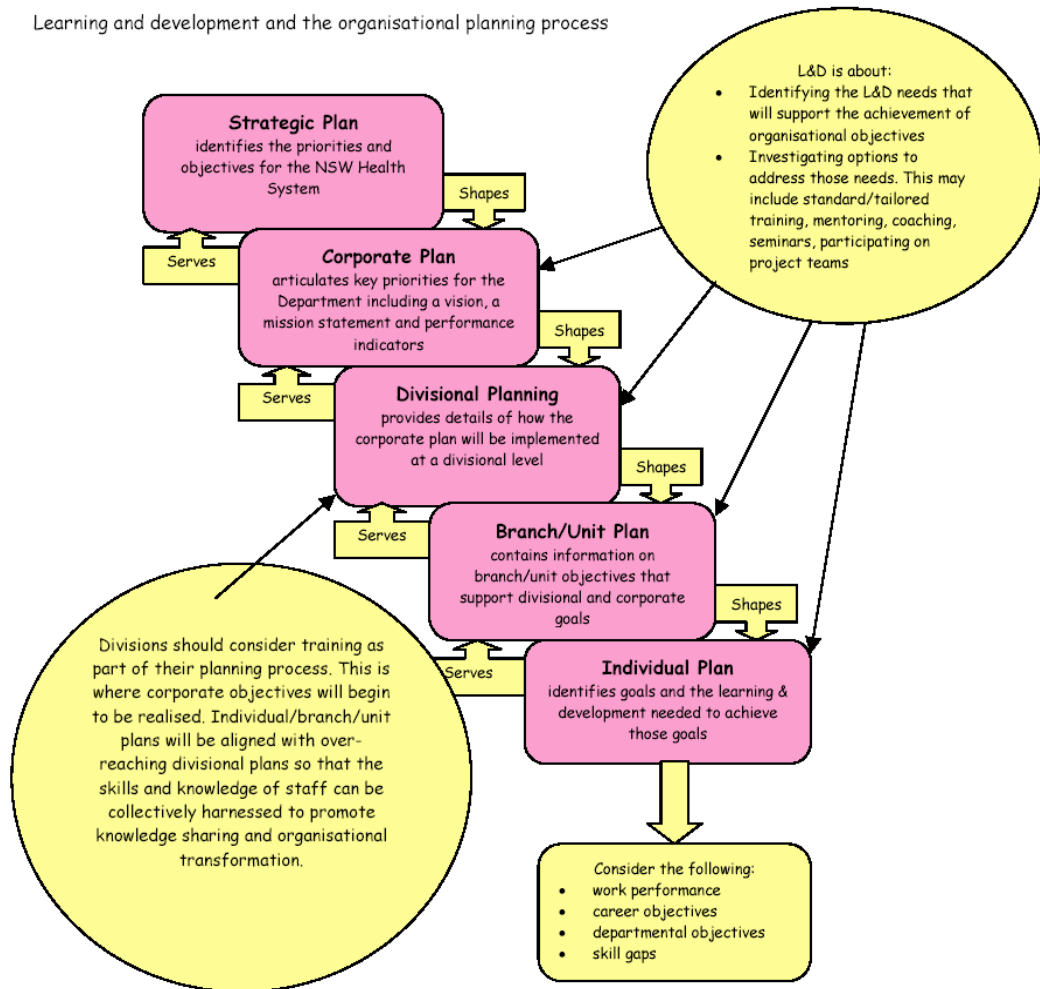


FIGURE 3.5: Cascading process for aligning organisational with individual learning plans (NSW Health Policy Directive PD2005_255 *Learning and Development Policy* issued 27/1/2005 p. 4, accessible through <http://www.health.nsw.gov.au>).

In their review of NHS change management tools, models and approaches, Iles and Sutherland (2001) had found little explicit research on PM as a means to secure changes in organisational culture (2001, p. 70). Nevertheless, under their four key categories (Figure 2.3), they had included PM along with AR, organisational development, organisational learning and the learning organisation⁷ under “*how can we make change happen?*” They found a diversity of thinking and activity encompassed by the term change that included theoretical models for analysing change, prescriptive models that aim to guide the process, typologies of different approaches, and empirical studies of the success and failure of various initiatives, programmes and tools (2001, p. 12). There were, however, few empirical or evaluative reports on organisational learning, with most literature prescribing how organisations should be designed and

⁷ Iles and Sutherland (2001, p. 63) define this as a transformation process to help organisations develop and use knowledge for ongoing change and improvement. It is characterised by continuous and emergent change, driven by learning processes founded, as suggested by Senge (1990), upon: (1) Personal mastery; (2) Mental models; (3) Building a shared vision; (4) Team learning; and (5) Systems thinking: the “fifth discipline” that fuses the other four into a coherent body of theory and practice.

managed to promote effective learning. Also, they found (2001, p. 13) problems with gathering and reviewing evidence⁸.

Williams (2007, p. 16) would later observe that moving from the individual to the organization is not simple and he referred to the debates in the field. Connell et al. (2003, p. 148), an example from the systems field, saw possible parallels between individual and organisational learning, referring to a substantial literature about some of the ways in which organisations use knowledge to review past performance and shape future performance. They drew upon the concept of organisational memory, including through a multi-layered model with the highest level being systemic (i.e. the organisation as the unit of analysis) and the lower two levels being group and individual, although boundaries may overlap.

3.3.2 Project post implementation reviews

Within NSW, the post implementation review / lessons learned processes were documented in various guidelines including in the NSW OICT's *Project Implementation Review* documentation (Figure 3.6). Technical / rational frameworks for recovering learning are evident in NSW Public Sector post-project review formats. At the time I was developing my research approach they comprised:

1. NSW Health *Post Implementation Review (Lessons Learned) Template* (APPENDIX 19), developed in the context of the Government Action Plan for Health, particularly the *Information Management and Technology Education, Training and Development Strategy* (NSW Health Department, 2002b).
2. NSW Government Asset Management Committee (2001) *Post Implementation Review Guideline* (Figure 3.7)
3. NSW Treasury *Gateway Review System Post Implementation Review Workbook*

The NSW Treasury Gateway Review process (NSW Department of Commerce, 2006) consisted of a series of structured reviews at key decision points (Figure 3.8), as did the UK OGC process upon which it was clearly modelled⁹.

⁸ Including: 1. A multidimensional impact for all but the simplest of changes; all dimensions must be captured or the picture will be incomplete. 2. Often analysing the causes of the presenting problem and designing, implementing and evaluating it is an iterative process. 3. Different views of people involved in the change program about the precipitating event, the underlying cause of the problem, and of desirable outcome; they will, therefore measure different outcomes and measure them differently.

⁹ As is the case with OGC, the NSW model concludes with an end-stage review and has guidance documentation setting out assessment criteria. Dimensions to be assessed, each of which have specific

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Post Implementation Review Guideline - Summary

Information and Communications Technology (ICT) projects generally result in the upgrade, development or acquisition of government assets that have ongoing management and operational commitments. ICT projects may involve applications, infrastructure, supporting technologies, information management, and telecommunications projects, including the acquisition and/or maintenance of telephone, radio and network infrastructure. An ICT project is a discrete initiative that is undertaken by an organisation to meet a business need. ICT projects are typically complex and have a number of different, but inter-related activities.

The final phase of an ICT project is to conduct a post implementation review to evaluate how well the expected business objectives and benefits of the ICT project were realised. The principles for conducting post implementation reviews of ICT projects are similar to those used to evaluate any project or initiative. The aim is to compare what was planned to what actually happened and assess whether the outcome added value to the organisation.

FIGURE 3.6: NSW Office of Information and Communications Technology link to Post Implementation Review Guideline (<http://www.oit.nsw.gov.au> accessed 8/2/2004)

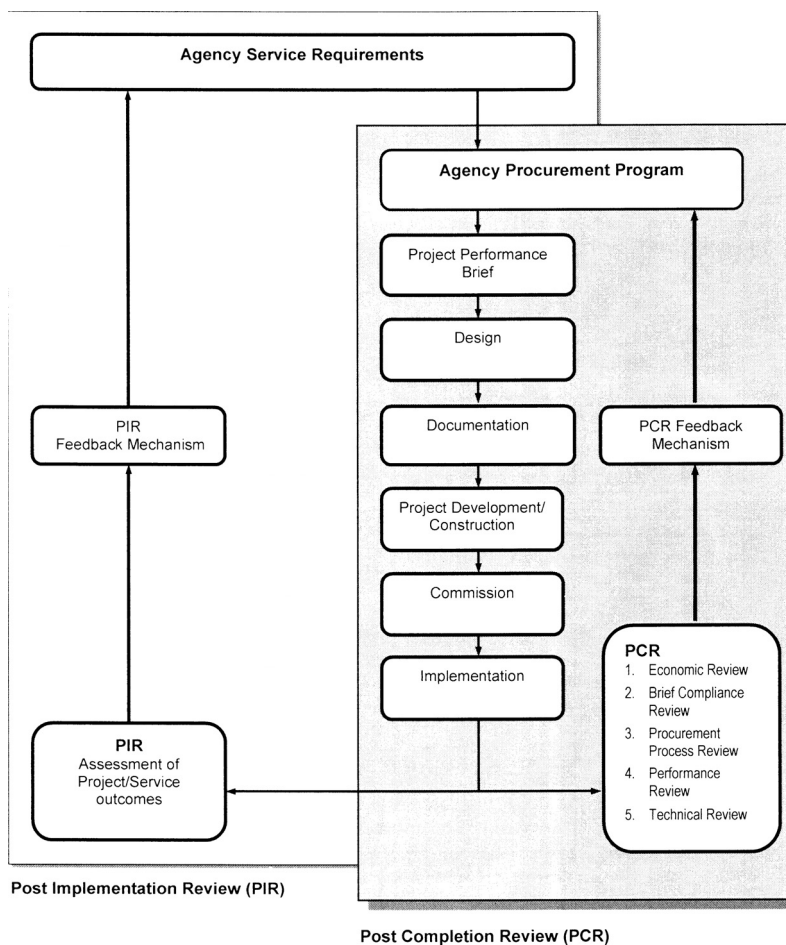


FIGURE 3.7: Conceptual diagram of PIR demonstrating it as a total feedback process which is distinguished from a Post Completion Review (NSW Government Asset Management Committee / DPWS, 2001, p. 4).

indicators (evidence requirements), are: service delivery; affordability (value for money); sustainability; governance; risk management; stakeholder management and change management (NSW Government Asset Management Committee, 2001).

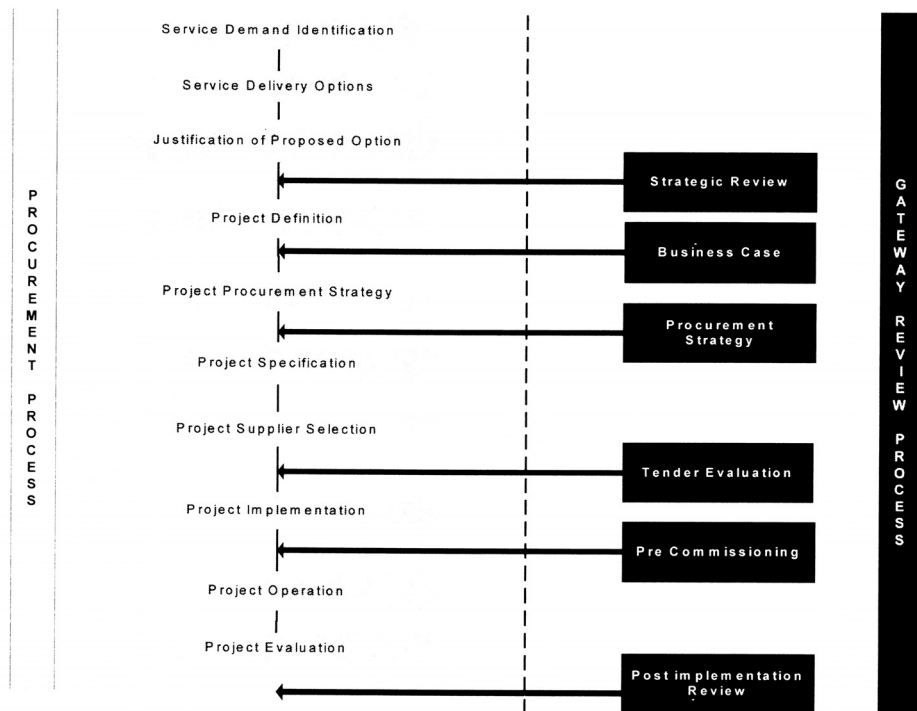


FIGURE 3.8: NSW Gateway Review Process (NSW Treasury, 2004, Attachment 5, p. 4).

Also, I would be having regard to PRINCE2 (later PRINCE2™) templates for *Post-Review Review Plan* and *Lessons Learned Report*¹⁰ and to OGC guidelines for *Post Implementation Review* and *Lessons Learned Report* from its Successful Delivery Toolkit Workbooks. These were being referenced in PM literature (Turner et al., 2000; Wideman, 2002; Turner and Keegan, 2004; Morris, 2006; Walker et al., 2008b) and were considered in the context of SSM (Checkland and Winter, 2006). In their review of project based learning opportunities, Morris and Loch (2002, p. 12) had included project reviews and gate reviews in the last two stages of the project life cycle (Figure 1.16). Newell et al. (2006) say that PM practices aimed at sharing knowledge across projects typically involve maintaining project documentation and conducting project reviews. Project team members are expected to capture knowledge and learning from the project in the form of “lessons learned”.

According to von Zedtwitz (2002, p. 257), post project reviews focus on the links between three levels of learning: individual; team/group; and organisational. Following Argyris and Schon (1978), he distinguishes between single- and double-loop learning (Table 3.5), the former proceeding through detection and mismatches between experience and a reference system without questioning or altering values. The latter takes place when a mismatch is detected and is used to correct the reference system.

¹⁰ Initially these were accessed from the Central Computer and Telecommunications Agency (CCTA) UK website on 3/11/2000 and subsequently from the UK OGC website on 16/05/03.

	'Single loop'	'Double loop'
Characteristics	<ul style="list-style-type: none"> • Occurs through repetition and routine • Well-understood context • Occurs at all levels in organizations 	<ul style="list-style-type: none"> • Occurs through insights and non-routine • Ambiguous context • Occurs mostly in upper levels
Consequence	<ul style="list-style-type: none"> • Behavioural outcomes 	<ul style="list-style-type: none"> • Insights and collective consciousness
Examples	<ul style="list-style-type: none"> • Institutionalizes formal rules • Adjustments in management systems • Problem-solving skills 	<ul style="list-style-type: none"> • New missions and new definitions of direction • Agenda setting • Problem-defining skills • Development of myths, stories and culture
Application in post project reviews	<ul style="list-style-type: none"> • Discussion of variances in expenditures, missed deadlines etc. • Retrospective analysis of major obstacles experienced 	<ul style="list-style-type: none"> • Suggestions for the application of lessons learned for future projects • Deep analysis of cause-effect relations regarding major obstacles experienced.

TABLE 3.5: Differences between single- and double loop learning as applying to post project reviews (von Zedtwitz, 2002, p. 258)

Turner et al., (2000, p. 15) refer to end of project reviews playing a vital part in capturing experience within organisations. Various referred to as after action reviews or project end reviews and with outcomes being described, for example, as lessons learned databases, their purpose was to capture the lessons learned on projects, codify them, and make them available to other members of the organisation (Keegan and Turner, 2001, p. 89). Capturing, recording and disseminating experience was considered to be key to developing organisational competence and feeding that into the development of project managers and other project professionals. Other practices that organisations used to retain PM experience were listed by Keegan and Turner (2001, p. 89) as including: corporate level training programs; competence models; learning resource centres; quality procedures and process documentation; client procedures and standards; and centres of excellence. As Newell et al. (2006, p. 168) observed, referring to documentation in lessons learned databases:

The idea is that other project teams can search these documents by project title, staff or keywords, assimilate the knowledge they contain, and so learn from them. These databases are typically computerized and, in larger firms accessed by a corporate internet. In this way, it is assumed, knowledge and learning can be shared across projects and reinvention can be avoided.

Turner et al. (2000, p. 17) refer to PRINCE2 and ISO 10,006 as suggesting a review be conducted at the end of every project. However, their data revealed a less than satisfactory use of end of project reviews with many organisations finding the practice very difficult to enforce. Where it was enforced, it could be a meaningless box-ticking exercise. Newell et al. (2006, p. 168) indicated possible reasons, including time pressures precluding any posting on the database. Further, even where a database existed and time was available, there were limits to the extent that “lessons learnt” were actually used. This appeared to be confirmed by a survey of corporate practices by Crawford and Cooke-Davies (2000) that found a fall-off in transferring lessons learned with each step of the generic process.

The problems being observed by Newell et al. (2006) suggested to them that they needed to consider the actual practice and this led them to explore underpinning assumptions. From their review of the literature, they identify typologies that develop some aspect of the distinction between the epistemology of possession (knowledge) and the epistemology of practice (knowing), arguing that in reality knowledge usually combines both possession and practice. For it to be meaningful, knowledge must be practised within a specific context.

Williams (1999, p. 272), one of my exemplar authors (Figure 2.1), said that traditional PM methods capture only hard qualitative data, concluding that it had become clear that softer ideas must also be included if they are to be a useful representation of the real project (1999, p. 272). He referred to contemporary PM practice being characterised by late delivery, exceeded budgets, reduced functionality and questioned quality, and observed that as the complexity and scale of attempted projects increases, the ability to bring these projects to a successful completion dramatically decreases. As a first step, Williams (1999, p. 273) asked what constitutes complexity, highlighting in particular the number and independence of the elements and uncertainty in goals and means (following Turner and Cochrane, 1993).

Examining why lessons are difficult to learn from complex projects, Williams (2003b, p. 443) concluded that “we have yet to discern how to systematically extract and disseminate management lessons as we move from project to project”. He found that complex projects behave in ways that are non- or counter intuitive so many lessons cannot be identified by unaided reflection. Simply identifying lessons at the end of a project was insufficient as “lessons need to be considered during the project, and when

the project is complete inter-personal structures need to be in place to distribute that learning throughout the organisations”.

In his study on post-project reviews, published by PMI in 2007, Williams would subsequently provide a basis for comparing my experience with NSW public sector PIR / Lessons Learned guidelines and templates. Here he reviewed advice on what inhibits or facilitates the distribution of lessons learned and the role of communities of practice (citing *inter alia* Wenger, 1998; Swan et al., 2002; Brown and Duguid, 1991; and Cooke-Davies and Arzymanow, 2002). Williams concluded (2007, p. 58) that project reviews were an integral part of the learning organisation; however, understanding the complex systemicity underlying project outcomes could also be important.

Reviewing use of lessons learned from post-project reviews, Williams (2007, p. 58) concluded that project reviews (post-mortems) are an integral part of the “learning organisation”. However, PM standards give little guidance on how to accomplish them. His literature search comprised articles particularly relevant to project learning¹¹ or fundamental articles or review of state-of-the-art theory. While noting that learning happens to some extent by the nature of undertaking projects (2007, p. 7), Williams’ attention was directed towards a more systematic collection and distribution of lessons from projects. He noted (2007, pp. 9-10) project processes “are generally temporary and unique, with non-routine features...Furthermore, projects not only cross organizational functions, they are transdisciplinary”. Accordingly, a change in the mode of knowledge production was required. Williams (2007, p. 16 citing Hodgson 2002) concluded that PM imposes an ontology and a specific way of thinking which can impose difficulties in critically thinking through what really happened.

In a subsequent case study of UK Government initiatives aimed at improving project delivery capability, O’Leary and Williams’ (2008, p. 556) concluded that the conventional approach of embedding best practice control processes may have little success in improving project delivery. Instead, they saw (2008, p. 563) success as an outcome of “a personally powerful and highly committed individual...skillfully exploiting the organisational context”. Looking to future research, they pointed to the need to understand better “what successful project managers and teams actually do in the day-

¹¹ Williams (2007, p. 6) referred to: (a) action learning (Revans, Smith) – people learn by working on real problems; (b) action science (Argyris and Schon) – project participants reflect on theories-in-use with the help of a facilitator; (c) action research (Lewin) – combines theory building with research on practical problems; (d) communities of practice (Wenger, Brown and Duguid) – learning occurs naturally through communities, with the deepest learning occurring when people’s positions move within a community and at the intersections of multiple communities; and (e) reflective practice (Raelin).

to-day organisational interactions” and “how those experience-based skills can be effectively developed and transferred, by means other than process codification”.

3.3.3 Case study reports

As noted on the UK Office of Government Commerce website¹², case studies are a valuable tool providing summary information and a snapshot of the work undertaken. A great deal of expertise and knowledge existed within individual projects and it was critical that the hard won lessons learned were captured for the future.

In NSW, the Office of Information and Communications Technology (OICT) posted case studies online to showcase some of the successful e-government / e-business services developed by agencies (Figure 3.9). Each was said to describe the lessons learned and was expected to bring a sharing of ideas, information and experiences.

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A - Z Listing of Case Studies

This segment of the OICT website showcases some of the successful services that have been developed by agencies. This promotes useful networking amongst agencies and acknowledges the success of their projects. It is anticipated that this will encourage agencies to deliver more services online.

Each case study describes lessons learned in the process, and it is expected this will bring about a sharing of ideas, information and experiences.

Some of these case studies are only available on the Agency Resource Centre. If you select one of these, you will be prompted for your password if you have not already entered the ARC. If you have not been issued with a password, please contact

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- [Corporate Services Reform: Department of Land and Water Conservation](#);
- [Corporate Services Reform: State Transit Authority](#);
- [Corporate Services Reform: Visitor Services Agencies](#);

FIGURE 3.9: NSW OICT Case Studies home page (<http://www.oict.nsw.gov.au/content/6.1.1 A-Z-Portfolio.asp> accessed 12/8/2004).

OICT posted some 42 case studies, including the GLP, and I accessed 27 of them. As they are no longer accessible online, I have summarised nine of them in APPENDIX 4.

¹² http://www.oigc.gov.uk/Document_Library_case_studies_all.asp accessed 31/8/2006

The accompanying *Guideline* (accessed on 6/7/04) said they were a key component of the initiatives developed by OICT to raise awareness of how ICT can be used to meet business needs and deliver enhanced services to the community:

A considerable store of hands on knowledge and experience exists on ICT. Much of this wealth of information lies buried in agency files or exists in the memories of practitioners. Lessons and insights from case studies that show rather than say what can be done is the best guide for the ongoing effective application and strengthening of ICT. OICT will publish an ongoing portfolio of case studies on the OICT web site to enable this expertise to “come to light” and be of benefit to other practitioners working directly with ICT.

OICT had a standard reporting format. However, unlike the UK NHS study by Iles and Cranfield (2004)¹³, the cases posted did not explicitly refer to the theory they used. Further, the depth of the accounts varied across cases and, although they were not amenable to comparative analysis, they did provide contemporaneous material on development of online services in NSW public sector agencies.

3.4 Agency-Specific Issues

The scope of action afforded by my three case study agencies was introduced in Chapter 1.1 in terms of the problems being addressed which would inform the purposes expressed in my research questions. This was a continuing dynamic across the periods of my inquiry as mapped in Figure 1.3. Progress on the reform programs / projects at all three case study agencies would be the subject of external review. While inquiries such as those undertaken by the Wood Royal Commission (NSW Police Service), the NSW Parliament Joint Select Committee on Bushfires (RFS) and the NSW Auditor-General (the GLP) provide unique windows into the areas of concern, at some stage, like the local discourses depicted in Figure 1.8, they are closed down. These inquiries explain the *why* of the affiliation’s project engagements but the PM *how* occurred within the context of prevailing PA managerial philosophy and practice.

3.4.1 NSW Police Service


The Soft Systems for Soft Projects collaboration had begun in the context of a Royal Commission of Inquiry. These occur regularly, albeit not frequently, in Australian public

¹³ This was a follow-up report to Iles and Sutherland (2001). They explain (2004, p. 9) that their choice of models was pragmatic and they referred to some comprehensive concepts, for example SSM and AR as being difficult to illustrate in the space available while some (models) like PM, are sufficiently familiar or have a good, accessible literature.

life (Gilligan, 2002; Prasser, 2006), their features including formal appointment by the Governor-General or state governors and establishment under legislation. They have coercive powers and open processes of investigation and their reports are publicly released. According to Gilligan (2002, p. 293) they “form part of the official discourse (of the state)” and their strategic importance “lies in their status as a tried and tested sealant of legitimacy gaps performing a valuable legitimization function for official discourses” (Gilligan, 2002, p. 203). These discourses concern power, rationality and the legitimacy of public institutions (Gordon et al., 2009a) whose response may be externally reviewed. In the case of the NSW Police Service external review was through the *Qualitative and Strategic Audit of the Reform Process* (Hay Group, 2001; 2002a; 2002b), academic analysis, for example, Dixon (2001-02), Karp (2008) and Gordon et al. (2009b) and continuing media scrutiny (Williams, 2002) as exemplified in Figure 3.10.


THE RYAN RESIGNATION

After six years Peter Ryan walks away from the NSW Police, leaving the man in the back row to pick up the pieces



1997: Peter Ryan's then newly appointed leadership team

VANISHING ACT



2002: The Commissioner's depleted command without Peter Ryan at the helm. Ken Moroney is circled.

By DAVID PENBERTHY

PETER Ryan yesterday became the most dramatic casualty in the exodus of senior police brought in by the Government to win the war on corruption and crime.

In a bombshell announcement, kept secret for almost a week, Mr Ryan will receive \$455,435 including leave entitlements after deciding in Athens last week he no longer wanted the job, with 17 months to go on his contract.

The Commissioner's departure takes to 10 the number of senior NSW police officers who have left his original leadership team since Mr Ryan was head-hunted on a salary of \$425,000-a-year following the Wood royal commission. It has forced the promotion of deputy commissioner Ken Moroney, now serving as acting commissioner and the favourite to win the top job, which will be advertised from Saturday.

In an exclusive interview with *The Daily Telegraph* yesterday, Mr Moroney said he wanted to be next commissioner to improve

Inside

- How Ryan made his decision to quit: P3
- 'Vitriolic' campaign took its toll: P3
- Ryan's legacy: P4
- New short list for commissioner: P5
- A wrong quick fix, Richard Basham: P2

Continued Page 2

FIGURE 3.10: Newspaper report of the resignation of Commissioner Ryan in the *Daily Telegraph*, Sydney 11 April 2002, p. 1.

3.4.2 NSW Rural Fire Service

The Minister for Emergency Services, the Hon Bob Debus, MP, had announced on 7 June 2000 that fire control staff would be transferred from local to state employment from July 2001, thus effectively unifying the RFS. Previously, there had been dual accountability to the RFS in operational matters and to local government councils in administrative matters. The Minister said the issue was complex and long-standing and welcomed the co-operation of all parties to bring about its resolution (Figure 3.11).

Smoke clears over bushfire fighting roles

Harvey Grennan

What will local councils make of losing one of their few positive PR tools and gaining one of the less glamorous functions of a modern society?

July 1 is the day that councils in NSW hand over control of bushfire fighting to the Rural Fire Service (RFS). The deeds of volunteer firefighters can and do reflect glory on councils, which have supported and nurtured them.

On the same day that council fire-control officers get a new boss in the form of the Rural Fire Commissioner, Phil Koperberg, councils will add to their pay rolls the 200-odd parking police who now work for the Police Commissioner, Peter Ryan. They are at the opposite end of the PR meter to the volunteers.

Local government is, however, taking the changes in its stride. This week the Local Government and Shires Associations will meet again with NSW Treasury officials to sort out the split of the proceeds from parking fines. Treasury says councils must employ all parking police

“We have called on the State Government to review funding for the whole fire service after a 12-month trial”.

CHRIS VARDON
Shires Association



Deadly menace . . . from July firefighting volunteers come under the control of the Rural Fire Service. Photo: Nick Moir

patible, and that there was duplication of resources and personnel.

Last year, after numerous inquiries it was agreed that councils should relinquish their fire-control officers to the RFS. But councils' role in bushfire management is not to end entirely. They will retain control of the formation of volunteer brigades and their premises, and there will be a contract or "service level agreement" between the RFS and each council under which the council will contract certain fire control activities to the RFS.

A "menu of options" to be contained in these contracts is now being refined by the RFS and which combination of options (or level of service) will be chosen by each council should be clear by April.

The president of the Shires Association, Chris Vardon, said many councils had had a very close association with firefighting but it was time to give the new arrangements a fair trial.

"We have called on the State Government to review funding for the whole fire service after a 12-month trial," he said. The changes would require a dramatic upgrade in the RFS structure at its Rosehill headquarters to meet these contractual obligations.

The transfer of parking police is also having a difficult birth. Some councils who had no parking police were given power to issue infringement notices, but if local police objected, this power was sometimes denied or withdrawn.

Then, in 1999, the Auditor General exposed the inefficiency of parking police, who were issuing 50 per cent fewer tickets per officer than 40 years ago and taking more sick leave than most other public servants.

About 50 councils have parking police operating in their areas and once in councils' employ they may be used for other ranger-type duties as well. Possibly another 50 councils would have parking police overlapping from another council area. Councils without parking police are expected to be able to appoint their own.

harveygrennan@bigpond.com.au

FIGURE 3.11: Newspaper report on the progress of the Rural Fire Service change management program, *The Sydney Morning Herald*, 13 February, 2001.

On 18 November 1999, the General Purpose Standing Committee No. 5 of the Legislative Council of the Parliament of New South Wales had established an inquiry into the RFS¹⁴. The terms of reference related to the adequacy of fire suppression services provided by the RFS to NSW rural communities, including adequacy of stakeholder representation and appropriateness of the command and control system in the suppression of bushfires. As noted in the Committee's Report (23 June 2000, p. xv), rural fire services had been undergoing extensive reforms during the previous decade, the catalyst being the devastating impact of fires occurring in the 1990s.

Recommendations for reform had resulted in a new Act, the *Rural Fires Act 1997*. Apart from a Performance Audit Report in 1998 (NSW Audit Office, 1998), there had not been a comprehensive review of the Service since the new Act. Also, the Committee noted some of the reforms appeared contentious. Referring to the major

¹⁴ NSW Legislative Council (2000); accessible through www.parliament.nsw.gov.au/gpsc5

transformation that had been occurring and the move towards a more professional service with a greater emphasis on safety, it acknowledged that (2000, p. xv) the RFS had been working hard to address outstanding issues or areas of concern. The Committee said that the positive RFS response had pre-empted the need for certain recommendations and acknowledged the hard work, experience and dedication of the volunteers. It believed that “we should strive to maintain and support the volunteer ethos, and a key part of that process is listening to the concerns of the volunteers”.

3.4.3 NSW Health Professionals Registration Boards

When the HPRB was selected as a lead agency¹⁵ for implementing the GLS in 2001 (Figure 3.12), it was to engage in the largest across-government IT project in NSW. According to the *GLP Project Summary* (NSW Office of Information Technology, 2002)¹⁶, the aim was to develop a state-of-the-art system for the State’s wide-ranging business and occupational licensing services, incorporating online access in addition to traditional counter, telephone and postal services.

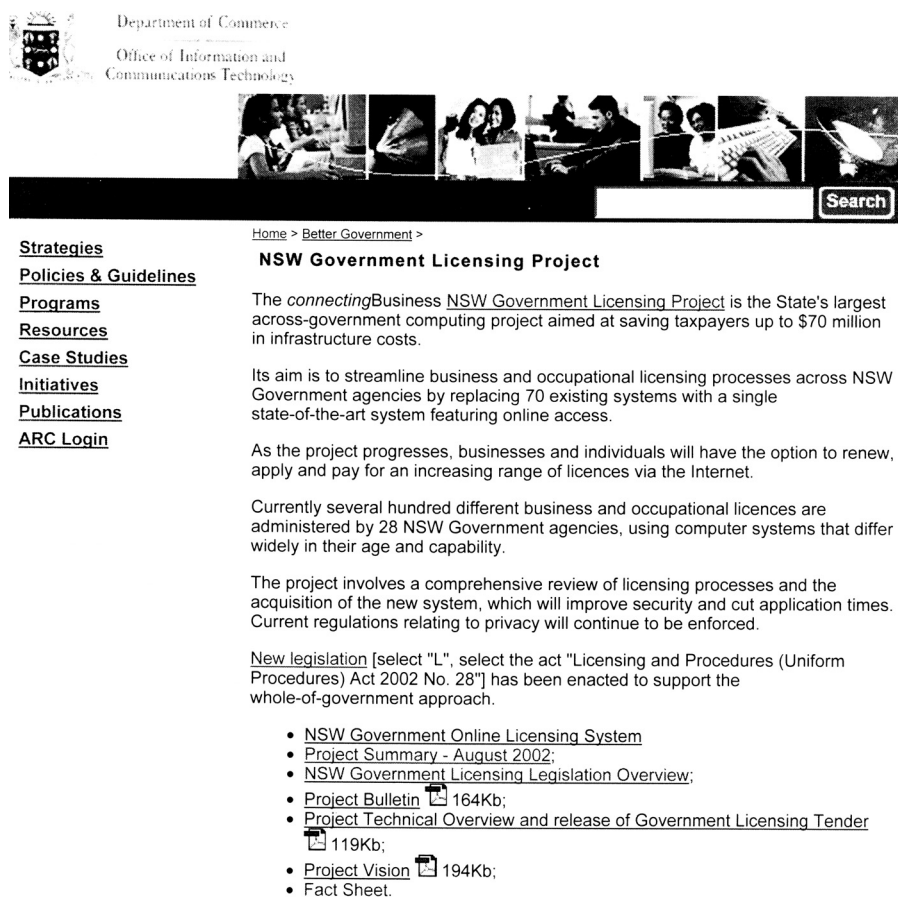


FIGURE 3.12: Government Licensing Project web home page (<http://www.oit.nsw.gov.au/pages/5.4.3.nsw.glp.htm> accessed 12/8/2003).

¹⁵ Other agencies selected were Fair Trading, Gaming and Racing, National Parks and Wildlife Service and the WorkCover Authority <http://oit.nsw.gov.au/pages/5.4.5.summary.htm> accessed 12/8/03

¹⁶ <http://www.oit.nsw.gov.au/pages/5.4.5.summary.htm> accessed 12/8/2003 and NSW OIT, *Fact Sheet 7*, Issued August, 2002 <http://www.oit.nsw.gov.au/pages/12.2.7.glp.htm> accessed 12/8/2003

The GLP implementation team included representatives of key government licensing agencies, the Office of Information Technology (OIT) which was the responsible agency at the time, and specialists in information, IT architecture, business process re-engineering, risk management, change management and communication". OIT¹⁷ was, according to the State Records Archive¹⁸, "built on the strategies of the Government Information Management Division of DWPS. It was responsible for developing a framework for the reform of management and use of IT in the NSW public sector.

The scope of the GLP is indicated in Figure 3.13. As reported in the *Benefits Management Plan Guideline* issued by the NSW Department of Commerce (NSW Government Chief information Office, 2003, p. 21), it had a budget of \$32M, was to provide a "one stop" entry point to licensing and information services by 2005, and was expected to save taxpayers up to \$70M in infrastructure costs across 32 different agencies. The GLP was considered complex because of the large number of agencies and systems involved, as well as the fact that the business process reform program being undertaken in each agency would be ongoing throughout the various phases of the project. The project approach adopted (Figure 3.14) indicated the GLS would have a legislative framework and would be built by an external vendor¹⁹.

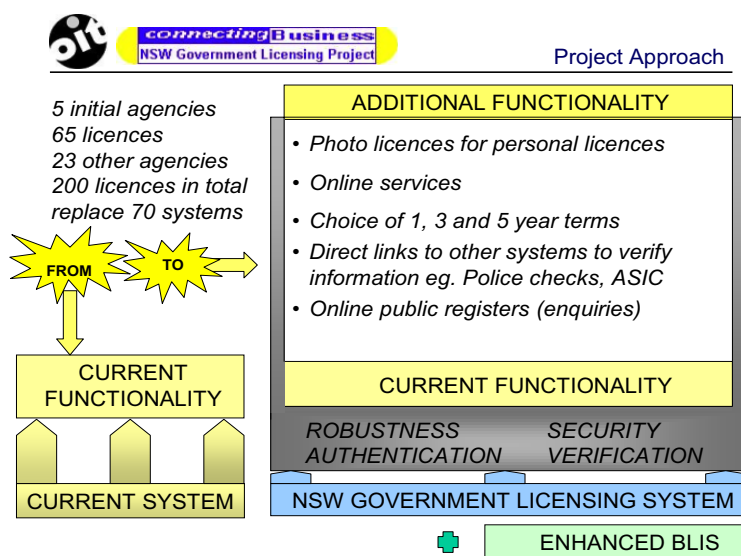


FIGURE 3.13: GLS scope from NSW Government Licensing Project Overview dated February 19 2002, NSW Department of Commerce and Office of Information and Communications Technology (accessible on 29/8/09 at www.egov.vic.gov.au/Documents/NSW/Licensing_020219.ppt).

¹⁷ OIT was established in January 1998 and was in the Premier's Department until 8 April 1999 when it became a unit in the Department of Information Technology and Management (DITM). In 2003 DITM was abolished and OIT transferred to the Department of Commerce where it became the Office of Information and Communications Technology (OICT). Abolished in November 2004, this was succeeded by the Government Chief Information Office (GCIO). The GLP then reported separately to Service Improvement.

¹⁸ NSW State Records Archives Investigator (<http://www.investigator.records.nsw.gov.au> – accessible 12/7/2010)

¹⁹ The Request for Tender was released by the State Contracts Control Board in August 2002 (*Overview of the GLP Initiative* dated August 2002; accessible on 10/8/05 on www.oit.nsw.gov.au/nswglp/index.htm). Following a proof-of-concept process and lengthy contract negotiations, a contract to develop the GLS was signed on 19 December 2003 with Accenture Australia Holdings Pty Ltd (release dated Sydney 14/1/2002 on <http://www.accenture.com/xd/> accessed 12/03/2003).

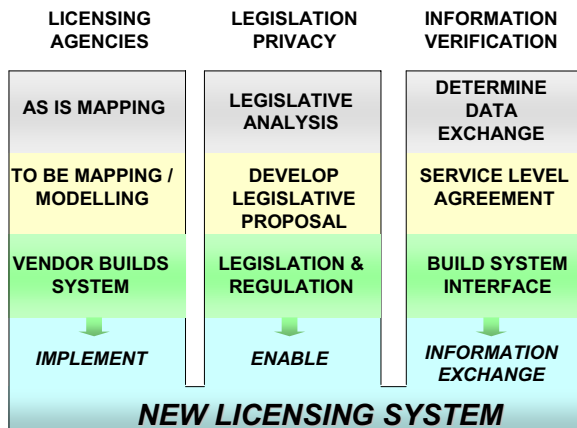


FIGURE 3.14: GLS project approach from *NSW Government Licensing Project Overview* dated February 19 2002, NSW Department of Commerce and Office of Information and Communications Technology (accessible on 29/8/09 at www.egov.vic.gov.au/Documents/NSW/Licenisng_020219.ppt).

3.5 Concluding Annotation

In this chapter I have reviewed literature on general public and local domain specific discourses, particularly concerning NPM and Government reforms and their implementation, as applying to my case study agencies, which were setting the contextual rules of the game for my practice and research engagement at HPRB. Emerging public sector management approaches were looking to apply PM to the transition from policy / recommendations for reform into service delivery. They were aiming to promote development of organisational capabilities and individual skills that translated into “better” business practices. The literature reviewed encompassed NSW Public Sector policies and practices for recovering PM lessons learned / knowledge at organisational, project team and individual practitioner level. Also, there were organisational cultural factors that were impacting on our PM engagement in each of the agencies.

Generally, I found the NSW public sector policies and practices to be prescriptive, as was the case with “best practice” PM standards, whereas our affiliation’s experience that began with the Soft Systems for Soft Projects collaboration had found no “one size fits all” answers. In Chapter 4, I begin stitching together the “threads” of my approach whereby I would be seeking to respond to the dynamics of my practice context while endeavouring to draw upon the affiliation’s experience to feel my way through my new practice-research situation.

CHAPTER FOUR: Positioning the Practice – Research Approach

NSW was one of the first governments to lay out a program for public sector reform using the Internet. The vision announced in the *Information Management and Technology Blueprint for NSW* and *connect.nsw* was far reaching. International consultants in 1997 commented that NSW was “extremely well positioned to take advantage of the benefits that electronic service delivery has to offer”. Implementing the Government’s challenging vision for e-government leadership is a huge, complex and difficult task. (NSW Audit Office, Performance Audit Report: *e-government: Use of the Internet and related technologies to improve public sector performance* 2001a, p. 13)

4.1 Summary

In this chapter, I begin stitching together threads that would be particularly informing my approach towards eliciting Mode 2 management knowledge within the PM scope of action in my three case study agencies. Connell et al. (2003, p. 148) refer to this knowledge as being embedded within systems of practice that enable an experienced practitioner to feel their way through new situations. It is knowledge that “the apprentice will have to accumulate for himself”. If it leads to a successful intervention, it “becomes his, not because it has been transferred, but because it has been created (by him) through his experience of that intervention” (Connell et al. 2003, p. 148). In my new situation I would be an insider practitioner-researcher working within the scope of action provided by HPRB’s participation in the NSW public sector’s largest across-government IS/IT project at the time, the GLP. This was a major vehicle for delivering the NSW Government’s strategic electronic e-business agenda; however, its implementation was delayed well beyond its original timeline.

Beginning with the Soft Systems for Soft Projects collaboration, the affiliation had found no “one size fits all” answers for responding to our practice and research context. We had found unease with traditional PM notions of control (Remington and Crawford, 2004, p. 7) and even signs that PM may be on verge of a paradigm shift (Pollack, 2007). Walker et al. (2008a, p. 28 citing Cicmil and Hodgson, 2006) refer to academics who argue that observed PM practice often seems to emerge out of coping with complexity and apparent chaos. Accordingly, we had been seeking alternative theoretical and methodological approaches to those traditionally employed in PM. Over the span of inquiry mapped in Figure 1.3, our appreciation of the literature informing our practice and research was continually shifting as we individually and collectively tackled emerging problems and puzzles.

In developing my approach to my inquiry, I would be aiming at a process that juxtaposed perspectives, which according to Alvesson et al. (2004, p. 8), a reflexive researcher uses to address limitations in using a single frame of reference. In their view, it is the accumulation of perspectives that amounts to reflexivity, not the adoption of one to undermine another. Thus reflexive practice is more a matter of bricolage, where different perspectives help to understand otherwise incomplete research. In the qualitative research paradigm, a bricoleur is “someone who works with his (or her) hands and uses devious means compared with those of the craftsman...the bricoleur is practical and gets the job done” (Denzin and Lincoln, 1998, p. 16).

4.2 Responding to the Practice Context

The context within which I initially planned my inquiry was HPRB’s selection as a lead agency for participation in the GLP, as outlined in Chapter 3. Since my inquiry would be beginning at the mid-point of the expected GLP life cycle, I intended to combine retrospective and prospective elements into my research design.

As planned, my HPRB engagement would be one of two overlapping AR cycles (Figure 1.3). The first, the *Online Services Development Program*, was my responsibility. The second, the *IS/IT Platform Project*, was to be undertaken by a colleague, Julien Pollack (Pollack, 2005). The hard versus soft issue was at the centre of his inquiry (Pollack, 2005, p. 16). His review of the literature found that, while traditional PM approaches had been significantly influenced by the hard paradigm, there was a growing acceptance of ideas which align with the soft paradigm. This suggested to him and affiliation colleagues that the underlying PM theoretical basis may be expanding to take into account a wider variety of perspectives and practice options.

4.2.1 Government Licensing Project

As is the wont of AR projects in complex organisational environments (for example Rose, 2000; Sarah et al., 2002; Molineux and Haslett, 2002) changes in my practice context would preclude me continuing with my planned AR methodology. As variously reported in government reviews²⁰ the GLP was encountering delays, which the Auditor-General’s *Performance Audit Report* (NSW Audit Office, 2009) would later say could

²⁰ The NSW Auditor-General’s Report (2009), for example, refers to reports to Parliament that since 2004 had been documenting the progress of the GLP.

happen in any large project. Although not contemporaneous with my inquiry, the *Audit Report* outlines the GLP position as appreciated from a later perspective. While the issues raised were discernible upon a reading of the contemporary accounts I constructed from my notebooks, it had the advantage of hindsight. In 2009, the GLP was not expected to be completed until 2014, was exceeding its budget (estimated at \$86M) and expected net benefits (\$19M) were far less than originally planned. The schedule's slippage was attributed to the decision making process, to treatment of major risks and to key decisions affecting project scope being made outside the GLP steering committee.

4.2.2 Other developments

In 2008, the Council of Australian Governments (COAG) had advised²¹ it had signed an Intergovernmental Agreement for creation of a single national registration and accreditation system for nine health professions (medical practitioners, nurses and midwives, pharmacists, physiotherapists, psychologists, osteopaths, chiropractors, optometrists and dentists) to commence 1 July 2010. The national scheme was to have commenced by July 2008 and, in anticipation, the NMB had revised its 2004/07 *Strategic Plan* to set out objectives, strategies and actions for the transition. A collaborative change management approach was adopted (NMB, 2005, pp. 12-13) that was also discernible in NSW Health's response to the Government Action Plan (GAP)²² through its *Information Management and Technology (IM&T) Education, Training and Development Strategy*²³. The GAP approach (February 2002)²⁴ had adopted an incremental approach to change and a focus on clear, specific goals, objectives and strategies. Accordingly, the *IM&T Strategy* (NSW Health Department, 2002b, p. i) aimed inter alia to create an evidence-based information culture, develop the information skills of health care workers to support day-to-day work practice and promote a learning culture, and to assist them to realise identified benefits at strategic, organisational and personal levels. Nevertheless, within NSW Health, the PM approaches also observed as required the technical / rational requirements of NSW Government policies.

²¹ In a communiqué following its meeting on 26 March, 2008 (www.coag.gov.au)

²² The NSW Health Strategic Management Framework (accessed 4/3/03) had a three tier structure, with the GAP Plan at the strategic level, then the Corporate Plan and then Operational Plans, defined as including learning from past achievements; strategies for action; accountabilities; and integrated budget, training, systems improvement, performance, risk and project management.

²³ This was accessible through http://www.health.nsw.gov.au/pubs/subs/sub_gap.html, most recently by the author on 19/6/2006.

²⁴ Accessed on <http://www.health.nsw.gov.au>

4.2.3 Rethinking the inquiry scope

Anticipating implementation of the GLP within HPRB, my inquiry had initially been designed for the practice context of a large, complex externally driven change project that could be characterised as transitional (Figure 4.1). At the same time, an internal IS/IT capability to support online service provision was emerging that may be characterised as developmental. As defined by Iles and Sutherland (2001, p. 15) this is a “change that enhances or corrects existing aspects of an organisation, often focusing on the improvement of a skill or process”. These two perspectives appear to align with the modes contrasted by Weick and Quinn (1999, p. 361) on the basis of implied metaphors of organising, analytic frameworks, ideal organisations, intervention theories and roles for agents (Table 4.1).

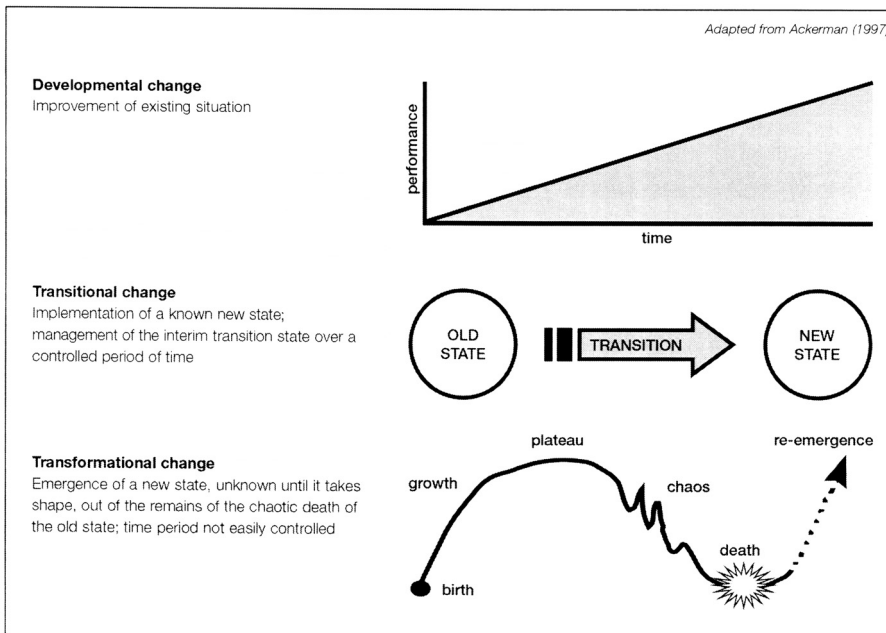


FIGURE 4.1: Perspectives on organisational change (Iles and Sutherland, 2001, p. 16).

	Episodic change	Continuous change
<i>Metaphor of organization</i>	Organizations are inertial and change is infrequent, discontinuous and intentional.	Organizations are emergent and self-organizing, and change is constant, evolving, cumulative.
<i>Analytic framework</i>	Change is an occasional interruption or divergence from equilibrium. It tends to be dramatic and is driven externally. It is seen as a failure of the organization to adapt its deep structure to a changing environment. Perspective: macro, distant, global. Emphasis: short-run adaptation. Key concepts: inertia; deep structure of interrelated parts, triggering, replacement and substitution, discontinuity, revolution.	Change is a pattern of endless modifications in work processes and social practice. It is driven by organizational instability and alert reactions to daily contingencies. Numerous small accommodations cumulate and amplify. Perspective: micro, close, local. Emphasis: long-run adaptability. Key concepts: recurrent interactions, shifting task authority, response repertoires, emergent patterns, improvisation, translation, learning.

	Episodic change	Continuous change
<i>Ideal organization</i>	The ideal organization is capable of continuous adaptation.	The ideal organization is capable of continuous adaptation.
<i>Intervention theory</i>	Necessary change is created by intention; it is Lewinian: inertial, linear, progressive, goal seeking, motivated by disequilibrium, and requires outsider intervention. <ol style="list-style-type: none"> 1. Unfreeze: disconfirmation of expectations; learning anxiety; provision of psychological safety. 2. Transition: cognitive restructuring, semantic redefinition, conceptual enlargement, new judgement standards. 3. Refreeze: creative supportive social norms, make change congruent with personality. 	The change is a redirection of what is already underway; it is Confucian: cyclical, processional, without an end state, equilibrium seeking, eternal. <ol style="list-style-type: none"> 1. Freeze: make sequences visible and show patterns through maps, schemas and stories. 2. Rebalance: reinterpret, relabel, resequence the patterns to reduce blocks. Use logic of attraction. 3. Unfreeze: resume improvisation, translation and learning in ways that are mindful.
<i>Role of change agent</i>	Role: prime mover who creates change. Process: focuses on inertia and seeks points of central leverage. Changes meaning systems: speaks differently, communicates alternative schema, reinterprets revolutionary triggers, influences punctuation, builds coordination and commitment.	Role: Sensemaker who redirects change. Process: recognizes, makes salient and reframes current patterns. Shows how intentional change can be made at the margins. Alters meaning by new language, enriched dialogue, and new identity. Unblocks improvisation, translation and learning.

TABLE 4.1: Comparison of episodic and continuous change according to properties that may be found in any comprehensive theory of change (Weick and Quinn, 1999, p. 365).

In continuous change, the change agent's role is managing language, dialogue and identity. They are important for their ability to make sense of change dynamics already underway and, in so doing, are sensitive to discourse (Weick and Quinn, 1999 p381). In episodic change, the role of the change agent is that of prime mover. However, Weick and Quinn (1999, p. 374) note that large scale change in very large groups is counterintuitive as size and participation tend to be negatively related. Accordingly, interventions:

...rely less on action theory and more on systems theory; less on closely held, internal data generation and more on gathering data from the environment and sharing it widely; less on slow downward cascades and more on real-time analysis and decision making; less on individual unit learning and more on learning about the whole organization; less on being senior management driven and more on a mixed model of being driven by both senior management and the organization; less consultant centered and more participant centered; less incremental in terms of depth of change.

My HPRB position statement included responsibility for developing a change management strategy for key HPRB processes based on evolution of people and systems interactively, with emphasis on the GLP and e-business generally.²⁵ In this

²⁵ Cited with the permission of the Director, HPRB

capacity, I would be engaging with the technical / rational business / managerialist voice of public administration. As Johnston (2002, p. 6) observed, this was the voice of cost-cutting, improved services, corporatisation, restructuring and amalgamation. Also, I would be engaging in NSW Health context. Here, while Johnston (2002, p. 6) found a dedicated and focused rational, managerialist voice supporting strategic management practices, it could be assumed on the evidence that the professionals in the system were professional to the core, in terms of service delivery (2002, p. 7).

Checkland and Holwell (1998b, pp. 173-4) said that to make sense of their NHS experiences, it had been necessary to think of it as a complex network of professional groups through which the delivery of health care emerged, thanks to dedicated professionalism, rather than being routinely managed. They reported it was public sector experience, particularly the NHS that shaped the development of SSM. Referring to how much the public sector can learn from the private, however, Iles and Sutherland (2001, p. 18) caution that:

...change in public sector organisations, and particularly those populated by influential professional groups, is beset by complexity of a different order from that in more hierarchical organisations. Success is likely to depend as much on the quality of implementation, on the sensitivity to different points of view and on the degree of support from influential organisation members as on the soundness of the principles of the change approach adopted.

4.3 Focusing the Inquiry

Critical review of my research approach would be on-going as it was being driven by the demands of practice. Informing my understanding of my scope of action in response to those demands would be my interpretation of unfolding discourses across the applied domains in Figure 1.8. Many of these were overlapping, thereby providing a number of perspectives for articulating issues central to my practice and research. Key focus areas emerging during the Soft Systems for Soft Projects collaboration and subsequently carried forward as extracted from the affiliation's publications until 2006 are mapped in Figure 4.2. My particular contribution to initiating and sustaining this stream of practice and research is documented in APPENDIX 5. I would be endeavouring to build upon a number of these threads using the affiliation's research methods, in particular AR and case studies and also review / analysis of both academic and non-conventional literature. I would subsequently add AL and discourse analysis as emerging from organisational and management studies.

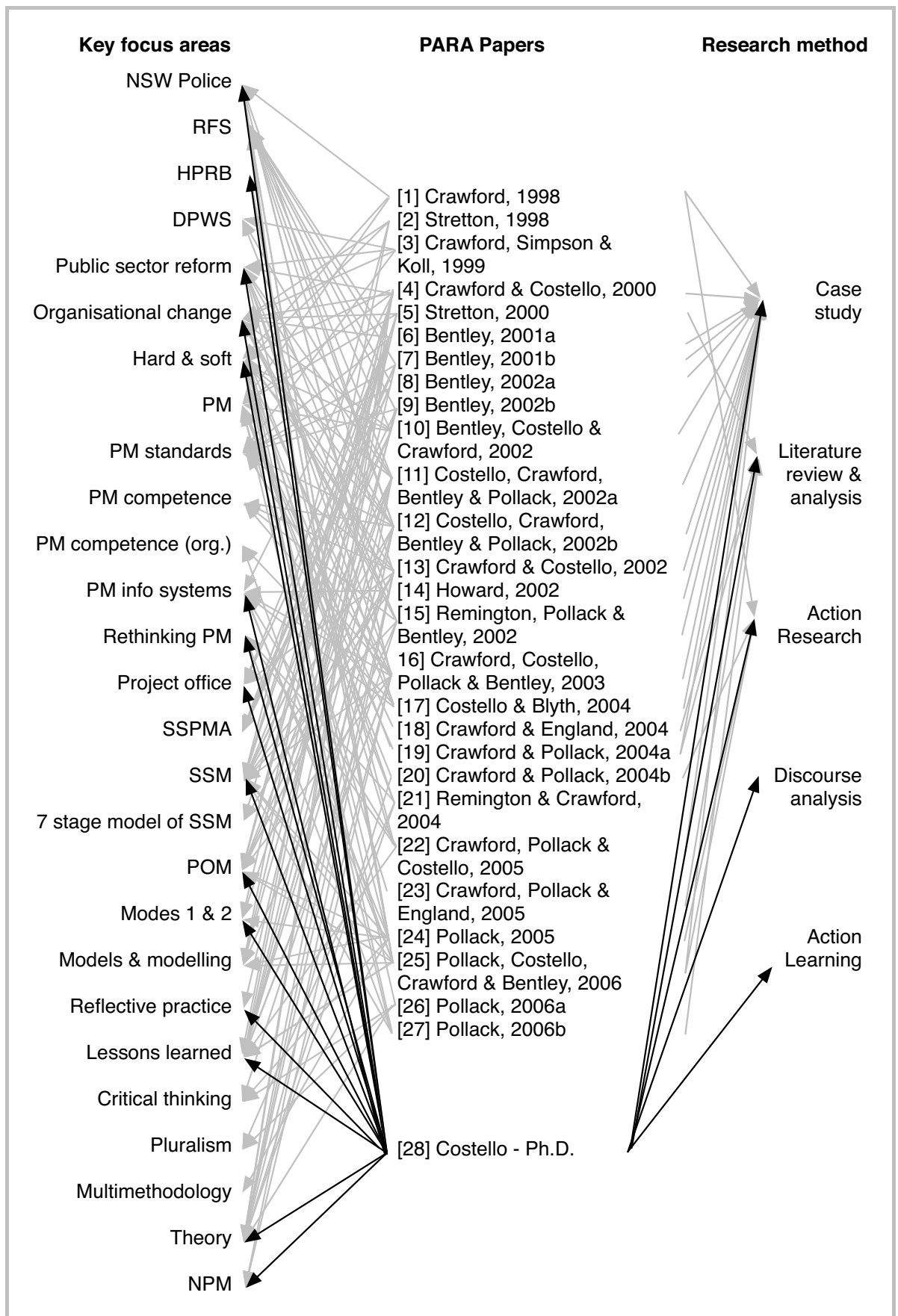


FIGURE 4.2: Key focus areas of the practitioner-researcher affiliation's (PARA) practice and research between 1998 and 2006 as mapped from the publications listed in APPENDIX 1.

4.3.1 Rationale

At the outset of my inquiry my rationale for developing my research approach was:

1. I would be undertaking AR in an area of practice (the public sector) that was not often reported in the mainstream PM literature.
2. My research would be in a PM area that was, according to well-documented project failures in popular and academic literature, attempting to deal with intractable issues – lessons learned and transfer and use (Crawford et al., 2003). Also, I would be attempting to use a soft interpretive research lens (Fitzgerald and Howcroft, 1998, p. 319) in a predominantly hard positivist field.
3. I would be seeking to align my research topic to my employment responsibilities. E-commerce, knowledge management and organisational change were identified as the big three topics emerging in Australian IS research (Pervan & Cecez-Kecmanovic, 2001) and I found them, particularly knowledge management, were being reflected in the content of the *International Journal of Project Management*.
4. I would be aiming to build upon the Soft Systems for Soft Projects collaboration that was, from literature searches, an early adopter of the POM model (Checkland and Holwell, 1998b, p. 106).

4.3.2 Aligning problem with approach

My personal papers at the time I was developing my inquiry approach exhibit a concentration on theoretical frameworks and practice-theory relationships as being explored by affiliation members. Although an oversimplification, the prevailing motivating concepts and principles of the conventional PM world outlook as we generally viewed them between 1998 and 2006 are, on my interpretation, encapsulated in Figure 4.3. This is arguably, a control model²⁶ predicated on the PM scientific / rationalist world view and its implications for PM engagement (Cicmil, 2006).

²⁶ One manifestation of control appears in driving metaphors as variously interpreted, including: “dashboard” in relation to performance measurement / management (Streatfield, 2001, p. 99; Norman, 2002, p. 620; Kleijnen and Smits, 2003, p. 508; Chowdhary et al., 2006, p. 589; “roadmap” -the strategic road ahead (Selen, 2000; Kappel, 2001, p. 39; Kalakota and Robinson, 2001); and “traffic lights” in relation to project risk management (Chapman, 2006, p. 311).

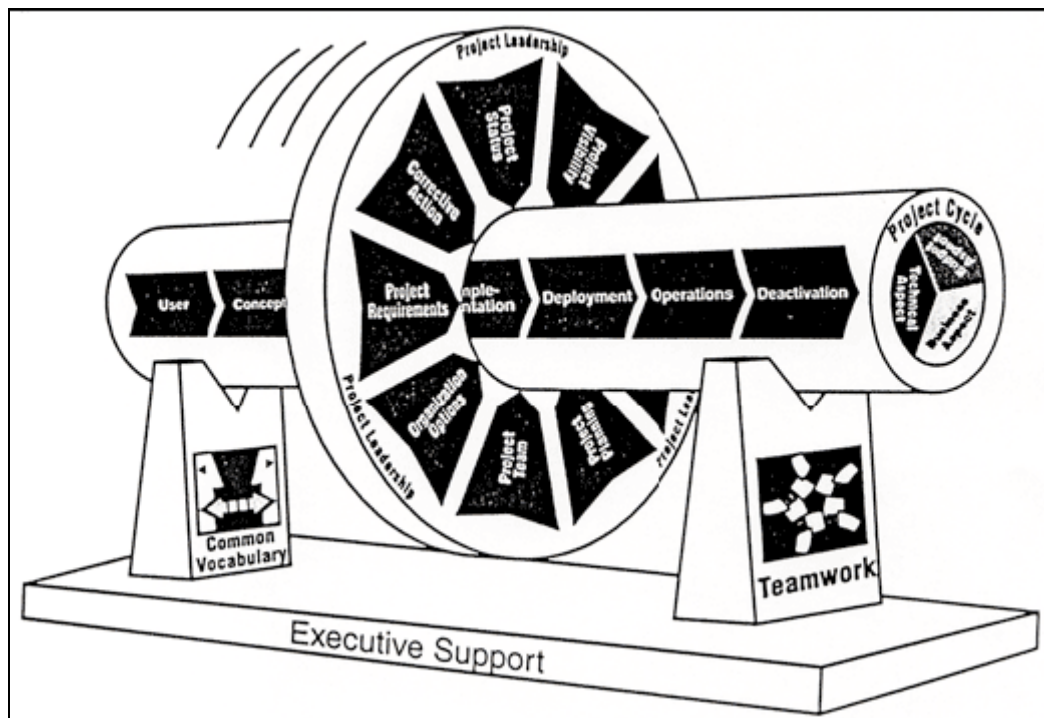


FIGURE 4.3: A dynamic orthogonal model of project management (Forsberg et al., 2000, p. 44).

Nevertheless, Remington and Crawford (2004) refer to the rich philosophical tradition informing PM practice (2004, p. 1). They considered three streams of thought that have had a profound influence: *reductionism* as predicated upon the idea that project outcomes can and should be controlled; *holistic world views* evolving as systemic approaches informing practices that eschew the notion that outcomes can and should be controlled by others; and *pluralism* associated with eclecticism, a label that denoted no opposition to specialisation but promulgated the free selection from theory according to requirements. All three were considered to be underpinning PM theories and methodologies in current practice; nevertheless, in Remington and Crawford's (2004, p. 1) view the dominant influence on PM was a belief that control of outcomes is both possible and desirable. They challenged this notion and its appropriateness for post-modern organisations and their environments, which are characterised by fluidity, ambiguity and uncertainty. For PM to survive as a viable profession, they argue, it must progress from a retroactive discipline, in which standards are based on the examination of past practices, informed by early modernism, to a profession which is capable of contributing in a post modern world.

The affiliation's early inquiry approaches had been informed by Fitzgerald and Howcroft's (1998) hard v soft summary (APPENDIX 6), although in their view (1998, p. 313) the paradigm debate should be recognised as somewhat vacuous, since each approach has its strengths and weaknesses. Indeed, affiliation members subsequently

developed a continuum view of hardness and softness (Figure 4.4) which they carried through to their conception of hard and soft research dichotomies (Figure 4.5).

Hard	Soft
First & Second Generation Projects	Second & Third Generation Projects
Tangible end products	Intangible end products
Well defined	Ill-defined
Hard, clear boundaries	Soft, permeable boundaries
Unambiguous	Ambiguous
Goal Achievement	Consensus building
Best solutions exist	Debate leads to solutions
Management	Facilitation
Planned strategy	Emergent strategy
Uncertainty reduction	Ambiguity reduction
Hard, closed systems	Soft, open systems
Complicated	Complex

Crawford, Sankaran & Butler, 2005

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FIGURE 4.4: Attributes of hard/complicated and soft/complex projects (Crawford et al., 2005).

'Soft' v. 'hard' research dichotomies

Soft	Ontology	Hard
Relativist		Realist
Interpretive	Epistemology	Positivist
Subjectivist		Objectivist
Emic/Insider		Etic/Outsider
Qualitative	Methodology	Quantitative
Exploratory		Confirmatory
Induction		Deduction
Field		Laboratory
Idiographic		Nomothetic
Relevance	Axiology	Rigour

Based on Fitzgerald & Howcroft, 1998, p. 319

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FIGURE 4.5: Re-interpretation of Fitzgerald and Howcroft's (1998, p. 319) hard and soft research dichotomies (Crawford, Pollack and Costello, 2005 ANZSYS presentation).

At the inception of the Soft Systems for Soft Projects collaboration, the departure point for the affiliation's engagement with soft projects may be likened to a Type 2 position

(semi hard) in our re-interpretation of Turner and Cochrane's (1993, p. 95) goals and methods matrix (Figure 1.13). Managing soft projects, according to the affiliation's emerging understanding of them over time - as mapped in Figure 1.3 and informed by our engagement with SSM- would require us to search for a different theoretical basis applicable to an environment where, according to Marsh (1999, p. 65):-

...the values informing public programs are invariably diverse and contested. Future issues are often hard to anticipate. Trade-offs and overlap between policy areas abound. New issues cross departmental and agency boundaries in unpredictable ways. Stakeholder environments are invariably multifaceted and complex.

Following from our emerging understanding of hard and soft as different paradigms, we found the dichotomy between them to be a pivot point in the development of many academic and practical disciplines, both in the attributes of each and in the possibilities for combining them, for example, Mingers and Brocklesby (1997). Positioning my research methodology within the soft paradigm would raise issues about methodological rigour. For Probert (2002, p. 29) rigour versus relevance represented a distinction between universals and particulars, the former being broad principles that apply in any ISD development that he equates with theory / academic research and the latter appropriateness in a particular situation.

Within the management research field, Aram and Salipante (2003, p. 190) viewed rigour and relevance as placeholders for substantive ontological and epistemological differences between contextual and general knowledge. They referred to gap between practitioners (relevance) and academics (rigour) as being much debated in management literature and saw the quest for closing it as a search to transcend competing assumptions. Levin and Ravn (2007) question, however, whether deep engagement in a situation impacts upon the possibility for rigorous research. Recent views are the gap is unbridgeable (Kieser and Leiner, 2009) or it is already being bridged (Hodgkinson and Rousseau, 2009).

4.3.3 Conceptualising the practice - theory relationship

Early on the practitioner-researchers had considered Jarvis' (1999, p. 155) argument that the relationship between theory, in its different formulations, and practice is much more complex than the traditional ideas about the relationship assumed. He distinguished between knowledge, or what has been learned by individuals, and

information, or what is contained in reports and might be learned and become knowledge and outlined four formulations of theory (1999, p. 145):

- *Personal theory of practice* (theory as knowledge) – practical knowledge including both processes and content.
- *Theory of practice* (theory as information) – a combination of both integrated knowledge of the process and content knowledge; both become integrated into personal theory when they have been tried and found to work in practice.
- *Theory about practice* (metatheory as information) – based in academic disciplines and making few claims of practicality.
- *Theory of and about practice* (knowledge learned but not tried out in practice) – learned cognitively from both forms of information.

Jarvis (1999, p. 132) noted the transitory and ephemeral nature of practice and, reconceptualising theory as practical knowledge (personal theory), distinguished it (1999, pp. 147-150) from information about practice, which is often based on a single academic discipline and driven by the demands of that discipline. It was an important distinction to be made at the outset of the learning process “because the validity of the information can only be critically assessed from within the framework of its construction” (Figure 4.6).

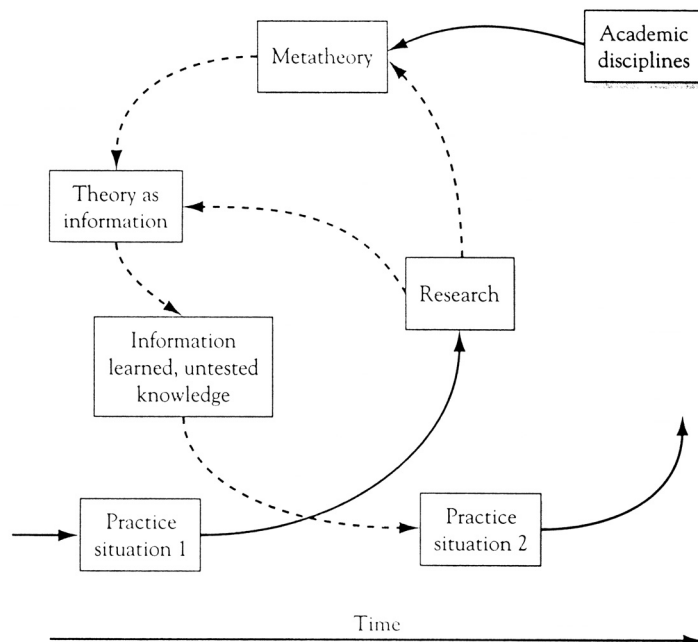


FIGURE 4.6: A conceptual model whereby practitioner-researchers’ research can relate to theory and practice (Jarvis, 1999, p. 153). “Practice situation 1” assumes the practitioner has received some theory as information, that practice has been researched and the results are incorporated into the theory as information or interpreted by the academic disciplines and become part of metatheoretical formulation.

In the context of AL, Pedler et al. (2005, p. 62), saying there is no dominant grand narrative in post-modern times, argued this allowed AL to be less fixed and so to occupy more than one position, depending on the perspective taken. Hence, it enabled them to explore the shifts in the practice of AL from Revans' classical principles as departures, dilutions and deviations or as evolutions and variations, including their assessment of how action learning approaches may contribute to business and management teaching. Pedler et al. (2005, p. 65) referred to theories such as activity theory (Blackler, 1993) and situated learning (Lave and Wenger, 1991) as providing a theoretical underpinning for AL approaches, but saw this as apparently not reflected in educational practice.

4.3.4 Engaging concurrently with practice and theory

According to Cleland and Ireland (2006, p. 17), PM theory and practice “continues to be refined toward a purpose of managing change to achieve greater efficiency with less risk and uncertainty. Techniques have been developed that give more positive control over resource consumption to achieve desired objectives”. Partington (1996, p. 16) refers to the widespread belief within the PM profession that PM principles are generic and applicable to all organisations wishing to adopt a project based management strategy for management of all kinds of change. According to Partington (1996, p. 17), the very concept of managing projects implies some degree of embodiment of the key tenets of the discipline. Immediately beyond these lie complex dependencies on context. Hence, he argues, there can be no single generic model of PM and, accordingly, “an examination of the basic tools and techniques in the context of...the use of projects for organizational flexibility reveals a number of basic incongruities between the two doctrines”. He found little acknowledgement of this mismatch in the literature and his finding generally accords with Morris' view (2002) that PM is not fully a hard science and that PM knowledge will always be to some extent, personal and experiential (Morris, 2002, p. 89).

At the ontological level, the hard paradigm belief is that the external world consists of pre-existing hard tangible structures which exist independently of an individual's cognition (Fitzgerald and Howcroft, 1998, p. 319). Accordingly, knowledge creation processes are based within an epistemological view that assumes them to be rational and hence amenable to neutral observation / measurement. Theory in PM is, however, problematic. Morris (2002, p. 82) concluded while we can certainly identify good PM practice, there will never be an overall theory of PM.

According to Winter and Smith (2006, p. 3), reporting on the findings of the *Rethinking Project Management Network* (2004-2006), mainstream theory is the published knowledge in PM. Extending and enriching it requires organised interaction between theory and practice, between academics and practitioners. During my inquiry at HPRB, PM theory-practice linkages were being considered in the EPSRC funded *Rethinking Project Management Research Network* (2004-2006) of academics and practitioners seeking to identify new directions for extending and enriching PM.²⁷ As Ledington (1989) observed, later reflection and theoretical development may provide a very different explanation of experience. My research proposal was developed before I could consider the Network's final report (Winter and Smith, 2006). Nevertheless, I was following the working papers and presentations published on-line between 2004 and 2006 that were challenging traditional PM²⁸. Subsequently, these contributed to reflective hindsight on my part that I acknowledge in context or include within a thread of development following from earlier references.

Theory, in the context of the Network's inquiry, had several forms: "the bird's eye view of the academic surveying and assessing in the field, the concepts that underpin the processes on managing the projects themselves, or the working theories applied in daily practice by those who engage in the production and delivery of projects" (Smith and Winter, 2004, p. 1). At the micro-level was a plurality of theories and perspectives – models and approaches that can inform a multiplicity of project related activities (Smith and Winter, 2004, p. 2). Macro-level perspectives²⁹ were also being considered. In their view (2004, pp. 2-3) both levels of thinking were required; the macro level could form the structure for an overview of the plurality of analyses at the micro level to map out, make sense of, and connect issues. It could also provide a basis to re-evaluate the benefits and range of specific perspectives and their use by practitioners. At that stage there had been no attempt to define the term "project". Later, outlining the Networks' philosophy of approach whereby theory (knowledge) leading to practice (experience) in turn generates theory (knowledge), Winter and Smith (2006, p. 3) referred to all practical activity in any professional field as being

²⁷ While the site is no longer active, presentations and working papers could still be accessed through <http://www.mace.manchester.ac.uk/project/research/management/rethinkpm/default.htm> in June 2010.

²⁸ As indicated on the web home page, these were: rooted in "old" management ideas; too narrowly focused; increasing calls to move 'beyond the GANTT chart'; and growing criticisms of the "bodies of knowledge" (e. g. PMBOK®).

²⁹ Including: sensemaking project maps: overviews of the interactions, transactions and practices of the different parties involved in the creation and delivery of projects; meta-theory: overviews of the worlds of research and practice, and relationships between these worlds – the role of theory, the development and diffusion of knowledge; and grand theory: narratives of the emergence, growth and development of projects as a way of life, and the associated social implications.

theory-laden in the sense that all practical action is based on some theory of knowledge, irrespective of whether the practitioner is aware of the theory guiding their action. Accordingly, the Network's approach had been that PM theory and practice could not be separated. Developing new concepts and approaches was seen to need organised interaction between theory and practice.

In a paper presented at Meeting 5 of the Network³⁰ Winter (2005) sought to understand the actuality of projects by focusing on what practitioners actually do³¹. Referring to Checkland (1989), Winter said in essence anyone who is a manager in any field of activity has to engage with an ever-changing flux of events that is continuously unfolding through time. Managing involves perceiving and evaluating (parts of) that flux, deciding upon action, and taking action which itself becomes part of the ever-changing flux, leading to new perceptions and evaluations and further actions. His focus was not the classical life cycle process, but the actual process of managing, seen as much less a process of applying propositional knowledge and more a process of appreciating, probing, modelling, experimenting, and diagnosing etc., using intuition and experience. Winter (2005) refers to research thus far as suggesting that this kind of reflective practice can yield considerable learning for the individuals involved.

In response to my practice environment, I expected I would ultimately adopt an eclectic / pragmatic approach (later considered in Gregor et al., 2007; Metcalfe, 2008; Joham et al., 2009). Struggling to achieve a balance between relevance and rigour, I would be endeavouring to observe Ulrich's (2001, p. 11) pragmatic maxim which requires "a comprehensive effort to bring to the surface and question the implications, the actual or potential consequences that our research may have for our domain of practice".

4.4 Developing the Research Questions / Themes

At the time I was developing my HPRB inquiry approach, I had been a practitioner-researcher in the field for some four years and had assembled a large, albeit eclectic, body of literature. We had been finding SSM a relevant and useful approach (Costello et al., 2002a and 2002b; Crawford et al., 2003) as had Ledington and Donaldson (1997), albeit that some elements seemed more readily assimilated than others. The

³⁰ 26-27 May 2005, University of Strathclyde, Glasgow, UK.

³¹ Winter (2005, p. 2) summarised Schon's image of how professionals think in action as: 1. Not "following" textbook theory in tackling real-world problems. 2. Frequently (e.g. project managers) dealing with messy, complex situations. 3. Inquiry in these situations as involving sensemaking, reflection and intuition etc. 4. Inquiry being driven mostly by experience and tacit knowledge.

PM guides for post-project review I was considering generally accorded with Morris' (2002, p. 88) view that hard systems approaches had given rise to almost the entire vocabulary of PM. Also, I had found little in the PM literature relating practice to processes occurring within complex organisational contexts. Further, as explained by Stivers (2000a, p. 13):

...public management research is hard to do. Human beings make choices that confound our analytic designs. We can rarely show a straight forward unambiguous cause and effect relationship...[The best] research in public management ...is methodologically sound, and explains important [phenomena]. But so far it isn't very useful...What public management research can do is describe what managers do and try to explain it, using practical reason, which is hermeneutic.

Establishing research questions under a traditional research framework (Table 1.2) would be expected early in the process. However, as framing my approach was as an iterative process (Figure 4.7), it became of itself an emergent AL learning cycle (Coghlan and Brannick, 2005, p. 85), albeit one not proceeding as a single, continuous process because of the changing practice context.

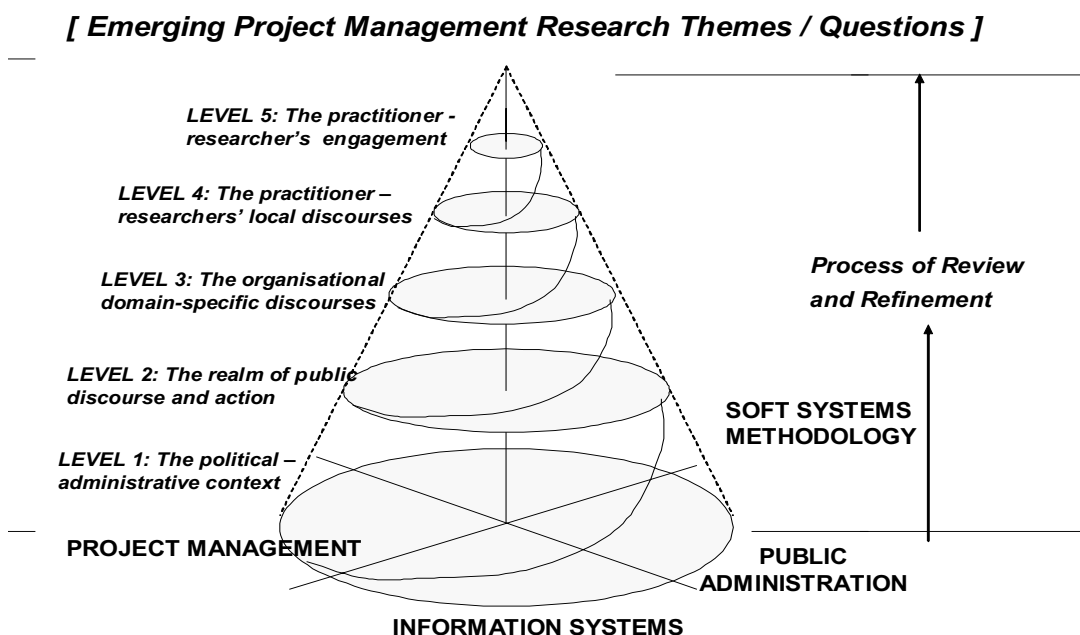


FIGURE 4.7: Model of the iterative process followed for focusing the research inquiry at HPRB, based on a diagrammatic concept of iterative convergence within a learning cycle in Stretton, 1998 adapted from Yip, 1997, p. 35.

In the SSM AR cycle (Figure 4.8), the researcher deals with research themes within which lessons can be sought. According to Holwell (2004, p. 355) this is one of three important concepts, the other two being recoverability and iteration. Researchers take action in a situation relevant to those themes and explore them through a declared

framework and methodology. Their findings could be about any or all of the themes, to which new themes could be added (2004, pp. 355-6). Holwell notes such research interests are rarely confirmed to one-off situations. “Moreover, research themes are unlikely to be completely resolved through a single intervention and the linking of projects (both forward and backward) via research themes means that iteration can be thought of differently to iteration within and around the action research cycle.”

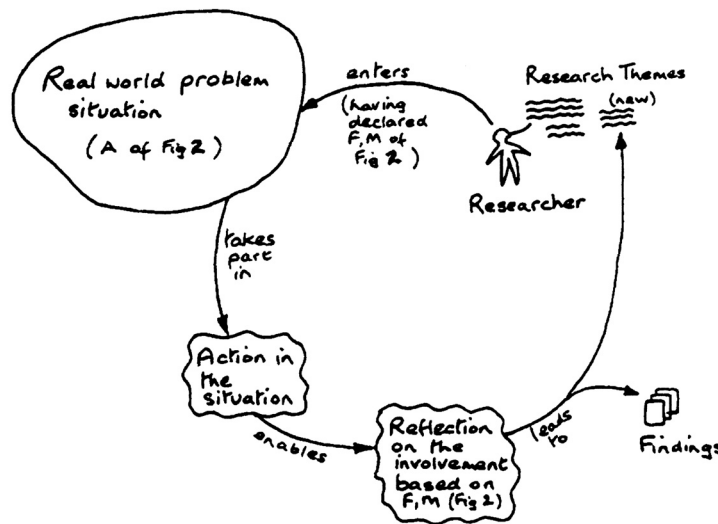


FIGURE 4.8: The cycle of action research in human situations (Checkland and Holwell, 1998a, p. 15).

I understood my three key themes of conceptual models, practical guidance and lessons transfer to be “research themes for taking action in a situation relevant to those themes” (Holwell, 2004, p. 355). Under my revised research strategy, I would be seeking to address these themes (Table 4.2) at the organisational rather than an individual practitioner / group level. My developing approach would shift from direct participatory AR to endeavouring to apply SSM as an organisational sense-making methodology.

Research Theme	Research Question
Conceptual models	<ul style="list-style-type: none"> Can SSM, in particular the “POM” model provide an effective framework to capture knowledge about “lessons learned” from previous research about engaging with “soft” projects?
Lessons transfer	<ul style="list-style-type: none"> How does the outcome compare with “standard” project management lessons learned frameworks? What “recovered” knowledge can be transferred to further develop an interpretive project-shaping model previously applied in NSW public sector agencies?
Practical guidance	<ul style="list-style-type: none"> How can the enhanced model be used to guide (communicate knowledge about) “project shaping” in the electronic workspace (at the Health Professionals Registration Boards)?

TABLE 4.2: Research themes and research questions

From reviewing the literature, including Ledington and Donaldson (1997, p. 238), I had found SSM could be adopted successfully as a sense-making methodology and to facilitate action and improvement in a situation. During the course of my inquiry, I would move from what Holwell (2000, p. 788) termed the “modelling discourse” in SSM to concern with underpinning assumptions and concepts³², including alternative conceptualisations relating to engagement and discourse (Houghton and Ledington, 2004). I would be undertaking my inquiry as a practitioner-researcher engaging in reflection-in-action, later defined by Levin and Ravn (2007, p. 10) as “thinking and learning while acting. It involves reflection and building an understanding of our actions as they unfold”. They refer to the reflective practitioner as “having a conversation with the field”.

4.5 Revised Research Approach

My schematic for my inquiry as represented in Figure 4.9 reflects the shift occurring in my main focus from problem solving / intervention to sense-making and learning.

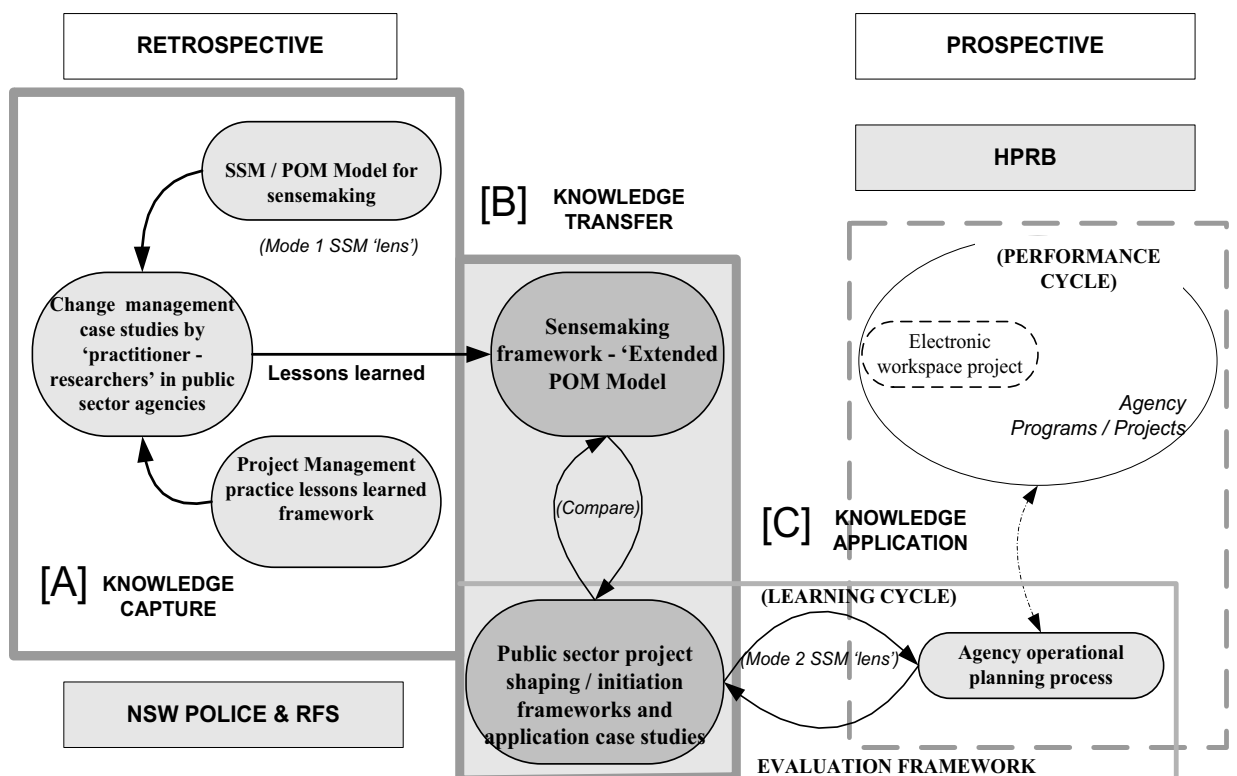


FIGURE 4.9: Schematic of the elements of my research inquiry as marked by the solid lines. The research space for the HPRB IS/IT Platform Project is indicated by the dashed lines.

³² Checkland and Holwell (1998b, p. 102) link the POM model to Vickers' concept of an “appreciative system”. Later they expanded upon the idea saying that (Checkland and Holwell, 2006, pp. 68-69) it could be attributed to the organisation as a whole, although whatever attributions are made would never be completely static.

Looking back to previous engagements, I would be seeking to respond to Partington's (1996, p. 13) observation wherein he referred to little research into the detailed model or system of project management being used in a particular situation. In looking forward, I would be considering how the affiliation's experience in engaging with SSM in general and the POM model in particular could be transferred into the processes being developed within HPRB to support the *Online Services Development Program*.

My revised research approach would now place Checkland and Holwell's (1998b, p. 106) POM model (Figure 1.15) at the sense-making centre of my inquiry. I would be seeking to compare the lived HPRB experience in developing an online capability, as informed by the learning emerging from affiliation members' previous project engagements, with the ways of thinking and action supported by NSW public sector project shaping / initiation guides. Reviewing the *IJPM* articles citing Checkland and colleagues (Table 2.3), I had found no consistent line of practical application or theoretical development to follow. Also, there were few insider accounts of SSM being applied throughout a change project that we could, as novices, relate to our practitioner-researcher contexts.

4.5.1 Action engagement

Iles and Sutherland (2001, p. 66) defined AR as "a way of using research in an interventionist way, so that the researcher is both a discoverer of problems and solution, and is involved in decisions about what is to be done and why". AR approaches offer an alternative to the hypothesis-testing research processes located in the hard paradigm which Pollack (2005, pp. 48-49) notes is concerned primarily with observation and is distanced from the subject of the inquiry (Table 4.3).

Property	Positivist science	Action research
Systems frame	Closed	Open
Repeatability	Experimental result	Process
Conditionals on hypotheses	Known and controllable	Unknown and not controllable
Objectivity	Apparent independence of researcher but dependent on the norms of peers	Triple loop learning evaluation; dependent on the values of the community of inquiry
Dominant mode of inference	Deduction	Abduction
Action based	No	Yes

TABLE 4.3: Comparison of action research and positivist research (Barton et al., 2009, p. 486).

As mapped in Figure 4.10, AR is a diverse field (Eden and Huxham, 1996; Reason and Bradbury, 2000, 2008; Winter and Munn-Giddings, 2001; Swepson et al., 2003; Dick, 2004; Cassell and Johnson, 2006; Barton et al., 2009) that forms the foundation of many approaches to change. While AR had proven its utility, “with growing recognition of its breadth as a field of research practice, and its depth as a discourse of theoretical insight”, according to Altrichter et al. (2002, p. 125) it did not have one neat, widely accepted definition. They refer to participants at an International Symposium held in 2001 adopting the following definition, while observing that definitions have pragmatic, descriptive and normative functions in this research:

Action research is a form of collective, self-reflective inquiry that participants in social situations undertake to improve: (1) the rationality and justice of their own social or educational practices; (2) the participants’ understanding of those practices and the assumptions in which they carry out those practices.

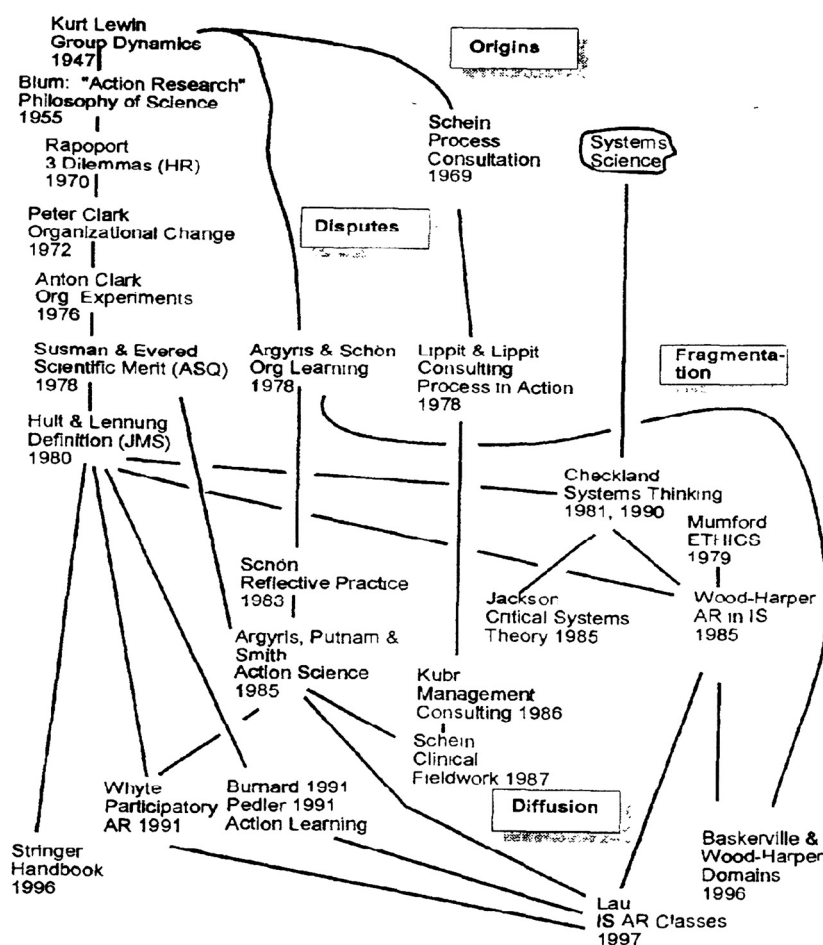


FIGURE 4.10: Genealogy of action research (Baskerville and Wood-Harper, 1998, p. 94).

In the context of health and social care, Winter and Munn-Giddings (2001, p. 3) refer to AR as a strategy for inquiry and development “which is not a separate, specialized

technical activity but one that is closely linked to practice and which can be undertaken by practitioners and service-users". AR is, in their view, an ambiguous term (2001, p. 5), simultaneously a form of inquiry and practical action that suggests:

...the possibility of a form of social research which involves people in a process of change, which is based on professional, organisational or community action, and which is thus no longer beset by the age-old problem of the gap between "theory" and "practice"...At the same time it proclaims an ideal of practical work which is also a form of *learning* for those involved (action as research).

Having decided on action engagement, the question then arose as observed by Coghlan (2007) about insider research doctorates, about how my research could contribute to the ongoing learning of my employing agency and to the affiliation community, that is to the "core" AR project and the "thesis" AR (Figure 1.5). In the positivist paradigm, according to Zuber-Skerritt (2001, pp. 6-7), validity is assured when knowledge is generalisable and the study is conducted in controlled conditions, using rigorous data collection methods, analysis and interpretation. Knowledge obtained through AR is, however, difficult to validate in terms of the natural science view of philosophy (Baskerville, 1999, p. 5), although an analysis by Stephens et al. (2009) would conclude both traditions have closer relationships than is often credited.

On the developing capability within AR to reflect on actions and motivations, Barton et al. (2009, p. 478) refer to Checkland and Holwell's contribution (1998a) as "four crucial elements in a research approach which works in a specific situation: a collaborative process between researchers and the people in the situation; a process of critical inquiry; a focus on social practice; and a deliberative process of reflective learning". Questioning how insider AR can contribute to project-based learning, Coghlan (2001, p. 57) offered a two part response. The first was that project-based learning demands rigour, which in AR refers to how data are generated, gathered, explored and evaluated and how events are questioned and interpreted through multiple AR cycles. The second, relating to the role of research consultants or trainers in AR projects, was not relevant in my case. My role would, as identified by Flood (1998, p. 4) as required for participatory AR, variously encompass co-researcher, co-subject and co-author.

Driven by real-world events, however, affiliation members' engagement with SSM was discontinuous and hence not amenable to sustaining a complete AR cyclic analysis, or even a continuous (end-to-end) AL spiral, as for example represented in Paton (2001, p. 108) citing Bawden and Packham, 1993). He conceptualises AL as a hierarchy of

systems, where each enquiring system (contingent methodology) has its own learning, meta-learning and epistemic-learning dimensions. Zuber-Skerritt (2001, p. 2) refers to the “aspects of philosophy (paradigm) and integrated theory and practice (praxis) which are generally accepted and shared by action learners and action researchers despite their wide-ranging differences in perspectives, processes and practices”. AL “*means learning from action or concrete experience, as well as taking actions as a result of learning*”. It is (citing Revans, 1980, p. 309):

...real people tackling real problems in real time, observing the impartial discipline of the business setting and looking after a lot of people...The action learning fellow will argue: “So-and-so has convinced me: I will follow his example”. The operational research professional will argue: “So-and-so-has proved it; I now understand how to do it.”

In considering the theoretical foundation for AR and AL, Zuber-Skerritt (2001, p. 5) adopts a model of problem solving that distinguishes between two paradigms: technical rationality and a reflective view. Most views, in her opinion, lie somewhere within these two extremes, mixing and using multiple methods. Later, Pedler et al (2005, p. 59) listed variations and alternatives to the classical principles of Revans (1980) as: Critical Action Learning (CAL); Auto AL; action mentoring; online and remote action learning; Self-managed Action Learning (SMAL); and Business Driven Action Learning. Further, the affiliation’s engagement over a number of agencies and across the timescale of my inquiry did not appear readily amenable to adopting a classic case study approach (Eisenhardt, 1989; Stake, 1995 and 2000; Patton, 2002; Yin, 2003; Stokes and Perry, 2007; George and Bennett, 2005; Bennett and Elman, 2006 and 2007), especially in relation to longitudinal studies (for example Dobson, 2001; Peppard, 2001; Schwarz and Nandhakumar, 2002; Allen and Wilson, 2003; Chau and Witcher, 2005; Hussain and Cornelius, 2007; Lee and Roth, 2007). Using transport metaphors, I was “aboard a moving train” (Simmons et al., 2005) or in the “rear passenger seat of the bus” (Sense, 2006) and hence outside any exercise of control over my practice context.

4.5.2 Inquiring in Mode 2

Considering the philosophy of knowing in management research, Aram and Salipante (2003, p. 191) distinguish between assumptions of realism-positivism (a research tradition based on the physical sciences) and the epistemology of contextualism (arising from the humanities and applied in social sciences). The former they associate with Mode 1 as in traditional discipline-oriented research wherein knowledge is

generated primarily by individual creative efforts and is disseminated via peer-reviewed journals and professional associations. Mode 2 systems of knowledge production, in their view, call into question this traditional knowledge production process, albeit co-existing with the traditional form. Mode 2 has been proposed (Aram and Salipante, 2003; Ferlie et al., 2003) to describe a new set of research practices which were sufficiently coherent to be called a new form of knowledge production.

According to Gibbons (2000, p. 159) the difference between Mode 1 and Mode 2 can be described in terms of context of discovery, role of the disciplines, skill mix of researchers and forms of organisation they adopt, social accountability and reflexivity in the researchers, and quality control. Kumar and Sankaran (2006, p. 369) saw a parallel between Mode 2 SSM and context sensitivity “wherein a person internalizes what he/she sees, understands it and then acts according to his/her understanding of the situation, or should we say according to his/her understanding of the context”.

Lack of prescriptive guidance for Mode 2 use in SSM has been reported as leading to issues in management practice and in research. Gold (2001, p. 558) found few published accounts of Mode 2 SSM use whereby problem solvers are able to internalise the methodology, employing it as a way of thinking as an insider within a situation. Connell (2001, p. 151), referring to a 1994 survey of MSc students undertaking SSM projects, identified the main difficulty with Mode 2 SSM being lack of sharp definition of the different modes. Use of Mode 2 SSM was causing problems because it is, in its purest form, a mental process which is not amenable to rigid definition. Attributes of Mode 2 management research compared with Mode 1, AR and Co-operative Inquiry are in APPENDIX 7 while differences between Mode 1 and Mode 2 knowledge attributes are summarised in Table 4.4.

Mode 1 Knowledge	Mode 2 Knowledge
<ul style="list-style-type: none"> • Knowledge that is produced and tested in the academy by researchers • Disciplinary • Knowing through contemplation • Knowledge for its own sake • Knowing that • Knower as spectator • Propositional knowledge • Theoretical knowledge • Knowledge about the world 	<ul style="list-style-type: none"> • Knowledge that is created and tested in action in the world by practitioners • Transdisciplinary • Knowing through action • Working knowledge • Knowing how • Knower as agent • Knowledge as reflection on practice • Practical knowledge • Knowledge in the world

TABLE 4.4: A comparison of Mode 1 and Mode 2 knowledge (Bourner and Simpson, 2005, p. 151).

I would be looking for guidance to Checkland and Holwell's (1998b, pp. 165-169) model of experienced Mode 2-like use of SSM and the inquiry process it supports (Figure 1.3). Their premise is that learning from use of crude models will enrich engagement with the problem situation and eventually enable development of more relevant sense-making models. This shift is motivated by the desire to move towards action (Checkland and Holwell, 1998b, p. 170). Moreover, in Checkland's (2000b, p. 799) view, the most cogent comments come from reflective practitioners which:

...suggests that SSM (whose process does not necessarily have to be made explicit to participants in a study) can engender a process of on-going (cyclic) coherent structured learning which feels natural, and which can surface previously unexamined assumptions, thus creating an arena in which accommodations can emerge which enable and motivate "action to improve" to be taken.

4.5.3 Reflexive practice / research

As observed by Freshwater and Rolfe (2001, p. 526), traditional interpretations of research tend to bifurcate research knowledge and practice knowledge. They refer to practice-based disciplines (in their case nursing) as complex and context dependent and not amenable to simple research-based prescriptions. Accordingly, they proposed a research method that legitimised practice as a source of knowledge built upon the concepts of situational understanding and contingent knowledge. Freshwater and Rolfe (2001, p. 529) found reflexivity an elusive and contested concept. Accordingly, reflexive research is not a unified process which, if carried out correctly, guarantees the production of truth, but a local practice that produces local and contingent knowledge. Rather than taking the research process for granted as an externally imposed given, the methodology itself becomes a focus of the reflexive researcher. It is a meta-methodology, a methodology which has itself as the focus of the inquiry, and which constantly scrutinises and critiques itself as it is progressing.

How I endeavoured to observe reflective / reflexive practices in my practice and research would be an on-going area of development throughout my inquiry. In the reflexive practices listed by Alvesson et al. (2004) in Table 4.5, I would be variously a *bricoleur*, and *participant* reflexively monitoring my lived practitioner-researcher experience over time and testing my emerging understanding against my theoretical frames. I would be looking at the practice wherein the qualitative researcher is characterised by the term *bricoleur*, a kind of "professional do-it-yourself person" who produces a *bricolage*.

	Destabilizing Practices	<i>Multi-perspective Practices</i>	Multi-Voicing Practices	Positioning Practices
Position relative to research	Outsider: making incursions across the borders of the research project.	Outsider: above the research viewing it though juxtaposed paradigms.	Insider: part of the research project, on a par with other subjects.	Insider: part of the broad social landscape in which research is conducted.
Focus on	Theory/epistemology	Vocabulary	Authorship	Social and political forces
Sources of inspiration	Foucault 1980; Derrida 1982	Kuhn 1970; Rorty 1979; Burrell & Morgan 1979	Hayano 1979; Bahktin 1981; Clifford & Marcus 1986	Latour & Woolgar 1979; Knorr-Cetina 1981a, 1981b
Examples	Arrington & Francis 1989; C��las & Smitr��ch 1991; Knights 1992	Hassard 1991; Alvesson 1996; Schultz & Hatch 1996	Jeffcutt 1994; Boje & Rosile 1994; Ellis & Bochner 2000	Callon 1986; Collins 1998; Hardy, Phillips, & Clegg, 2001
Means used	Opposing epistemological assumptions, deconstruction	Multiple paradigms, metaphors, vocabularies	Auto-ethnography, experimental writing	Actor network theory, laboratory studies
Key questions asked	What are the conditions and consequences of the construction of a theory or a "fact"?	What are the different ways in which a phenomenon can be understood? How do they produce different knowledge(s)?	How do we speak authentically of the experience of the Other? What is the relationship between Self and Other?	What is the network of beliefs, practices, and interests that favour particular interpretations of knowledge?
Orientation	Oppositional/adversarial: takes on "dangerous" research.	Instructive/enlightening: takes on "incomplete" research.	Divulging/enfranchising: positions researcher as a subject like any other.	Revealing/exposing: recognises social and political forces in research.
Identity of the reflexive researcher	Trouble maker, infiltrator, insurgent	Traveller, builder, bricoleur	Participant, confessor, artist	Networker, politician, adventurer-explorer
Paradox	Omnipotence: ends up being the "final" word using an epistemology which stresses there is no final word.	Pantheism: ends up using a range of perspectives when grounds for choice are problematic.	Narcissism: ends up drawing all attention to the researcher when trying to "downplay" the researcher.	Heroism: ends up implying an astute researcher can negotiate system constraints while repudiating agency.
Limits	Can only be used to undermine theory, difficult to use to develop theory.	Nature of the way in which paradigms are juxtaposed remains highly contested.	It is impossible to give everyone a voice (let alone an equal voice).	Solutions for navigating the research process are highly individualistic.

TABLE 4.5: A categorisation of sets of reflexive practices (Alvesson et al., 2004, p. 4).

According to Denzin and Lincoln (1998, pp. 4-5), a bricolage³³ is a pieced together, close-knit set of practices that provide solutions to problems in a concrete situation. It is an emergent construction that:

...changes and takes new forms as different tools, methods and techniques are added to the puzzle...a complex, dense reflexive, collage-like creation that represents the researcher's images, understandings and interpretations of the world or phenomenon under analysis; it will connect parts to the whole, stressing the meaningful relationships that operate in the situations studied.

Under their interpretation, a bricoleur is adept in performing a large number of diverse tasks including interpreting personal and historical documents and self-reflection and introspection. He or she understands interpretive paradigms represent belief systems that may be defined by overarching philosophies denoting particular ontologies, epistemologies and methodologies that cannot be easily moved between.

Nevertheless, a bricoleur is able to work between and within overlapping perspectives and paradigms. Also, they understand that research is an interactive process shaped by his or her personal history and that of the people in the setting.

4.6 Evaluating Outcomes

According to Coghlan (2001), there are two requirements for an insider action researcher to contribute to the ongoing learning of an organisation and to a field of research. These are an inclusive notion of research and an organisational framework that integrates individual and organisational learning. Traditionally, "research addresses the community of scholars; and applied practical research addresses an outside audience in reports, recommendations and so on". However, quoting Reason and Marshall, (1987, pp.112-3), Coghlan (2001, p. 55) argues for another dimension:

All good research is *for me*, *for us* and *for them*: it speaks to three audiences and contributes to each of these three areas of knowing. It is *for them* to the extent that it produces some kind of generalizable ideas and outcomes that elicit the response, "That's interesting". It is *for us* to the extent that it responds to concerns for our praxis, is relevant and timely and produces the response, "That works" from those who are struggling with problems in their field of action. It is *for me* to the extent that the process and outcomes respond directly to the individual researcher's being-in-the-world, and so elicits the response, "That's exciting".

³³ In the *New Shorter Oxford English Dictionary* (Brown, 1993, Vol 1, p. 281) "a bricolage is "construction or creation from whatever is immediately available for use; something constructed or created in this way; an assemblage of haphazard or incongruous elements".

4.6.1 Research

As novice practitioner-researchers, affiliation members had set out in 1998 to explore the possibilities of a qualitative interpretive approach (SSM) for overcoming limitations of the prevailing quantitative positivist approach in PM (Crawford and Costello, 2000; Costello et al., 2002a, 2002b; Crawford et al., 2003). We went on to explore an eclectic range of approaches / models for validating authenticity in interpretive research, including in my case the *NHS Guidelines* (Iles and Sutherland, 2001, p. 81).

Beginning with our PM “world outlook”, we initially sought out best / better practice standards, one of the most prominent being Klein and Myer’s (1999) set of principles for conducting and evaluating interpretive field studies in IS: the hermeneutic circle; contextualisation; interaction between the researchers and subjects; abstraction and generalisation; dialogical reasoning; multiple interpretations; and suspicion. While we understood these were intended only as principles (Pollack, 2005, p. 66), they would be a formative influence on how we constructed our research approaches. Pollack (2005, p. 66), concluded from his review that “one model of research does not apply in all circumstances” and, quoting Swepson (2003, p. 108), that good researchers get on and do something that works locally, even at the expense of methodological prescriptions. Another approach I located was the UK Cabinet Office’s *Quality in Qualitative Evaluation: A framework for assessing research evidence* (Spencer et al., 2003). Developed in the context of the UK PA movement for evidence-based policy, it was based on the four principles listed below and 18 appraisal questions (APPENDIX 8):

- *Contributory* in advancing wider knowledge or understanding.
- *Defensible* in design by providing a research strategy which can address the evaluation questions posed.
- *Rigorous* in conduct through systematic and transparent collection, analysis and interpretation of qualitative data.
- *Credible* in claim through offering well-founded and plausible arguments about the significance of the data generated.

4.6.2 Evidence-based practice

When I was looking at evidence required under the NSW public sector practice guides, a developing PA thread was systematic review (Pawson, 2002b). The UK government had made research a key building block of its policy formulation and evaluation

approach, the new buzzwords being evidence-based or evidence-informed policy and practice. Evans and Benefield (2001, p. 529), distinguish it from academic reviews on the basis of it being less focused and more wide ranging, their key features being:

...an explicit research question to be addressed; transparency of methods used for searching for studies; exhaustive searches which look for unpublished as well as published studies; clear criteria for assessing the quality of studies (both qualitative and quantitative); clear criteria for including or excluding studies based on the scope of the review and quality assessment; joint reviewing to reduce bias; a clear statement of the findings of the review.

A large body of literature on systematic review emerged through research funded by the UK Economic and Social Research Council (ESPRC) (Mays et al., 2005b). This encompassed a range of review approaches, for example meta-narrative review (Greenhalgh et al., 2005). They were summarised, with acknowledgement of the permeability of their boundaries, by Mays et al. (2005a) under the headings of narrative approaches, qualitative approaches, quantitative approaches and Bayesian meta-analysis and decision analysis.

Also being explored were methods for synthesising qualitative and quantitative evidence (Dixon-Woods et al., 2005; and 2006). An emerging approach was realist synthesis (Pawson et al., 2004), a strategy for *retrospectively* synthesising research “which has an explanatory rather than a judgmental focus. It seeks to unpack the mechanisms of *how* complex programmes work (or *why* they fail) in particular contexts and settings” (Pawson et al., 2005, S1:21). They saw three important theoretical limitations on a reviewer:- how much territory can be covered; the nature and quality of the information that can be retrieved; and what recommendations can be expected, where hard and fast truths about what works must be discarded in favour of contextual advice. Referring to the drive for evidence-based practice developing within the NHS during the 1990s, Speller and Kelly (2003, pp. 2-3) observed that bringing about change based on evidence was neither linear nor simple. They concluded that the distinction between the theoretical and the applied remains a barrier that must be broken down in order to turn evidence into better practice.

4.7 Concluding Annotation

In this chapter I have positioned the elements of my research approach towards eliciting “situation-driven” (Mode 2) management knowledge as an insider practitioner-

researcher in an agency participating in a major public sector e-business project. Carrying forward the affiliation's experience, I would be aiming to juxtapose other perspectives, which a reflexive researcher uses to address limitations in a single frame of reference, against traditional control notions of PM to tackle the emerging problems and puzzles of my practice context. Appreciating the dynamics of my situation, I conceptualised the outcome as a "bricolage" – a complex, dense, reflexive, collage-like creation representing the researcher's images, understandings and interpretations of the situation under analysis.

In Chapter 5, I map the elements of my research design for retrospectively appreciating the lessons learned from the Soft Systems Collaboration as they may be prospectively carried forward into later PM engagements. In reframing my strategy in response to my changed practice context, my inquiry would become a process of explication that would require me to construct an exploratory sense-making framework for "reading" my research material which would mainly come from documents published / accessible in the public domain.

CHAPTER FIVE: Designing the Research

A chain of command is easy to describe; a network of response isn't. To those who live by mutual empowerment, "thick" description, complex and open ended, is normal and comprehensible, but to those whose only model is hierarchical control, such description seems a muddle, a mess, along with what it describes. (Le Guin, 1995, p. 95)

5.1 Summary

Checkland and Holwell (1998a, p. 14) emphasise research elements need to be established early in the process. Accordingly, I proceeded at the outset of my inquiry to frame my research approach within their FMA model wherein a particular set of linked ideas ("F") are used in a methodology ("M") to investigate an area of interest ("A"). My aim was to retrospectively appreciate lessons learned from the Soft Systems for Soft Projects collaboration as they may be carried forward into later PM engagements. Ledington (1989, pp. 1.4-1.5) observes that, when applying SSM, the report of a project will include aspects of understanding as it unfolded and subsequent reflection and theoretical development may provide a very different explanation of the experience. Thus each project and each phase of learning and development creates new insights which may in retrospect throw new light upon an older project.

For "A", I adopted the concept of *problematique* to convey the dynamic and messy practice context wherein I was aiming for eliciting Mode 2 knowing in the form of lessons learned as may be recovered from public sector PM practice guides. In the process, I would be reviewing the affiliation's on-going engagement with the POM model as may be understood according to various conceptualisations of practice / theory relationships. From my literature review, I had an undecided view about the POM model as a methodology, albeit in the SSM sense of a set of principles rather than a precise method (Checkland and Holwell, 1998b, p. 162). Instead, I had begun to consider its possibility as a mid-range theory for guiding professional practice when the appreciative setting in the model is the organisation as a whole.

The first of my three "F" elements was Vickers' Appreciative Systems, acknowledged by Checkland (e.g. 2005) and colleagues as a foundational influence on their work. The second was Checkland and Holwell's (1998b, p. 106) POM model as praxis. The third, hermeneutics, provided a broad epistemology and philosophy to inform interpretation and analysis of practical action.

My initial “M” had encompassed AL / AR, reflexive practice, the POM model and the *PMBOK® Guide* (PMI, 2000, 2004) as they may be considered methodologies and discourse analysis. Subsequently refocusing my “M” to the organisational level, in response to a change in my practice context, my inquiry would become a process of explication with the reframing itself becoming a learning experience. Under my revised approach, my research material would mainly come from documents published / accessible in the public domain that would include the affiliation’s publications about our research and practice. This would require me to construct an exploratory sense-making framework for reading the texts.

My expected result would be an emergent construction (bricolage) that changed and took new forms as different tools, methods and techniques were added to the puzzle. Nevertheless, I would be endeavouring to maintain the initial focus of my research themes (conceptual models, lessons transfer and practical guidance) and research questions probing PM praxis in lessons recovery processes in complex public sector organisational contexts.

5.2 Research Foundations

My research inquiry extended over an eight-year period (Figure 1.3) as a member of a PM practitioner-researcher affiliation. Our on-going (local) discourse about our engagements, as reported in our publications (APPENDIX 1) was occurring within the context of multiple domain specific and public sphere discourses (Figure 1.8) that were fundamentally shaping our scope of PM action. Responding to the context, affiliation members would shift their mind set to accommodate both hard and soft systems thinking (Table 1.4), pragmatically combining the two. This interpretation (Figure 1.13) would represent a major challenge to prevailing views about hard and soft in PM.

Our initial attempt to apply soft systems thinking to traditional PM practice had been in the context of a Royal Commission when the then NSW Commissioner of Police had identified the need for a PM system to facilitate coordination and reporting requirements for the Reform Agenda and also to contribute to improved policing management. The research plan had combined hard and soft systems approaches, in particular SSM (Checkland, 1981; Checkland and Scholes, 1990) within an AR framework (Figure 1.4).

Published material reports that the Soft Systems for Soft Projects collaboration did deliver a practical system (PMIS) that addressed an important problem. The number, complexity (scale and interdependence) and dynamic context of the projects involved required a different level of appreciation of organisation than provided in PM best practice standards as represented by the *PMBOK® Guide* (PMI, 2000 and 2004). Here, the basic concept of an organisation is structural (Table 1.6). Models of organisations from other traditions, suggested organisations are always in flux and not operating in a stable state as assumed in the model in the *PMBOK® Guide*. Affiliation members, therefore, began to engage with the POM model (Figure 1.15) as a different concept of organisation and organisational processes to the conventional wisdom model. In their approach, Checkland and Holwell (1998b, pp. 68-71) had conceptualised action as managing a multiple and changing set of relationships rather than taking rational decisions to achieve goals. Affiliation members would revisit the POM model at later sites (Bentley, 2001a; Pollack, 2005), however, their engagement had remained at the conceptual level.

The PMIS format developed during the Soft Systems for Soft Projects collaboration was subsequently carried to other NSW Public Sector agencies including the RFS and the HPRB. As represented in Figure 1.18, I would be seeking to build an inquiry process that elicited the lessons learned by affiliation members in the philosophical sense of praxis, defined as applying in PM by Cicmil et al. (2006, p. 678) as a form of action which is fundamentally contingent on context-dependent judgement and situational ethics. Initially I had planned to adopt the AR framework applied during the Soft Systems for Soft Projects collaboration (Figure 1.4) as expanded for the FMA model in Figure 4.8. This provided for research themes embodying the researcher's interests to be established at the outset, which in Holwell's (2004) was an important concept for meeting criticism of AR on the grounds it lacks generalisability and external validity from one-off studies. Themes make sense of a program of research³⁴, giving coherence to multiple site, multiple level multidisciplinary research by linking the separate projects and allowing for cross-fertilisation between them. Holwell (2004, p. 359) claims that carrying a set of themes forward makes sense of calls to do several projects on the same topic in order to achieve more generalisable outcomes. Following from my reflection on my experience during the collaboration my themes were:

³⁴ In Holwell's (2004, p. 359) view themes can be thought of as a hierarchy. At the top are themes that motivate the researcher to become involved. Then there are themes more relevant to a particular research program. At the third level, there are themes relevant to particular projects, and finally there are some relevant themes within a particular organisational setting. New themes may be recognised at any time.

- *conceptual models* in particular the POM model as an SSM approach to support people thinking through difficult issues;
- *lessons transfer* in particular how the SSM version of AR (Figure 4.8) may support learning / lessons transfer and how this compares with PM models;
- *practical guidance* as may be discerned from an exploratory reading of (public domain) texts to gain a contextual practice view.

Unlike Holwell's case study (2004, p. 359), where no specific interventions needed to be negotiated to explore particular themes, my inquiry would be undergoing a constant process of adaptation and, accordingly, re-focusing. As mapped in Figure 1.3, I would be engaging with my themes through the interaction of:

- the decision making / action taking context (the focus of concern);
- the complex flux of events and ideas providing the context of the PM / SSM engagement; and
- the affiliation's knowledge of / prejudices about PM and SSM as applied to developing organisational sense-making models in PM.

According to Smyth and Morris (2007, p. 424) a PM research methodology's applicability depends on context. Walker et al., (2008a, p. 29) also say that research needs to be justified in the relevant institutional and industry context. My case study sites had different organisational cultures whereby PM in NSW Police was seen as a skill to be acquired³⁵ while in NSW Health its context would be in capacity building³⁶. As mapped in Figure 1.3, which was adapted from Checkland and Holwell's model (1998b, p. 170), I would be undertaking my inquiry within the scope of action provided by my case study agencies. Checkland and Holwell's (1998b) example of the application of their model charted a shift from crude to sense-making activity models made possible by engagement with and learning about the situation. It was oriented to taking action rather than simply gaining understanding, the desired action being initiation of AR at NHS locations with collaborating organisations. In general, they said it could be thought of as "action to improve". During my inquiry, I would be following the process according to my retrospective appreciation of the affiliation's previous engagements and my prospective sense-making approach towards purposeful action at the agency level during the HPRB *Online Services Development Portfolio*.

³⁵ Source http://police.nsw.gov.au/recruitment/police_career/skills, accessed 16/11/2005.

³⁶ Source: NSW Health Department (March 2001) A Framework for Building Capacity to Improve Health (www.health.nsw.gov.au).

5.3 Assumptions and Limitations

The research agreement for the Soft Systems for Soft Projects collaboration had set out the requirements to be observed, including relating to publication of research findings. As my inquiry would be at the organisational level (Figure 4.9) and my material would be from the public domain in publications, government websites in accordance with their copyright provisions³⁷ or through published research, there would be no issues of privacy or confidentiality. There were no human subjects, interviews or any direct intervention with humans that may have significant consequences for them. Also, I had obtained permission from my employing organisation for documents produced during the course of my inquiry into my practice to be reproduced in my thesis.

Researchers, nevertheless, must act ethically according to general principles and within the standards of a particular group³⁸. While observing public sector requirements, I would be proceeding on a general understanding that ethical considerations are not an independent or discrete part of research or professional practice but need to be observed throughout the entire process. As with all projects, I would need to consider the nature of the inquiry and the data and any potential impact on the people involved (Fitzgerald, 2001, p. 149). Should any unanticipated ethical issue occur, my strategy was to acknowledge it and explain how I resolved it. Also, according to my understanding that no form of inquiry is value-free (Denzin, 2001, p.4), I decided to be meticulous in referencing all the documents I used in my thesis.

A major assumption was that Julien Pollack would complete his HPRB inquiry. This he accomplished despite the changes, uncertainties and frustrations occurring during the IS/IT Platform Project (Pollack, 2005). Another was that I would remain employed in HPRB and able to complete my inquiry within my planned time scale and that the GLP would continue to develop. This did occur; however, undertaking research in such

³⁷ NSW government websites included a notice to the effect that, in keeping with the NSW Government's commitment to encouraging the availability, dissemination and exchange of information (and subject to the operation of the *Copyright Act 1968*), you are welcome to reproduce the material which appears on the site for personal, in-house or non-commercial use without formal permission or charge). UK government sites also give permission for use of material from their websites, in the case of the OGC, the material may be reproduced free of charge in any format or medium for research, private study or internal circulation within an organisation. However, the material must be re-used accurately and not in a misleading context. The source of the material must be identified and the copyright status acknowledged as Crown Copyright.

³⁸ For example: Fitzgerald (2001) on professional practice; Walker and Haslett (2002) on AR in management; Bartlett (2003) on research in management and business generally; Kerzner (2003) on PM case studies; Guillemin and Gillam (2004) on reflexivity and research ethics; Holian and Brooks (2004) on "insider" applied research; Clegg and Courpasson (2004) on control in project organisations; Coghlan and Shani (2005) on AR design in organisational development; McIntyre-Mills (2008) on systemic ethics.

complex environments carries risks. As West and Stansfield (2001, p. 264) caution, unforeseen issues may arise during the course of a study which takes the work into new, unexpected areas of inquiry. The researcher must therefore be able to adapt to new and emerging situations that may arise and be able to reflect continually upon how new situations may affect the nature of the research. Re-focusing my research to the organisational level may well have presented challenges in obtaining relevant research material. Besides availability of material, there was also the question of evidentiary weight. However, as the PM engagements in my case study agencies were in the context of responding to external developments, there was relevant material from a number of published sources and all the agencies would be subject to external review.

Also, I was assuming that the complexity of the PM practice context would not preclude an inquiry approach yielding conclusions that could be defended as academic research (Walker et al., 2008a). Fuller-Rowell (2009, p. 364) says that in an increasingly interconnected world it is becoming very important to address issues at the multi-organisational scale. Levin and Ravn (2007, pp. 11), however, warn that the dialogue processes that engaged researchers are up against are unpredictable and intractable in a very fundamental sense. An important researcher skill is to live with ambiguities.

Three important limitations Pawson et al, (2004, p. S1:23) identified for conducting a realist synthesis appeared relevant in my case: the territory that can be covered; the nature and quality of the data; and what can be expected to be delivered, where hard and fast truths about what works must be discarded in favour contextual advice.

5.4 Applying the FMA model

According to Checkland and Holwell, (1998b, pp. 23-24) any piece of research can be thought of as entailing the FMA elements depicted in Figure 5.1. In this model, a particular set of linked ideas “F” are used in a methodology “M” to investigate some area of interest “A”. From doing the research, the alert researcher may learn things about all three elements. It is essential that the elements be declared in advance, “before plunging into the flux of events and ideas in a real situation, which is always exciting and daunting” (Checkland and Holwell, 1998b, p. 24) as they are the intellectual structure which will lead to findings and the research lessons being recognised as such (Checkland and Holwell, 1998a, p. 14).

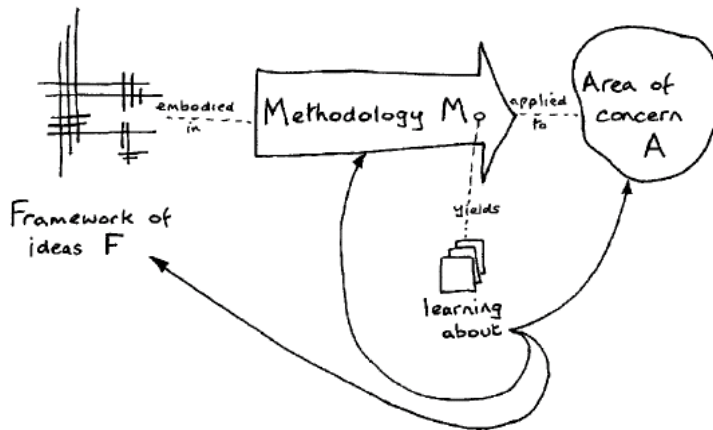


FIGURE 5.1: Elements relevant to any piece of research (Checkland and Holwell, 1998b, p. 23).

There is much commentary on and adaptation of the FMA reported in the literature. Houghton and Ledington (2004), arguing for engagement as a replacement for the SSM modeling process, claim the FMA model is the simplest way to describe an approach to engagement in real-world problem solving and innovation. Sarah et al. (2002, p. 537), reporting on its adoption by a university PhD cohort, explain that in any research endeavour there exists a background framework of ideas (F) which as a theory inform our methodology (M), consisting of tools and methods, which are applied to some area of concern (A) in the form of a practical application. A frequent criticism, according to West and Stansfield (2001, p. 253), was that stating F at the beginning restricts the research direction. In their view this is a misunderstanding of the cycle of action and learning as the analytical framework is not static; it is simply a statement at a point in time of one's awareness of the theoretical underpinning of the methodological approach being adopted. Later, the FMA elements were reflected in the practical PM research framework developed by Winter et al. (2006b) out of the EPSRC Rethinking Project Management Network, albeit with more prescriptive detail (Figure 5.2).

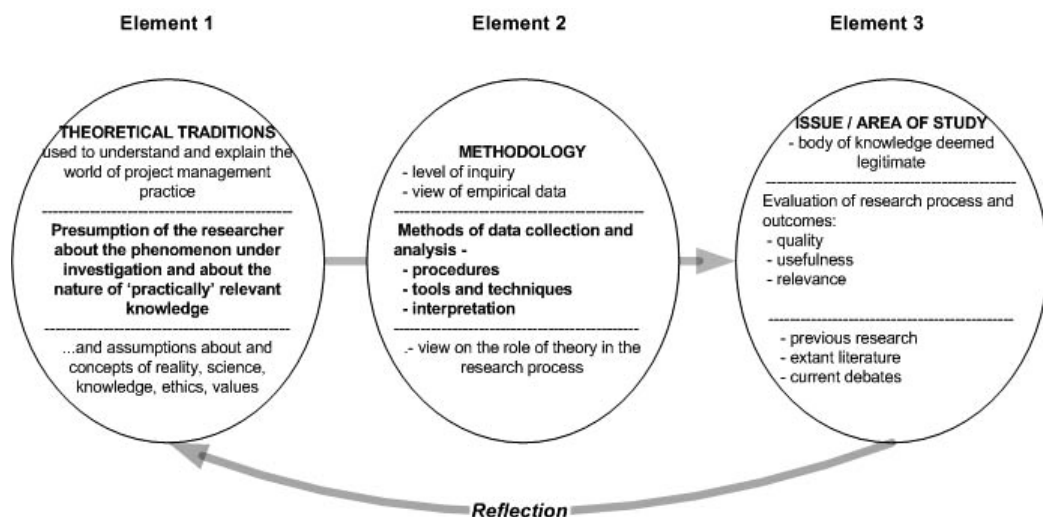


FIGURE 5.2: A practical framework for thinking about project management research addressing the relationship between the research process and the nature of knowledge created (Winter et al., 2006b, p. 647 reproduced in Cicmil, 2006, p. 32).

The approach applied during the two HPRB inquiries (Figure 1.3) generally followed the FMA model in Figure 5.1. Figure 5.3 is the model for *IS/IT Platform Project* developed by my colleague practitioner-researcher (Pollack, 2005).

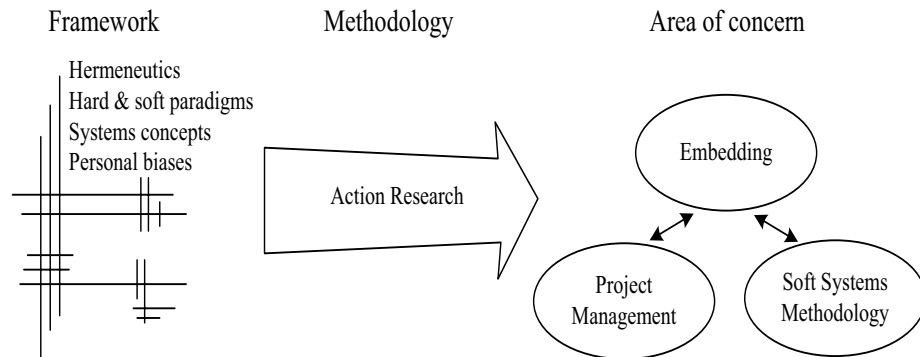


FIGURE 5.3: Map of the research approach for the HPRB *IS/IT Platform Project* within the structure of the FMA model (Pollack, 2005, p. 63).

Figure 5.4 maps my research elements for the second HPRB inquiry, the *Online Services Development Portfolio*. Both inquiries were overlapping in terms of location and time, but were proceeding at different levels of appreciation and analysis: Julien Pollack's at the project level and mine at the portfolio level. As advised by Julien Pollack in APPENDIX 5, the themes of his research focus during the period were: Checkland's (1981; 1990 and 2000a) SSM; PM at the methodological level; and ways of combining methodologies. The focus of my strand of inquiry was: the primacy of practice; Checkland and Holwell's (1998b, p. 106) POM model as a framework for sense-making; meta-narratives, particularly within the context of NPM; and textual analysis as a way of appreciating organisations.

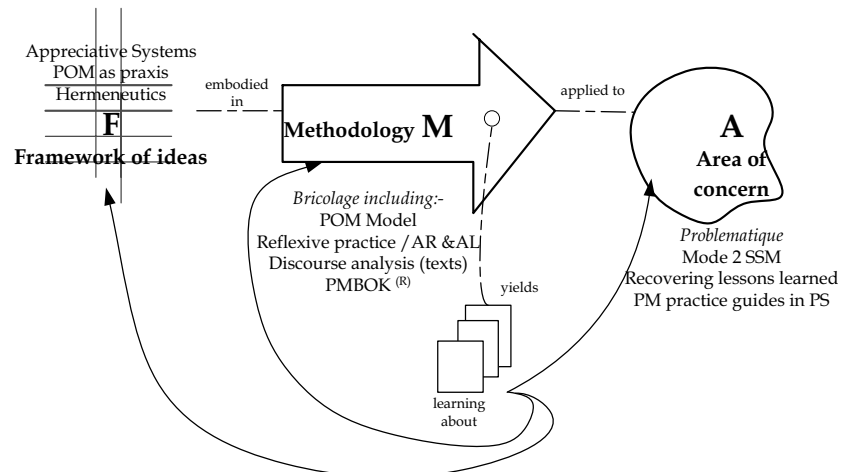


FIGURE 5.4 Map of the research approach for the HPRB *Online Services Development Portfolio* within the structure of the FMA model.

I would later compare my approach to adaptations of the FMA model including Figure 5.5 where it was applied during Participatory Action Research (PAR) to assist with the process of thinking systemically and combining many methods through questioning. According to McIntyre (2005, pp. 194-5), PAR is very different from rationalist approaches in enabling thick description and supporting participative democracy.

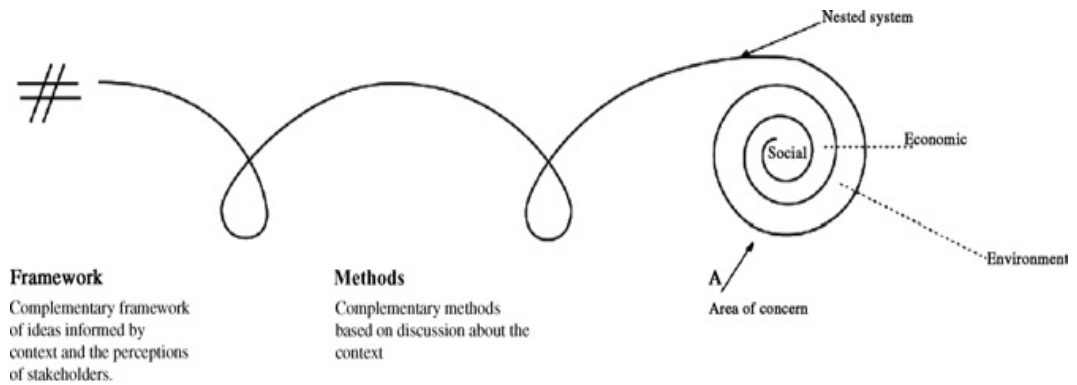


FIGURE 5.5: Participatory Action Research as iterative thinking and practice (McIntyre, 2005, p. 195 derived from Checkland and Holwell, 1998a, p. 13).

In another example, an expanded FMA model (Figure 5.6) was applied during an interdisciplinary agro-environmental research project involving researchers from eight countries (Helmfrid et al., 2008). The authors said if they could redesign the project they would have a professional facilitator instead of an action researcher and a collaborative research platform where dialogue between researchers and the community forms a hub around which the project revolves and through which fundamental elements, for example research questions, would be developed.

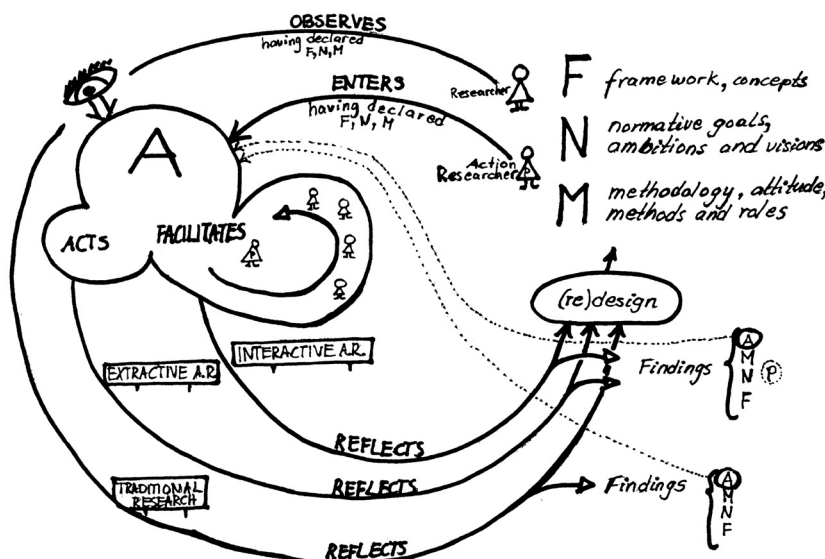


FIGURE 5.6: Adaptation of the FMA model in Helmfrid et al., (2008, p. 120) for three research approaches. N is goals, visions and ambitions, to be declared before entering into the situation. P is "process" competence.

5.5 Minding the Gap between Theory and Practice

As I noted in Chapter 4 (Section 4.3.3), affiliation members had early on considered Jarvis' (1999, pp. 147-150) reconceptualisation of theory as practical knowledge (personal theory) which he distinguished from information about practice, which was often based on a single academic discipline and driven by the demands of that discipline. He said this was an important distinction to be made at the outset and provided a conceptual model (Figure 4.6) whereby practitioner-researchers' research could relate to theory and practice.

At the time I was framing my FMA approach I was also following an activity theory thread³⁹, which provided another perspective for thinking about my engagement with systems thinking in general and SSM and the POM model in particular. Tenkasi and Hay (2004) used activity theory to guide an inductive interpretation of theory - practice linkages that scholar-practitioners considered successful in delivering business results while furthering academic knowledge⁴⁰. Their model (Figure 5.7) described theory and practice elements that go into the temporal flow of organisational endeavours, the nature of linkages between them and their format and functions, and the strategies used to construct them. Activity theory was, in their view, more a meta-theory consisting of basic principles that constitute a general conceptual system that can be used as a foundation for building more specific mid-range theories. Hence:

Instead of the traditional views of practice as involving action and theory abstract thinking, we view each of them as different kinds of tools and resources that mediate different kinds of action...we construe theory as actions that are mediated by formal domains of knowledge as represented and available in the form of books, articles, expert opinion, and principles of research. Practice, we see as actions that are mediated by non-theoretical tools that may include contextual contingencies, conventions, norms, routines, rules, and established procedures. Theory and practice are linked, when a theoretically mediated action influences (i.e. informs and/or invokes) a practically mediated action, or vice versa (Tenkasi and Hay, 2004, pp.181-2).

³⁹ For example in Blackler et al., (2000), Kerosuo and Engestrom (2003) and Blackler and Kennedy (2004). Local examples included Hasan (2003) and Larkin (2003). In the UK, a post-implementation systems evaluation within a government agency by Turner & Turner (2002) demonstrated how activity theory supports understanding of an information system in context. They also concluded adopting a SSM approach would have brought to the surface similar issues to evaluate.

⁴⁰ They refer (2004, p. 178) to the description by Rynes et al. (2001) of the gap between theory and practice as the great divide and to the concept of actionable scientific knowledge. This concept called for rigour and relevance or modes of knowledge production that describe the rise of scholarly knowledge from the practical problems of business; in either case, useful research must advance the theoretical understanding of the phenomena as well as provide for a better resolution of business problems.

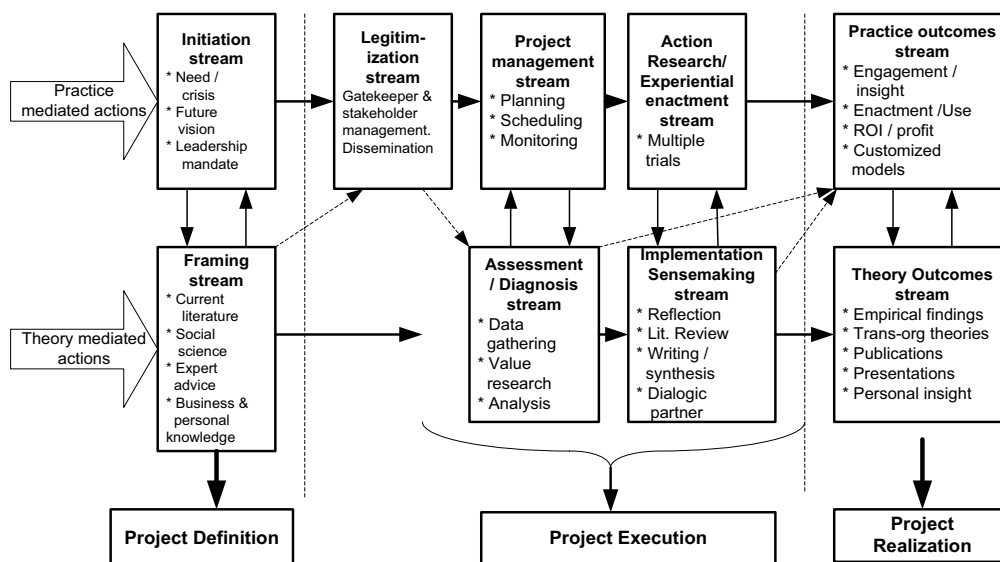


FIGURE 5.7: Theory and practice mediators of an organisational project perceived to be successful (Tenkasi and Hay, 2004, p. 186).

From the health area, I particularly considered Fitzgerald’s (2001) location of the research process at the core of a model of theory informing practice. This was on the basis that the clinical practice inquiry is basically the same process as the research inquiry, that theory and practice are linked in fundamental and seamless ways and that professional learning and professional practice are aspects of the professional whole. Checkland and Holwell (1998b, p. 11) also believed thinking about the world and having experiences in it cannot be properly separated. Experiences are interpreted by but also serve to create, ideas and concepts which make sense of (new) experience.

5.6 Framework of Ideas [“F”]

Getting things done as required for the HPRB *Online Services Development Portfolio*, would entail supporting development of what Orlikowski (2002, p. 2) has termed a collective capability for knowing in practice, a situated knowing constituted by a person acting in a particular setting that is not a static embedded capability, or stable disposition of actors, but an on-going social accomplishment, constituted and reconstituted as actors engage in the world of practice. Capabilities are generated through action (2002, pp. 5-6), emerging from the situated and on-going relationships of context (time and place), activity stream, agency (intentional actions) and structure. Orlikowski (2002, p. 2)⁴¹ refers to knowledge as being emergent and to “know-how” as the particular ability to put “know-what” into practice, a capability embedded in particular communities of practice. She identified five work practices supporting

⁴¹ Citing *inter alia* Brown and Duguid (1998, pp. 91-5).

organisational knowing in practice: sharing identity (knowing the organisation); interacting face to face (knowing the players in the game); aligning effort (knowing how to coordinate across time and space); learning by doing (knowing how to develop capabilities); and supporting participation (knowing how to innovate).

Orlikowski (2002, pp. 16-8) considered PM as only particularly contributing to aligning effort, a finding consistent with Iles and Sutherland's (2001) framework (Figure 2.3). Nevertheless, the PM field as exemplified by Cleland and Ireland (2006, p. 71) was of the view that PM can provide an organisational focus and philosophy on how to deal with the inevitable changes facing contemporary organisations and that projects are inexorably related to the design and implementation of strategic and operational change initiatives. Winter and Checkland (2003) would, however, characterise the dominant "hard" PM approach as a "management process", and "soft" as a "process of managing" (Figure 5.8). In their view, "hard" and "soft" were not alternatives, rather the "hard" image was a special case of the "soft".

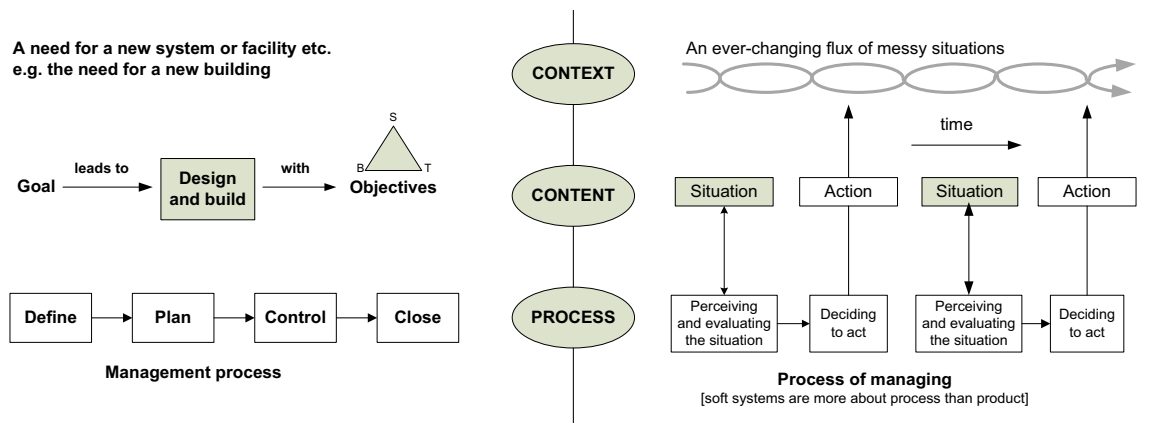


FIGURE 5.8: Project management: two contrasting images of real-world practice (Winter and Checkland, 2003, p. 191).

5.6.1 Appreciative Systems, SSM and the POM model

My FMA framework (Figure 5.4) had incorporated the POM model under "M" and "F". In Checkland's view (2000a, p. S36), SSM was clearly a methodology and the challenge is to convert the methodology into a specific approach or method which the user felt was appropriate for a particular situation at a particular moment in its history (Checkland, 2000a, p. S36). Checkland and Poulter (2006, pp.175) refer to AR as the theory underpinning SSM use. When outlining the rationale and methodology for helping a leading food retailer develop a business model, Winter (2006, p. 803) referred to much of the published work on SSM as being largely at a theoretical level

but with few real examples to support the theoretical discussion. He considered his experience helped make explicit a distinction made by Checkland and Winter (2006, p. 1435) about using SSM to tackle the perceived content of a problematical situation (termed SSMc) and the intellectual process of the intervention itself (termed SSMp). His account showed that he was not following a sequence of stages, but enacting certain aspects in parallel because of the constraints of the particular situation.

While there are the constitutive rules relating to SSM generally⁴², Checkland and Holwell (1998b, p. 230) were not prescriptive for the POM model although they were explicit about considering it a sense-making model and not a theory. Under the broad features they considered worthy of comment, they cited Weick (1995) in the context of the POM model being a defensible device with a structure and language which can be used to make sense of life in real organisations and their provision of IS. Observing there was no single body of work which underlies the soft interpretive approach to IS in the same way that Simon's work was taken as given, and so shaped the "hard" or functionalist approach, they introduced the "soft" orientation through the work of Sir Geoffrey Vickers (1965). The characteristics of the two broad traditions are given in Table 2.1. In summary, according to Checkland (2000a, pS43), SSM can be seen as a systemic learning process which articulates the working of appreciative systems in Vickers' sense⁴³. On appreciative settings generally, Checkland and Holwell (1998b, pp.103-4) said that they lead:

...to particular features of situations (as well as the "situations" themselves) being noticed and judged in particular ways by standards built up from previous experience. As a result of the discourse that ensues, accommodations may be reached which lead to action being taken. Equally, then appreciative settings and the standards by which judgements are made may well be changed. They will certainly change through time as our personal and social history unfolds; there is no permanent "social reality" except at the broadest possible level, immune from events and ideas which, in the normal social process, continually change it.

⁴² For example in Holwell (2000); Mingers (2000; Bergvall-Kareborn (2002 and 2006); Bergvall-Kareborn et al. (2004); and Mirijamdotter and Bergvall-Kareborn (2006).

⁴³ In his account of his correspondence with Vickers, Checkland (2005, pp. 286-7) summarised Vickers' intellectual journey as: (1) Rejecting the goal-seeking model of human activity, regarding it as too poverty-stricken to encompass the richness of being human; (2) Discovering the sense-making power of systems ideas; (3) Rejecting the classic cybernetic model of steersmanship, arguing that real life generates multiple, often incompatible, courses, none completely recognisable, which stems from our previous history and judgements; and (4) Formulating an epistemology which addresses the nature of human understanding, judgement and action - the concept of an "appreciative system" described as a mental evaluative act, a cultural mechanism which maintains desired relationships and eludes undesired ones.

After commenting on the lack of practical guidance for applying the POM model, West (2002, p. 38) offered a way of representing relationship-maintaining that she felt was more accessible to researchers and practitioners. Vickers' idea of relationship-maintenance in her view (2002, p. 44) encouraged a context-dependent view of human activity built upon organisational members' conceptualisation of "the organisation" and its aims and objectives. Management of the organisation, therefore, becomes management of the varied and complex relationships that are considered to exist for different organisational members and Vickers' idea of relationship maintenance was a useful way of describing the regulating process. For the theoretical concept of relationship-maintenance to be made relevant and available to IS practitioners and researchers, however, it needed to be presented in a way which set out its components in a manner which is easy to understand.

5.6.2 The POM model as theory

As novice SSM practitioner-researchers we had begun with a concept of the POM model as a methodology (Crawford and Costello, 2000), defined by Checkland and Holwell (1998b, p. 162) as a set of principles of method rather than a precise method that has to be adapted by its users both to the demands of the situation they face and their own mental modes and casts of mind. The relationship between methodology, tools and techniques and method, for example in Ragsdell's (2000, p. 106) hierarchy was, however, much debated within the affiliation⁴⁴. We had also noted application of the POM model during a coordinated care trial in a NSW Health Service as a theoretical framework for IS/IT evaluation (Cromwell, 2000). Examining both technical and organisational issues, Cromwell (2000, p. 5) gave two reasons why it might be considered superior to alternative evaluation frameworks, the first being it was a richer model of an organisation than implicit in much of the IS literature. The second came from the POM model's separation of how people convert data into information and how they synthesise this with knowledge to create intentions that lead to action.

My subsequent literature search found few examples of the POM model being applied and these mainly appeared examples of Holwell's (2000) so termed modelling discourse. Where POM was being examined in any detail appeared in the work of doctoral students (Figure 2.1). In an ISD AR project carried out using a SSM

⁴⁴ The method / methodology issue was also considered by Bergvall-Kareborn et al. (2004) in their examination of the basic principles of SSM modelling from the perspective of the application CATWOE tool. Ishino and Kijima (2005), who refer to Crawford et al., (2003), also combined SSM as a methodology with other tools (e.g. balanced scorecard).

approach, Rose (2000, pp. 32-3) had also applied a second strand of modelling using the POM model. He critiqued Checkland's view of IS and ISD from a number of perspectives, including that by focusing on the social construction of meaning, it ignores inequalities of power which may allow certain stakeholders to dominate the process. Also, technical computing factors were ignored and the complex relationship between action, meaning and IS evident in the POM model was not really carried over into Checkland's version of ISD.

Reviewing the development of SSM as a well-accepted management problem solving methodology, wherein difficult ontological questions in the seven stage model were gradually being erased, Rose (2000, p. 86) referred to further questions about the nature and mechanisms of social construction not being adequately resolved by Checkland's adaptations from Vickers' work. In his view, the further aspects of social construction embodied in the POM model did not entirely resolve the problem. In 1997, Rose had suggested SSM was a candidate methodology for a wide range of social science research projects, including as a theory-testing or generating tool of the middle range. He did not appear to extend this to the POM model in later published papers (e.g. Rose, 2002) wherein he appears to be engaging with SSM in its modelling mode.

McIntosh-Murray (2003) had included the POM model in the literature forming the theoretical basis of her study, applying it as a tentative model of the construction and use of information about adverse (clinical) events in health care organisations. Nevertheless, she saw (2003, p. 22) an inconsistency in Checkland and Holwell's (1998b) description of the POM model wherein culture and politics are referred to as aspects of problem situations which should be investigated, but no further advice given on how or what elements this would entail.

Aiming to provide a coherent framework to guide the development of monitoring and evaluation IS within international aid agencies, Crawford (2004, p. 10) applied SSM to explore how aid agencies could best operationalise the concepts so as to continually enhance their effectiveness. The theoretical basis for his framework was drawn from transdisciplinary review of three academic fields: IS, organisational effectiveness and PM. On the latter, he noted (2004, pp. 84-5) that within the PMBOK® Guide (PMI, 2000) monitoring and evaluation is not a discrete knowledge area, but is dispersed throughout seven of the nine PM knowledge areas. Crawford (2004, pp. 105-12) considered the POM model as applying to the provision of IS within organisations, albeit questioning the nature of organisation and how this affects IS. He observed

(2004, p. 109) that Checkland and Holwell (1998b, p. 230) do not offer the POM model as a “copper-bottomed theory of the field” but rather as a model which can be used to make sense of the core processes at the heart of IS work. It offered an alternative perspective to the functionalist epistemology within conventional IS literature and hence a richer understanding of the role information plays within organisations.

The POM model was particularly examined by Holst (2004 and 2007) when inquiring into the processes of boundary crossing knowledge work. While acknowledging development of the POM model for ISD, Holst (2004, pp.23-4) extended its application to understanding organisational processes in knowledge work, combining it with the Ba model of Nonaka and Konno to provide the theoretical basis for her study. Within her framework, the Ba model represented the context for the processes of creating knowledge and was used as a sense-making tool to understand the forming processes of multidisciplinary groups. The POM model was used to place considerations about knowledge work in context. She found advantages and disadvantages with both models, the benefit of the POM model being that it included aspects that the Ba model lacks, whereby people, the information exchange processes and the organisation are clearly indicated.

Holst (2004, pp. 37-8) found the POM-model translated nicely into the theory of enabling knowledge creation. She had, however, found few references in the literature and citations in an appended paper by Holst and Mirijamdotter (2004) included reference to Costello et al. (2002a). When applied to examining the organisational requirements for multi-disciplinary teams which must create a shared vision for purposeful action, Holst and Mirijamdotter (2004, p. 9:13-14) suggested it was particularly relevant for understanding the horizontal communications of a multi-disciplinary group. Furthermore, POM acknowledged the historical view and pre-knowledge of individuals in the process. Learning from this study was to be carried into a computer supported cooperative work project where implementation strategies for advancing knowledge generation through ICT support would be articulated and tested (Holst and Mirijamdotter, 2004, p. 11:13)⁴⁵.

⁴⁵ Subsequently, the efficacy of the POM model for guiding learning-focused, inter-disciplinary, user-centric initiatives was tested during a three-year collaborative project between faculty researchers from Sweden and the USA (Mirijamdotter et al., 2006, p. 83). This involved combining SSM processes and collaborative evidence-based librarianship principles to guide end-user involvement in digital library project design and development (Mirijamdotter et al., 2006; Mirijamdotter and Somerville, 2008; Mirijamdotter and Somerville, 2009).

Elaborating on the POM model elements (Figure 1.15), Checkland and Holwell (1998b, p. 105) had said Element 1 consisted of people as individuals and group members and Element 2 the data-rich world they perceived selectively through their taken-as given assumptions. In the model's language, these were the appreciative settings ("cognitive filters") which would be engaging in organisational discourse (Element 3), the arena in which meaning is created inter-subjectively, leading to the attributions of meaning which yield information and knowledge (Element 4).

Later, Checkland and Holwell (1998b, p. 148) referred to individuals and groups comprising Element 1 as being those who have a concern both for purposeful real-world action and for the information support needed by those carrying out the action. The idea of appreciative settings could, in their view (Checkland and Holwell, 1998b; Checkland and Holwell, 2006) extend to the organisation as a whole. Referring to the conventional wisdom, they observed it is a "rather naïve assumption that all members of an organisation share the same settings, those that lead them unambiguously to collaborate together in decision making in pursuit of organizational (corporate) goals". However, the idea of "the (attributed) appreciative settings of the organisational as a whole" is a usable concept:

...the content of those settings, whatever attributions are made will never be completely static. Changes both internal and external to the organisation will change individual and group perceptions and judgements, leading to new accommodations related to evolving intentions and purposes.

Working through how POM might be applied where the appreciative setting was the organisation as a whole, I began to consider conceptualising it as a mid-level theory for guiding professional practice (Figure 5.9) and the implications of this for my inquiry. Checkland and Holwell (1998b, p.107-9) said although the POM model broadly represents aspects we can observe and analyse, the detailed reality will always be less clear cut than the model. Further, while the model could encompass any way of conceptualising an organisation and was not necessarily linked to the conventional wisdom, it could encompass the conventional wisdom according to any organisational metaphor which seemed appropriate in a particular case. Also, in a real situation the POM processes would have to somehow be embodied in structures and many different sets could be chosen to encapsulate the model's fundamental processes.

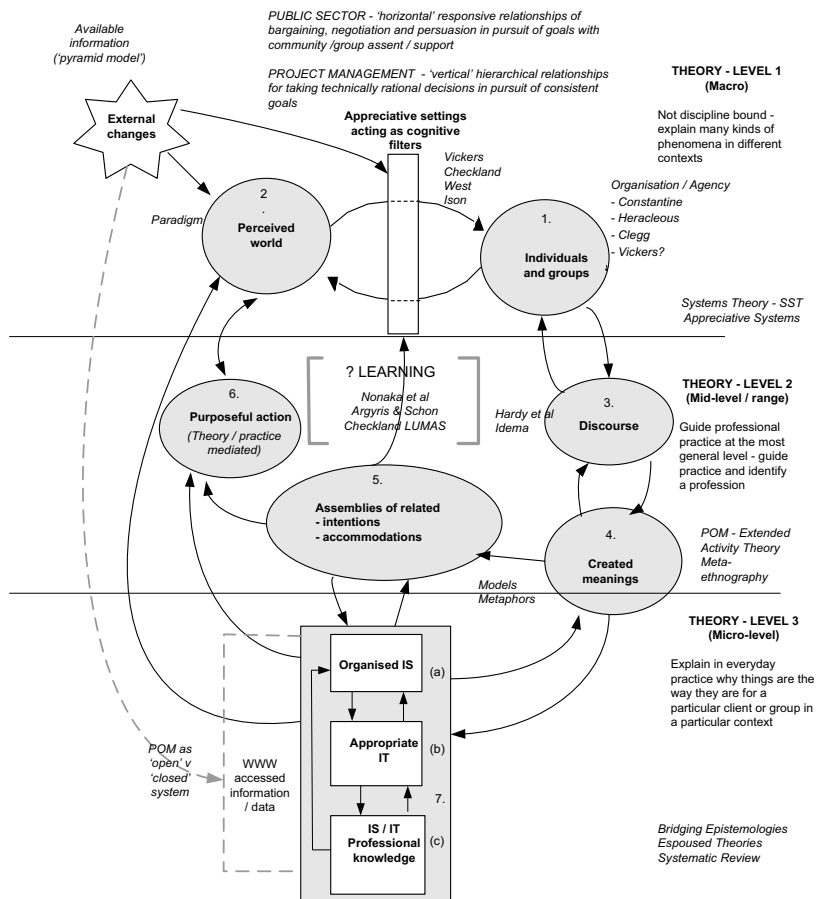


FIGURE 5.9: Exploratory mind map for working through POM in use issues (Costello Personal Research Papers)

Mid-level theory, according to Fitzgerald (2001, p.188-9), was one of three levels or kinds of theories explaining things at different levels of magnitude. Grand-scale (macro-level) provided the greatest explanatory power for many kinds of phenomena in different contexts, for example systems theory, and is not discipline bound. Mid-range (mid-level) guided professional practice at the most general level, for example theories about how specific systems operate. Elemental / local (micro-level) explained why things are the way they are for a particular client or group in a particular context; however, it could and usually did reflect the other levels. This theoretical base may be explicit or implied by the assumptions it makes or the methodology used. Different levels of theory were also distinguished by the *Rethinking Project Management Research Network* as elaborated in Chapter 4 (Section 4.3.4). However, as I noted there theory in PM was problematic, with Morris (2002, p. 82) concluding that while good practice can certainly be identified, there would never be an overall theory of PM.

Considering what counts as theory in qualitative management and accounting research, Llewelyn (2002, p. 663) referred to a bewildering array of theoretical forms for supporting empirical research including grand theory, conceptual tools and philosophical (meta) theories. In these disciplines, the value of qualitative empirical

research was seen in conceptual framing of organisational actions, events, processes and structures that extend beyond the highly abstract schema generally considered as “theories” by academics. In this interpretation, meaning not only follows the sense-making of individuals but is concerned with how something is connected or related to something else. Llewelyn (2002) identified five ways of theorising available to qualitative empirical researchers as being metaphor, differentiation, conceptualisation, context-bound theorising of settings and context-free grand theorising.

Reflecting on significant trends in IS theorising in Australia, Gregor et al. (2007, p.12) referred to eclecticism as a key feature of the theoretical landscape. In this respect, they saw some commonality with Scandinavia in that both were to some extent outsiders in comparison with more prominent and powerful research communities in Europe and North America. They saw value in researchers being able to think differently, taking lessons from a number of traditions and being willing to find a new paths and pioneer new directions. Some similarity may be drawn with PM in this respect. Costello et al. (2002a, p. 48), noting research interest in PM was difficult to attract due to PM not being recognised as a distinct academic discipline, referred to the International Research Network for Organising by Projects (IRNOP). IRNOP has been holding bi-annual conferences since 1994⁴⁶ and, as indicated by the list of affiliation papers in APPENDIX 1, IRNOP was an important experience for them⁴⁷.

5.6.3 Hermeneutics

In his 30-year retrospective, Checkland (2000a, p. S13) outlined the process whereby his three seminal books (1981, 1990 and 1998b), carrying the discussion which is the real essence of any developing subject, tried to extend the boundaries of knowledge. He explained that in this process the whole and the parts are continually honed and refined in cycles of action, an example of Dilthey’s hermeneutic circle. Summarising a 29-year period of AR, Checkland (2000c, p. S67) said it was “firstly a process of inquiry which through a number of hermeneutic circles learns its way to the accommodations

⁴⁶ The first was hosted by the Umea School of Business and Economics in Sweden, the current host of the IRNOP website ([http:// www.irnop.org](http://www.irnop.org)).

⁴⁷ Subsequent conferences have been held in Paris, France (1996, hosted by the Ecole Polytechnique); Calgary, Canada (1998, hosted by the University of Calgary); Sydney, Australia (2000, hosted by the University of Technology, Sydney); Rotterdam, The Netherlands (2002, hosted by Erasmus University); Turku, Finland (2004, hosted by Abo Akademi and the Helsinki University of Technology); Xi’an, China (2006, hosted by The International Project Management Institute of Northwestern Polytechnical University supported by the Project Management Research Committee); Brighton, UK (2007, hosted by CENTRIM, University of Brighton and SPRU, University of Sussex); and Berlin, Germany (2009, hosted by Institut fur Technologie und Management at Technische Universitat, Berlin).

which enable action to improve to be taken, and secondly more than 200 studies in organizations in which the process has been developed, tested and refined”.

Classical hermeneutics as represented by Dilthey has been distinguished from philosophical hermeneutics (Prasad, 2002, p. 15) on the basis that the purpose is to guide the practice of correct interpretation and understanding. In philosophical hermeneutics the major concern is not with creating prescriptive theories for regulating interpretive practice; instead it is with what is constitutively involved in a philosophical sense in each and every act of interpretation. Gadamer (1982; 1993) was a principal contributor to this tradition, developing a systematic philosophy of hermeneutics which played a key role in shaping the contours of contemporary hermeneutics (Prasad, 2002, p.16). In particular, the distinction between understanding and interpretation was no longer maintained. With later developments, hermeneutics was no longer seen as a narrowly defined method but as a broad epistemology and philosophy of understanding and interpretation (Prasad, 2002, p. 23). Accordingly:-

...contemporary hermeneutics has expanded the scope of the term *text* to include not only documents in the conventional sense but also organizational practices and structures, social and economic activities, cultural artifacts and the rest. In methodological terms, this implies that management scholars may legitimately adopt hermeneutics as a research approach not only for interpreting the usual corporate documents...but for investigating a whole host of micro level and macrolevel organizational phenomena (Prasad, 2002 p29).

Gadamer's interpretive epistemology informed Julien Pollack's research methodology for the HPRB *IS/IT Platform Project* (Pollack, 2005, pp. 56-61), in particular his interpretation and analysis of practical action. Noting his approach and also “the hermeneutical turn” taken in systems thinking (Corea, 2005, p. 339), where systems are no longer seen as existing in the world but as “mental constructs used by an observer to frame a fruitful understanding of a situation”, I engaged with hermeneutics in its broad sense⁴⁸ within my FMA model. Nevertheless, I was still considering its method-related guidelines. As an approach for management research, hermeneutics requires the investigator to pay great attention to the history and context of the organisational phenomenon being studied, makes important demands on the researcher's capability for self-reflection and auto-critique and emphasises the value of adopting an ethically informed critical perspective in organisational research. As

⁴⁸ Hermeneutics has been used in ISD (Heracleous and Barrett, 2001; Kraemmergaard and Rose, 2002; Chalmers, 2004; Sarker and Lee, 2006; Cole and Avison, 2007) and in nursing (Karkkainen and Eriksson, 2004; Mitchell, 2004; Lindholm et al., 2006).

Patton (2002, p. 113) notes, hermeneutics reminds us that what something means depends on the cultural context in which it was originally created as well as the context within which it was subsequently interpreted.

5.7 Area of Concern ["A"]

In my three case study agencies the problem focus was always in flux. All of the affiliation's PM engagements were, however, undertaken in the context of responding to external developments: the *Wood Royal Commission* for the NSW Police Service; Ministerial announcement for the RFS; and inclusion as a lead agency in the GLP for HPRB. Therefore, while my key themes of conceptual models, lessons transfer and practical guidance (Table 4.2) provided the broad parameters of my "A", specific focal points would shift according to changing circumstances in the agency contexts.

For this situation, I adopted the term *problematique*. In his dissertation, Venter (2003) used the term to refer to the mess (wicked problems) that was the subject of his study. Warfield and Perino (1999, p. 221) define *problematique* as a structural model for enhancing understanding and facilitating development of action plans to correct undesirable situations. Warfield (2004, p. 130) refers to Foucault using the term to convey intuitively the aggregate concept of description of a situation. Parsons (2004), in a public policy context, also used the term broadly. Adopting terms such as problem context or domain would, in Venter's (2003, pp. 21-2) opinion, imply a structure and hence that a potential understanding of the problem may become existent within the world. As he observes, a *problematique* cannot be identified explicitly in the world and its boundary is constantly changing. Accordingly, it is not possible to isolate a single problem and there is no sense of a solution, only incremental improvement.

In my framework (Figure 5.4), I also included under "A" Mode 2 SSM as may be applied to recovering lessons learned and public sector PM practice guides. Accordingly, my "A" would reflect the distinction made by Checkland and Winter (2006, p. 1435) about using SSM to tackle the perceived content of a problematical situation and the intellectual process of the intervention itself.

5.8 Methodology ["M"]

Midgley (2000, p. 105) defines a methodology as a set of theoretical ideas that justifies the use of particular method or methods. While often there is a blurring of the

boundary between methodology and philosophy methodology is clearly distinguished from method. He defines the latter as a set of techniques operated in sequence (or sometimes iteratively) to achieve a given purpose.

Reviewing papers from the 2005 *IJPM*, Smyth and Morris (2007) referred to the key role of research methodology in generating knowledge on projects and their management. In their view (2007, pp. 423-4), absence of both an integrated theory of management and PM can be observed in its multidisciplinary nature and the way it draws on social and natural sciences⁴⁹. They found PM research methodologies being selected and applied in ways that are often inappropriate, both to context and to issues concerning general-particular explanations. Further, the majority of the research failed to articulate explicitly the choice of research methodology (2007, p. 433).

In the systems field, methodological pluralism has been a substantial field of academic and practitioner endeavour (Jackson, 2000). For the purposes of my study, I noted that methodological pluralism has been promoted in relation to reflexivity in knowledge making / management research and there are many examples where it has been applied to designing organisational interventions (e.g. Ormerod, 1997). Nevertheless, while Midgley (2000) argues for a focus on mixing methods in most systemic interventions, he gives an example where it is appropriate to draw upon methods from just one source, in this case SSM.

Reflecting the complexity of my “A”, my “M” would require me to stitch together threads from different research traditions. In doing this, I had regard to Midgley’s (2000, p. 173) advice that no one theory, or set of theories, whether or not they have been codified into a methodology, can ever be comprehensive. My methodology would place my research outside the dominant PM positivist perspective (Hodgson, 2000), as reflected in the PM literature and, indeed even in ISD (Orlikowski and Baroudi, 1991). There were signs at the time, however, that this was shifting in the ISD field (Rose, 2000) and SSM was being acknowledged in its mainstream (Bennetts et al., 2000). My choice also raised boundary issues across the domains involved (Midgley et al., 1998; Clarke and Lehane, 2000) as represented in Figure 1.8. Generally, it would locate my inquiry

⁴⁹ Smyth and Morris (2007, pp. 423-4) saw this as leading to: (1) an eclectic mix of concepts being required for understanding projects or aspects of them; (2) professional PM associations’ BOKs drawing on different conceptual and theoretical underpinnings, often causing confusion in the “profession” as to the basis of the discipline; (3) practitioners finding difficulty in assimilating and applying such diversity echoed corporately where articulating practice and integrating knowledge encounters conceptual difficulties, particularly across the enterprise – program - project interface; and (4) application varying as practitioners interpret knowledge differently according to context, circumstance, competence and indeed whim.

within the qualitative research paradigm (APPENDIX 6), described by Denzin and Lincoln (1998, p. 2) as a field in its own right that crosscuts disciplines, fields and subject matter.

Klein and Myers (1999) and many other writers make out the case for qualitative interpretive research and provide guidance on its application (for example Bryman, 1999; Higgs, 2001; Patton, 2002; Denzin and Lincoln, 2008 edition). The principles in Klein and Myers (1999, pp. 71-2) follow from the hermeneutic circle, which suggests that we come to understand a complex whole from iterating between considering the interdependent meaning of parts and the whole that they form. Adopting an interpretive research methodology, however, raises issues not encountered within the conventions of positivism, which has been attributed, at least in part, to politics embedded in the (qualitative) field of discourse (Denzin and Lincoln, 1998, p. 7).

In designing my inquiry I needed to balance relevance / rigour, and distance / engagement (Figure 5.10) with the research material, each offering a different opportunity for interaction between researcher and subject. At HPRB all the options were open to me except consultancy. Initially, I selected insider AR, the next most engaged. Noting the potential problems of engaged methods, including what constitutes data, how do we report them, the relationship of the researcher to the actors in the research context, Nandhakumar and Jones (1997, p. 128) considered them common with other data-gathering methods, albeit less clearly highlighted.

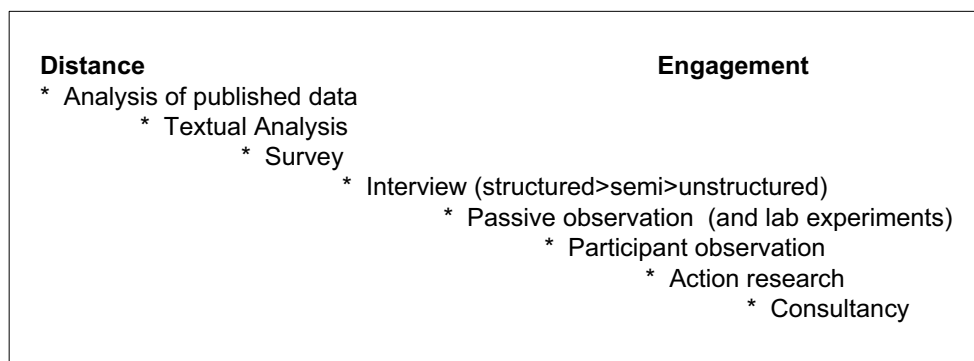


FIGURE 5.10: Distance and engagement between researcher and subject with different data-gathering methods (from Nandhakumar and Jones, 1997, p. 113).

With my change in focus to the organisational level, my strategy shifted to a combination of textual analysis, participant observation and personal reflexive practice. Pidd and Dunning-Lewis (2001, p. 3) refer to participant observation as an approach in which someone taking part in an activity records what they see and experience and,

after reflection, draws conclusions. It is very different from the detached stance where the observer maintains a distance between herself and the object of her research.

5.8.1 The PMBOK® Guide

In this thesis I used the PMBOK® Guide (PMI, 2000 and 2004) as my exemplar of PM best practice. It provided a common lexicon talking and writing about PM (Table 5.1). Within each knowledge area, individual processes can be described (PMI, 2000, p. 32) in terms of inputs (documents or documentable items that will be acted upon), tools and techniques (mechanisms applied to the inputs to create the outputs) and outputs (documents or documentable items that are a result of the process). PM software is considered a tool that aids integration within a project and it may span all project processes (PMI, 2000, p. 42). For the purposes of my inquiry, I considered it a methodology “which should tell us ‘what’ steps to take, in what order and ‘how’ to perform those steps but most importantly the reasons ‘why’ the methodology user must follow those steps and in the suggested order” (Jayaranta et al., 1999, p. 31).

Process Groups Knowledge Area	Initiating	Planning	Executing	Controlling	Closing
4. Project Integration Management		4.1 Project Plan Development	4.2 Project Plan Execution	4.3 Integrated Change Control	
5. Project Scope Management	5.1 Initiation	5.2 Scope Planning 5.3 Scope Definition		5.4 Scope Verification 5.5 Scope Change Control	
6. Project Time Management		6.1 Activity Definition 6.2 Activity Sequencing 6.3 Activity Duration Estimating 6.4 Schedule Development		6.5 Schedule Control	
7. Project Cost Management		7.1 Resource Planning 7.2 Cost Estimating 7.3 Cost Budgeting		7.4 Cost Control	
8. Project Quality Management		8.1 Quality Planning	8.2 Quality Assurance	8.3 Quality Control	
9. Project Human Resource Management		9.1 Organizational Planning 9.2 Staff Acquisition	9.3 Team Development		
10. Project Communications Management		10.1 Communications Planning	10.2 Information Distribution	10.3 Performance Reporting	10.4 Administrative Closure
11. Risk Project Management		11.1 Risk Management Planning 11.2 Risk Identification 11.3 Qualitative Risk Analysis 11.4 Quantitative Risk Analysis 11.5 Risk Response Planning		11.6 Risk Monitoring and Control	
12. Project Procurement Management		12.1 Procurement Planning 12.2 Solicitation Planning	12.3 Solicitation 12.4 Source Selection 12.5 Contract Administration		12.6 Contract Closeout

TABLE 5.1: Map of the 39 Project Management processes to the five process groups and nine knowledge areas in the PMBOK® Guide (PMI, 2000, p. 38).

5.8.2 SSM in the form of the POM model

From Checkland’s retrospective view (2000a), it appeared whatever contribution Checkland and Holwell (1998b) was making to carrying forward discussion of SSM as

a methodology, its prime application area was IS / IT. Accordingly, their section on POM model's broad features was followed by the general requirements for ISD. As an ISD methodology, the POM model offered a different process for inquiry to the traditional PM control view of IS, for example as represented in Figure 5.11.

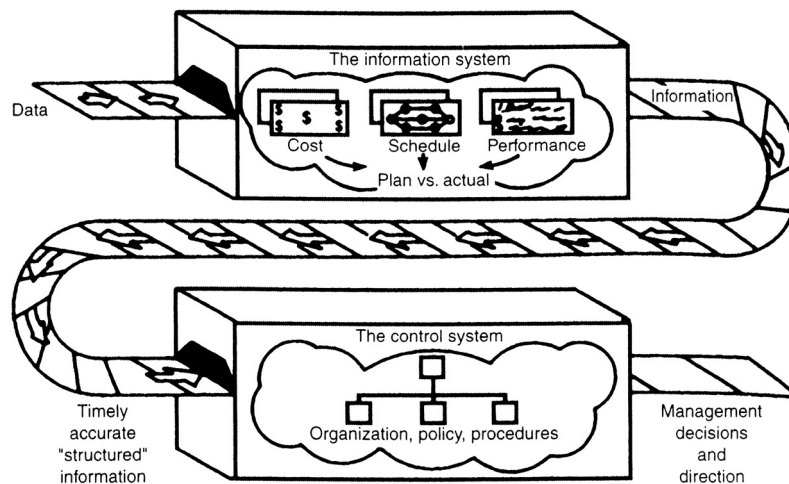


FIGURE 5.11: Model of an information control system (from Cleland and Ireland, 2006, p. 302).

As I have already noted, affiliation members' initial engagement with the POM model had been on the basis of their appreciation of it as a methodology (Crawford and Costello, 2000; Costello et al., 2002a and 2002b). Essentially, this remained their view in the RFS engagement that was carried forward to the HPRB (Figure 1.3). However, I would now be re-examining the POM model in depth. During the Soft Systems for Soft Projects collaboration, we had not found it applicable for management at the individual project level. Here particular SSM tools (for example rich pictures⁵⁰ and CATWOE analysis⁵¹) were more likely to assist. In Checkland and Holwell's (1998b, pp.116-7) view, "once-and-for-all" systems were intrinsically unlikely to meet all the idiosyncratic requirements of particular users and hence were likely to be less appropriate than systems designed in the light of rich analysis of the POM elements. They refer to a two-fold lesson from the POM model:

Firstly, in order to know whether a propriety system is appropriate to its needs, an organization must have a very clear understanding, in some detail, of the purposeful action that it is carrying out or intends to carry out based on its achievable

⁵⁰ Including Checkland and Scholes (1990) and Checkland (2000a) and as variously interpreted and applied e.g.: Davies and Ledington (1991); Ellis and Green (1996); Gregory and Midgley (2000); Ragsdell (2000); Williams and Dobson (2000); Bell et al., (2001); Venters et al. (2002); McIntyre (2004); Checkland and Poulter (2006); Mirijamdotter and Bergvall-Kareborn (2006).

⁵¹ Including Checkland (1985), Checkland and Tsouvalis (1997), Checkland (2000b) and Checkland and Poulter (2006) and as variously interpreted and applied for example in: Davies and Ledington (1991); Hindle et al., (1995); Rose (1997); Atkinson (2000); Smallwood et al., (2000); Pidd (2001); Bergvall-Kareborn et al., (2004); Pidd (2005); Basden and Wood-Harper (2006); Bergvall-Kareborn (2006); Mirijamdotter and Bergvall-Kareborn (2006); Delbridge and Fisher (2007); Joham et al., (2009).

accommodations...Secondly, the developers of packages which purport to fill general needs will be best prepared for the market place if they can provide an account of the action which the system serves, preferably in the form of an activity model. Such models provide a better basis for initial customer-vendor discussion than any documentation of system architecture expressed in the language of IT.

Applying the POM model, however, proved challenging to project managers, used to detailed practice guidelines, for as West (2002, p. 38) observed:

Checkland and Holwell's description of the "conventional wisdom" model and their "richer" model of organisation explains the philosophical and sociological differences between goal-seeking and relationship-maintaining but in practical terms their model is disappointing since it tells us what is to be done but offers little advice or guidance about how these concepts can be put in use to help IS practitioners and researchers improve their understanding of organizations and information systems that may support their activities.

5.8.3 Discourse analysis

In my inquiry I would be following various "threads" drawn from multiple discourses across the applied domains in Figure 1. 8. Comparing PM as a developing body of knowledge and practice and wider discourses of organisational change and learning, Bresnen (2006, p. 74) saw differences in nature and emphasis in the knowledge bases between them (APPENDIX 9) as perhaps reflecting differences in epistemic cultures. This may be observed in the way projects and their organisational settings are superimposed in the study of PM and organisational change processes. Most PM analyses bring projects to the foreground, often depicting the project as dynamic and set within a more or less static organisational context. This tends to obscure an understanding of how project-based systems dovetail with the wider, changing lattice of organisational relationships within which they are embedded. Nevertheless, Bresnen (2006, p. 75) saw some epistemic similarities as both fields were oriented towards practice and dependent upon the influx of (Mode 2) knowledge from a range of actors.

I had found the term discourse to have no agreed upon definition in the literature and to encompass approaches being informed by a wide variety of disciplines; however, a distinction was being made between a field of inquiry emerging from organisational and management studies and organisational discourse analysis, emerging from more

linguistic-oriented research. It is the first conception that I engaged with through organisational texts that were available in the public domain.

Grant et al. (2004, p. 4) view texts as a manifestation of discourse and as providing the discursive unit upon which the organisational discourse researcher focuses. These texts help stabilise and reproduce organisational activities over time (Hardy, 2004, p. 418). Heracleous and Marshak (2004, p. 1287) refer to scholars who called for the development of discourse analysis approaches that not only consider the text as a data source, but are also more contextually sensitive and holistic. In their view (2004, p. 1291), discourse is symbolic and constructive at multiple levels. My approach was particularly informed by the proposition in Phillips et al (2004) that discourse analysis provides a coherent framework for making certain ways of thinking and acting possible. They conceive of institutions as constructed primarily through the production of texts, rather than directly through actions (Figure 5.12). It was in being observed, and interpreted, written or talked about, or depicted in some other way, that actions generated texts, which mediated the relationship between action and discourse.

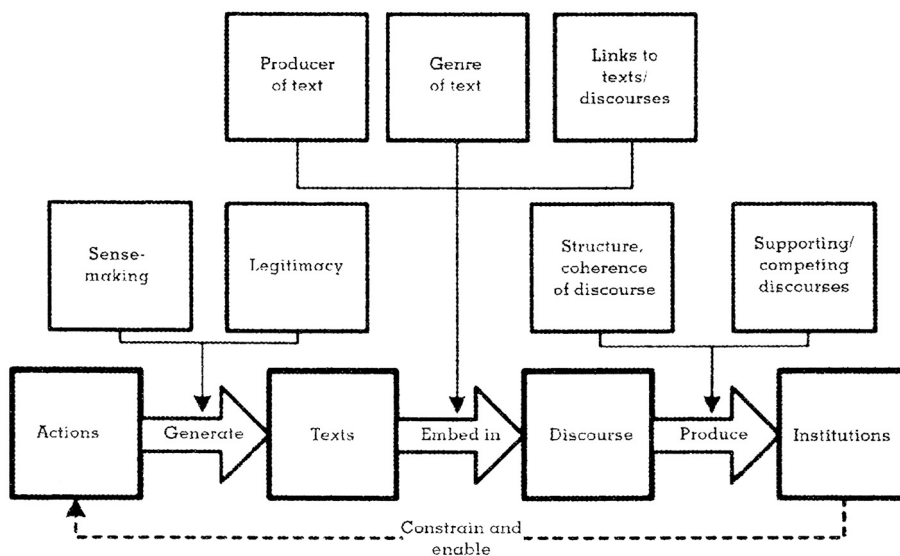


FIGURE 5.12: A discursive model of institutionalisation for exploring the roles of actions, texts and discourse (Phillips et al., 2004, p. 641).

Therefore, making sense is a textual process and thinking is not knowledge until it is “textualised”. Sense-making involves “the retrospective interpretation of actions and is triggered by surprises, puzzles, or problems; occasions for sense-making involve ‘novel moments in organisations [that] capture sustained attention and lead people to persist in trying to make sense of what they notice’” (Phillips et al, 2004, p. 641). Further:

- Actions requiring organisational sense-making or affecting perceptions of legitimacy are more likely to result in more widely disseminated and consumed texts.

- Texts produced by actors understood to have a legitimate right to speak are more likely to become embedded in discourse.
- Texts taking the form of genres recognisable and usable in other organisations are more likely to become embedded in discourse.
- Texts drawing on other texts within the discourse and on other well-established discourses are more likely to become embedded in the discourse.

Alvesson and Karreman (2000, p. 1127) refer to methodological problems in studying discourses as text and social practices where language is viewed as a medium for interaction rather than a system of differences or a set of rules for transforming statements. In their view, many versions of discourse analysis occur along the two key dimensions represented in Figure 5.13. The horizontal axis represents a spectrum of opportunities and research positions for discourse / discursive practices and the vertical axis assumptions about the scope and scale of discourse, close range emphasising local situational context as distinguished from discourse as a universal, if historically situated, set of vocabularies⁵².

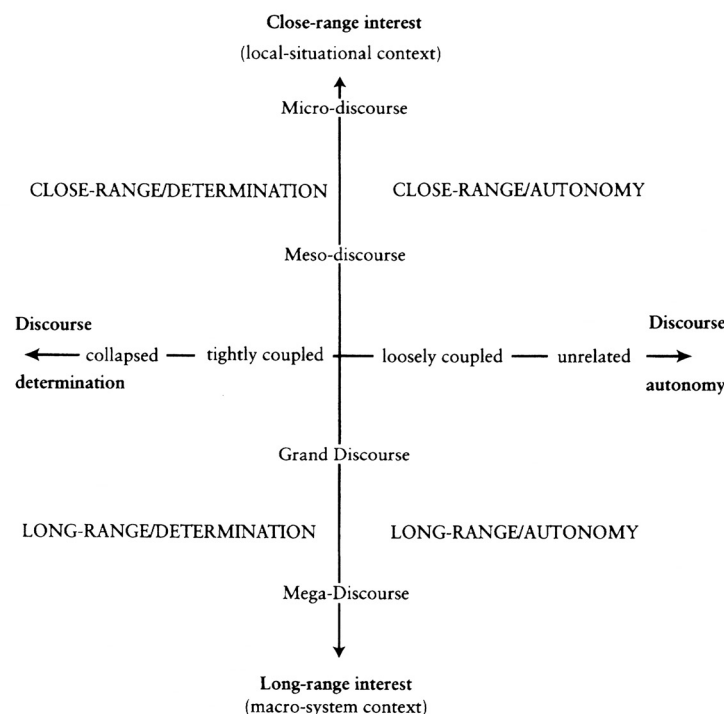


FIGURE 5.13: Two core dimensions in discourse analysis in social science – formative range and discourse/meaning relation (Alvesson and Karreman, 2000, p. 1135).

⁵² Alvesson and Karreman (2000, p. 1135) distinguish between: - (1) Micro – social texts calling for detailed study in a specific context; (2) Meso – relatively sensitive to language use in context but interested in finding broader patterns that can be generalised to similar local contexts; (3) Grand – an assembly of discourses ordered and presented in an integrated frame; and (4) Mega – an idea of more or less universal connection of discourse material typically addressing more or less standardised ways of referring to / constituting a certain type of phenomenon.

5.9 Reading the Organisational Texts

Within my ethical and practical scope of action, I would construct my “bricolage” through “reading” textual material in the public domain according to a framework I developed for exploring the roles of actions, texts and discourses (Table 5.2).

Discourse Level i.e. level of public exposure [Level of interest] i.e. close range v long range	Document
Society-at-large: including the state [the political-administrative system] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> •
Public sphere [realm of public discourse and action] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> •
Domain-specific discourses at various intermediate levels <i>[Meso discourse]</i>	<ul style="list-style-type: none"> •
Local discourse [closed down at some point by those in control] <i>[Meso / micro discourse]</i>	<ul style="list-style-type: none"> •

TABLE 5.2: Framework for reading documents considered during the research inquiry grouped according to Ulrich’s (2003, p. 331) multiple sphere discourse model and Alvesson and Karreman’s (2000, p. 1135) versions of discourse analysis.

Following Rhodes (2000, pp. 23-4), I would not be reading the texts as correct representations of the real world but rather as contested claims to speak the truth about the world. The texts I would select at the grand and meso discourse levels would be ones that arguably were able to make the authority claims of official discourse (Brown, 2003, p. 95). Textual authority in Brown’s (2003) view, involves the texts appropriation by a reader who relates it to his or her own context and experience in a creative hermeneutic process. The construction of meaning results from an interplay between the text, author and reader in ways which are pluralistic and dynamic. Each construction would, therefore, be expected to vary. As observed by Rhodes (2000, pp. 23-4) in the context of organisational research:

...multiple readings attest to the notion that “all ways of seeing are simultaneously ways of not seeing”...[his] three readings [of the one text] demonstrate that none of them can be seen as being the correct reading, but rather that each one is informed by different perspectives and positions on research...The texts of organizations...should not be read as representations of the real world, but rather as contested claims to speak “the truth”

about the world; writing research moves from attempts to represent or persuade to reflection upon the relationship between the texts.

5.10 Concluding Annotation

In this chapter, I have framed my research process within Checkland and colleagues' FMA model, the elements of which can be thought of as applying to any piece of research (Checkland and Holwell, 1998b, pp. 23-4). My Framework of ideas (appreciative systems, the POM model as praxis and hermeneutics) and Methodology (reflexive practice, the POM model and AL) would be applied to an Area of concern (recovering lessons learned and public sector PM guides) to produce an emergent, interpretive construction ("bricolage") for addressing a dynamic / "messy" *problematique*. This would be a process of sense-making and explication, constructed through analysing documents in the public domain, rather than hypothesis testing. For this process, I developed a framework for retrospectively reading the documents that had shaped the affiliation's scope of PM action at the organisational level in my first two case study agencies (Chapters 6 and 7) and then testing it as a sense-making framework for guiding my PM practice and research at the HPRB (Chapter 8).

CHAPTER SIX: First Iteration Case Study (1998-2000) - Looking Back on Soft Systems for Soft Projects

Royal Commissions and similar bodies provide examples of appreciation which have the advantage of being matters of public record. They are appointed not merely or even primarily to recommend action but to “appreciate a situation”. By exposing what they regard as the relevant facts and their own value judgments thereon and the processes whereby they have reached their conclusions, they provide the authority which appointed them and also all who read their report with a common basis for forming their own appreciations and, it is to be hoped, with a model of what an appreciation should be. They are thus not only analytic but catalytic; and the knowledge that they are expected to be so leads them to expose their mental processes with a fullness which other public bodies seldom equal and are often at pains to conceal. *Sir Geoffrey Vickers* (1965, p. 50)

6.1 Summary

The Soft Systems for Soft Projects collaboration between the NSW Police Service⁵³ and UTS was the first of two practice-research engagements that would particularly inform my approach at the HPRB. It was a multi-faceted, multi-level PM engagement that carried forward into an eight-year exploration within NSW Public Sector agencies of how traditional PM practice could potentially benefit from applying SSM. The result of a successful ARC / SPIRT application⁵⁴, it was applied research under the guidelines - an original work to acquire new knowledge with a specific application in view involving risk or innovation. Its objectives included developing both a theory and practical system for management of interdependent “soft” projects in a dynamic environment.

Soft Systems for Soft Projects proved not to be a static engagement but was continuously being reshaped by a complex flux of events and ideas at the organisational level that required affiliation members to rethink their research approach. As Palmer (1997, p. 675) observes, any reform process or program is subject to ongoing negotiation and the resulting practices cannot be assumed to match the rhetoric of reform, and neither can they be assumed to be fully implemented in some pure form. My account focuses on the PMIS being developed in parallel at the practice and collaborative research sites. Within the ethical and practical scope of action of the PM engagement, I review textual material in the public domain according to a

⁵³ The Police Service became the Police Force with the *Police Amendment (Miscellaneous) Act 2006*.

⁵⁴ Australian Research Council / Strategic Partnerships with Industry – Research and Training.

framework I had developed for exploring the roles of actions, texts and discourses. The texts included Royal Commission and related texts that could arguably make the authority claims of official discourse (Brown, 2003, p. 95) as well as (more limited) domain specific and practice texts.

Reviewing the Soft Systems for Soft Projects engagement within the research themes of my inquiry, summarised as conceptual models, lessons transfer and practical guidance, I observe that ours was an exploratory interpretation of SSM, particularly the POM model, as it might be applied to PM practice. An emerging issue was its defensibility in terms of practical application and theoretical foundations; however, the engagement did deliver a practical system that addressed an important problem.

6.2 The Soft Systems for Soft Projects Collaboration

Researching police services can present particular challenges⁵⁵. As Bradley et al. (2006) observe, the organisational features of policing make it difficult to provide scope and support for sustained applied research and police studies, like policing itself, are based on material, political and cultural interests that pattern the production and distribution of knowledge. Further, (Bradley et al., 2006, p. 183):

...perhaps because of their authoritative position in society, police have typically not been viewed as partners (let alone equal partners) in academic research endeavours.

Academic researchers have always written about police, not with them. Policing scholars have written at length about the difficulties of 'gaining' access to police organisations

...The object/subject distinction in such research endeavours has always been very stark.

The success of the Soft Systems for Soft Projects application for a grant was advised by the (Australian) Department of Employment, Education, Training and Youth Affairs (DEETYA) in November 1997. The grant supported research and development projects undertaken to acquire new knowledge and involving risk or innovation. Its selection criteria are in APPENDIX 10, the critical element being interaction of potential users of the research. Applicants determined in collaboration with industry partners the necessary and appropriate resources. The industry partner contribution had to be specific to the project and not part of a broader contribution to the institution. Attached to the DEETYA advice were the external assessments of the proposal (Costello, 1998,

⁵⁵ For example: Prenzler (1997); Vickers (2000); Fleming and Lafferty (2000); Chan (2001); Vickers and Kouzmin (2001); Dick and Cassell (2002); Mead (2002); Brunetto and Farr-Wharton (2003b); Fleming (2004); Currie and Dollery (2006); Wood et al, (2006); Chan and Dixon (2007); Karp (2008); Gordon et al. (2009b); and Wood and Bradley (2009).

Personal Research Papers (Collaboration Research) Vol.1), so the partners appreciated the basis for the application's success and its expected potential contribution. As later alluded to in the *Qualitative and Strategic Audit of the Reform Process (QSARP) of the NSW Police Service – Year 1: March 1999 – March 2000* (Hay Group, 2001, p. 25):

The context in which the NSW Police Service has embarked on its change program is highly complex. The sheer size of its geographic distribution of the workforce poses a challenge to a focused, sustainable change effort. It is an organisation with significant resource constraints which cause difficulties for funding and implementation of reform measures. It has an entrenched “command and control” culture to overcome in order to move forward.

6.2.1 Project rationale

As understood by affiliation members⁵⁶, public sector organisations worldwide had been moving towards project based management (Boznak, 1996; Dinsmore, 1996; Lloyd, 1995), endeavouring to apply PM systems, tools and techniques developed for essentially “hard” projects in the construction, engineering, defence and aerospace industries where the goals to be achieved and the methods for achieving them are well known (Turner and Cochrane, 1993). Application of PM to “soft” projects, including public sector management, research and development and organisational change, had presented difficulties (Preston, 1996; Heindel and Kasten, 1996). A number of writers and researchers had turned to systems theory for possible enlightenment and tools for managing organisational change projects (Rodrigues and Bowers, 1996; Yeo, 1993; Neal, 1995; and Cavaleri, 1994 were cited). Systems theory recognised the interconnectivity of projects – between sub-projects or parts of a whole and between projects and the environment. Also, to survive, a system needs processes of communication and control enabling it to adapt and respond to a dynamic environment (Checkland and Scholes, 1990). PM could be considered as a process constantly trying to achieve order out of chaos to exercise control and facilitate communication.

6.2.2 Project aims and methodology

A combination of “hard” and “soft” systems approaches was to be used in an AR framework (Crawford, 1998, p. 5), envisaged as a series of steps (Figure 6.1). SSM

⁵⁶ Faculty Research Strength documentation for “Project Management of Multiple Interdependent Soft Projects” (commencing November 1997) (Costello, *Personal Research Strength Papers*, Vol 1)

was not scheduled until Step 4, some nine months after commencement when participants were to review each sub-project, the relationship of subprojects to other projects, internal and external environments, and role of the sub-projects in the overall and sustainable achievement of organisational change. By Step 7, data gathered were to be used in developing a theoretical model and practical methodology for management of multiple inter-dependent soft projects for achieving organisational change in a dynamic environment. The aim was to (Crawford, 1998, p. 5):

- develop a theory and practical system for management of interdependent “soft” projects in a dynamic environment;
- provide a mechanism for strategic intervention in the Police Reform Agenda project portfolio to maximise the success of the reform process;
- develop PM to support achievement and sustainability of reform and organisational change in the NSW Police Service; and
- provide a framework to support the effective on-going delivery of policing services.

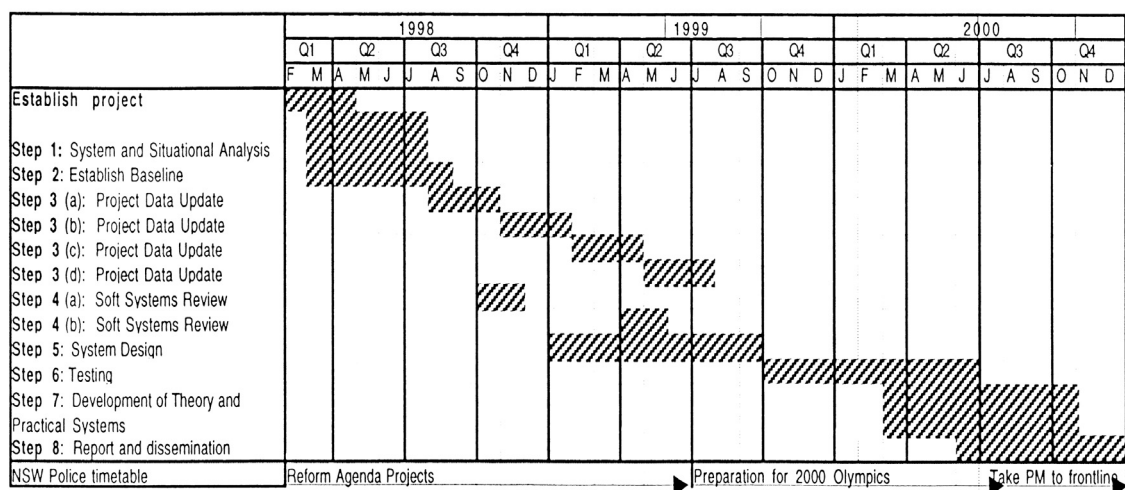


FIGURE 6.1: The Time Plan for “Soft Systems for Soft Projects” (Crawford, 1998, p. 9).

6.2.3 Partnership participation

Key positions in 1998 included Ms Lynn Crawford, UTS, as Chief Investigator and Assistant Commissioner Christine Nixon, NSW Police Service, as a Partner Chief Investigator. Assistant Commissioner Nixon was Executive Director Human Resources, a position to which she had been appointed in 1994 and came to occupy for four years. On her experience, she later said (Prenzler, 2004, p. 305) “three days after I got there they announced the Royal Commission into the New South Wales Police...So I thought, ‘This is good!’. It is a really interesting time to be in HR. So we worked with the Royal Commission.” In response to a question about her major

achievements at that time (Prenzler, 2004, p. 307) she replied: “There was an impetus then, because of the Royal Commission to think about different sorts of systems and practices in the way police should be dealt with and in support for police.” Other full and part-time participants included uniformed and public service officers from the NSW Police Service, one being Lesley Bentley (as reported in Figure 6.2) who was an individual and co-author of practitioner-researcher papers listed in APPENDIX 1.

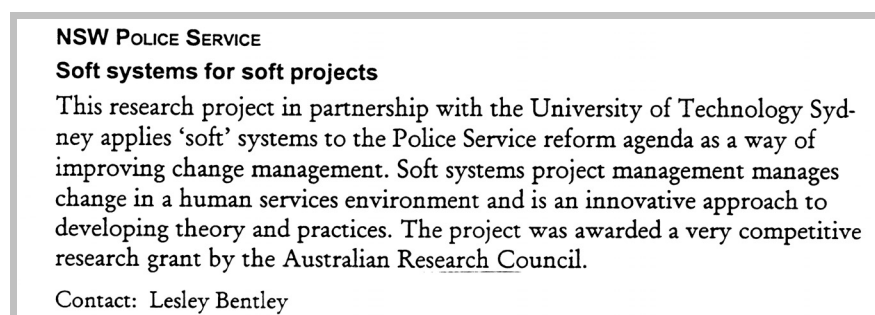


FIGURE 6.2: The “Soft Systems for Soft Projects” entry in the *Premier’s Public Sector Awards 1998* (published by the New South Wales Government, 1998, p. 21).

There was a Research Agreement with provisions that included: ownership and use of the project intellectual property; partner consent for publication (although this was time limited); provision for independent research; and protection of confidential information owned by the other party until such time it lawfully became part of the public domain. Also, the Research Plan and ARC Conditions of Award were schedules to the Agreement. I was appointed to the Research Associate position (APPENDIX 5). My background was extensive experience in NSW Public Sector agencies in research, policy development, administrative, management and technical positions including in industrial development, energy, law enforcement, emergency services and health. My role included membership of the research management team (Project Control Group) established under the Research Agreement and my major tasks were:

- Assisting with planning the research project (including data gathering, sample selection, timing and budgeting).
- Managing research assistants as required, including data and files.
- Carrying out all aspects of research within determined limits.
- Maintaining effective liaison with all members of the research teams.
- Maintaining confidentiality of records and ensuring research ethics were respected.

6.2.4 Scope of engagement

My account focuses on my perspective on the developing PMIS that proceeded in parallel within the NSW Police Service and at the UTS collaborative research site. This

was not a static engagement, but was continuously being reshaped by a complex flux of events and ideas at the organisational level; our practice context was always in the process of “becoming” (Clegg et al., 2005). It would challenge our PM view of “organisation” and lead us to search for a different concept of organisational processes to those expressed or implied in the dominant PM discourse.

6.3 Reading the Organisational Texts

My approach to conducting my inquiry would be on the basis of my understanding of a model I considered for exploring the roles of actions, texts and discourses (Figure 5.13) and a framework I had developed for reading the texts (Table 5.2). The source documents for the first iteration case study are listed in Table 6.1

Discourse Level i.e. level of public exposure [Level of interest] i.e. close range v long range	Document
Society-at-large: including the state [the political-administrative system] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> • Wood Royal Commission into the NSW Police Service (Interim and Final Reports). • Qualitative and Strategic Audit of the Reform Process (QSARP) of the NSW Police Service – NSW Police Integrity Commission / Hay Group
Public sphere [realm of public discourse and action] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> • Commissioner Ryan’s responses to the Royal Commission • NSW Treasury Budget Paper No. 3 – Budget Estimates: Minister for Police (1997/98-2001/02) • NSW Police Service Annual Reports • NSW Police Integrity Commission Annual Reports
Domain-specific discourses at various intermediate levels <i>[Meso discourse]</i>	<ul style="list-style-type: none"> • <i>Professional guides</i> <ul style="list-style-type: none"> - NSW PS PM Guidelines - PM Professional Associations publications • <i>Practitioner-researcher papers</i> • <i>Other practice publications</i> e.g. NSW Police Service Weekly
Local discourse [closed down at some point by those in control] <i>[Meso / micro discourse]</i>	<ul style="list-style-type: none"> • ARC / SPIRT grant documentation as constructed from guidelines / generic requirements, published accounts or personal practitioner-researcher contribution. • Project Management Information System (PMIS) • Personal practitioner-researcher reflective journal

TABLE 6.1: Documents considered in the first iteration of the research inquiry grouped according to the framework in Table 5.2.

In my generic framework, I had included “grand discourse” texts under the *society-at-large* and the *public sphere* levels of Figure 1.8. The former I had considered on the basis of my understanding of the texts as part of the official discourses of the state and their legitimation function. They were the *Royal Commission into the NSW Police Service Interim Reports* (Wood, 1996a and 1996b) and *Final Reports - Volume II* (Wood, 1997a) and *Volume III* (Wood, 1997b) and the *Qualitative and Strategic Audit*

of the Reform Process (QSARP) (Hay Group, 2001; 2002a; 2002b). All involved extensive consultation across NSW Public sector agencies and professional associations and organisations. Texts I included in the “public sphere” category, on my understanding of them as representing the realm of discourse and action for implementation, comprised Commissioner Ryan’s responses to the Royal Commission, NSW Police Service Annual Reports, Police Integrity Commission (PIC) Annual Reports and the NSW Treasury *Budget Estimates*. These could arguably make the authority claims of official discourse Brown, 2003, p. 95).

“Mega-discourse” texts I have taken as the NPM discourses. While these were informing aspects of our PM engagement, the main shaping influence was the “grand discourse” provided by the *Royal Commission Interim and Final Reports* (Wood, 1996a; 1996b; 1997a and 1997b). At this level, what the reforms were expected to achieve and responsibility for achieving them were in the public domain and, as demonstrated in the *Final Report Volume II - Reform* (Wood, 1997a) and *Volume III – Appendices* (Wood, 1997b), there were clear directions about implementation.

6.3.1 The Royal Commission Reports

Commissioner Ryan’s *Blueprint for Reform* (Ryan, 1996) provided for initiation of a large number of carefully managed projects. He advised that a PM system was being refined to fit the specific needs of the NSW Police Service that would involve NSW Police officers being trained in both the technical aspects of PM as well as the associated thinking and reasoning processes (Ryan, 1996, p. 43). In his report to the Royal Commission in February 1997, Commissioner Ryan referred to the comprehensive consultation process that had been undertaken throughout the organisation. Also, he elaborated a framework within which reform was to proceed and referred to the development of a change management methodology using PM principles (Crawford, 1998, p. 4). In the *Final Report Volume II*, Commissioner Wood, (1997a, p. 489) referred to the need for an external process to audit the *Final Report* and the continuing performance of the NSW Police Service and advised “a blueprint for the audit process had been prepared and endorsed by Commissioner Ryan” (Wood, 1997a, p. 490). Ten high-impact areas were identified⁵⁷ (Wood, 1997a, p. 491) for

⁵⁷ They were: effective leadership and management; changing culture and values; an honest Service which repels corruption; effective planning; focus on performance management and quality; focus on staff and teamwork; building new human resource systems; and breaking down outmoded systems.

annual audit by the PIC⁵⁸. Number 23 of 24 examples of indicators that the reform was proceeding appropriately was “the Service improves its project management by setting clear objectives, reviewing available information, devising the means of achieving the desired result, actively reviewing progress and readjusting” (Wood, 1997a, p. 493). In Appendix 31 in the *Final Report Volume III*, under Key Reform Area (KRA) 10 (*Implementation of Effective Structural Change*) he said (Wood, 1997b, p. A253):

In carrying through sustainable change in organisations one of the key processes that is frequently overlooked is the alignment and co-ordination of systems, processes, projects and structures. A project office that supports the change processes is an invaluable tool in the development of this alignment. It can assist in ensuring that the scarce resources are directed to change projects that have the most impact. Such an office can offer assistance to project teams or individuals trying to implement or deliver reforms.

Crawford (2006, p. 77) identifies the project office as a strong emergent theme in PM, defining it as “an organizational entity established to provide coordination or support for a number of projects [or programs]”. The Soft Systems for Soft Projects Planning / Support Office operated as a virtual team, its role including support for managers of priority Agency projects through training, mentoring and coaching. By January 1998 the Commissioner had outlined the four key areas for the next phase of the reform as crime reduction, rationalised and improved work practices, employee job satisfaction and motivation, and police responsiveness to public needs, saying:

Necessarily, there has been the need for some changes in emphasis and tactics in progressing the reform through to its next stages – many of those projects have been completed, others have been rolled together in single projects, while some, reflecting our recent experiences, have been discontinued. And I would like to make the observation at this point that adapting to change and having the ability to change focus is the hallmark of a learning organisation (Commissioner Ryan, 1998, quoted in Crawford, 1998, p. 4).

6.3.2 The QSARP process

There were three *Qualitative and Strategic Audit of the Reform Process (QSARP)* reports, the first due some three years after the *Final Report* of the Royal Commission in 1997. In this section I include perspectives from: PIC Annual Reports; the QSARP

⁵⁸ The PIC's functions are set out in the Police Integrity Commission Act 1996. As summarised on www.pic.nsw.gov.au (most recently accessed 7/3/10) they are preventing, detecting and investigating serious police misconduct. PIC is also responsible for detecting, investigating and preventing misconduct by administrative officers of the NSW Police Force. Other functions in the Act relate to police activities and education programs and collection of evidence and information.

Reports (Hay Group, 2001; 2002a and 2002b); NSW *Treasury Budget Estimates Papers*; and an academic commentary (Chan and Dixon, 2007). In the *Report for Year 1: March 1999–March 2000*⁵⁹ (Hay Group⁶⁰, 2001), five key areas were identified as measures of transformation and sustainable change (Figure 6.3), each supported by “best practice” change management indicators applying to organisations generally (2001, pp. 22-3). Application would, however, require some local adjustment.

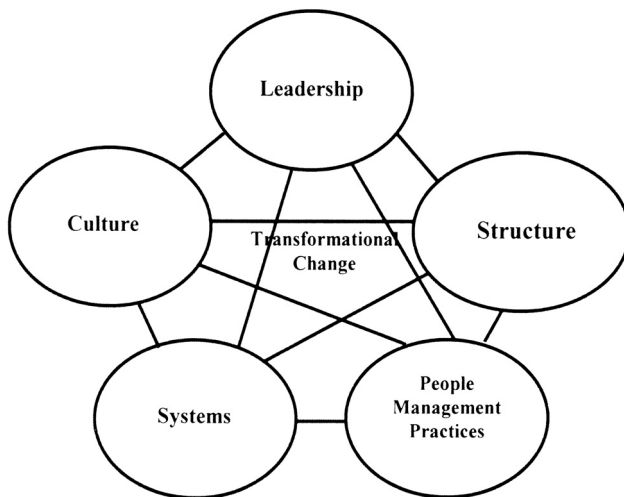


FIGURE 6.3: Interdependencies between five key areas for measuring change in the QSARP Audit of the NSW Police Service (Hay Group®, 2001, p. 22)

Other specific indicators were outlined and reported for each of the ten KRAs identified in Appendix 31 of the *Final Report*. Threshold activities for KRA 10 for audit were:-

- Careful examination of all proposed structural changes to ensure effective alignment and coordination of goals, reviews, systems and processes has preceded structural change.
- Definition of the role of the project office, or redefinition of the function of an existing unit as appropriate, to support the reform process, particularly in oversight and co-ordination.
- Specification of a business plan for internal resourcing and operation of the office, linked to the Service Reform Agenda.

⁵⁹ As reported in the PIC Annual Report 1997-1998 (p. 62), the audit was to: (1) evaluate and report on the progressive implementation of the reform of the Police Service; (2) advise on measures to improve the process; (3) engender greater public confidence in the Police Service through independent and open reporting of progress in the reform process and performance of the Police Service; and (4) support the leadership of the Police Service by providing independent objective feedback. There was a QSARP Consultative Committee, comprising representatives of The Cabinet Office, the Ministry for Police, the Police Service, Office of the Ombudsman and the Audit Office.

⁶⁰ The Hay Group was selected after PIC advertised for expressions of interest from suitably qualified and experienced persons external to the NSW Public Service and Police Service, to conduct and report on the Strategic Audit process (PIC Annual Report for 1998-1999, p. 49).

Activities for audit beyond Year 1 included integration / alignment of different reform projects, with the focus being on transformation of the Service, not simply isolated projects. Chan and Dixon (2007, p. 499), referring to the QSARP finding for Year 1 (Hay Group, 2001, pp. i-ii), said the reform's progress was systematically limited⁶¹. However, the *Budget Estimates* paper (NSW Treasury, 1999, p. 16 - 3), reported:

The reform of the NSW Police Service continued in 1998-99, encompassing the recommendations of the Royal Commission, as well as service and administration improvements. As at May, 1999, of the 174 recommendations in the Final Report of the Royal Commission, 171 are either implemented or being implemented, and the implementation of the remaining three is currently under consideration.

As reported (1999, p. 16 - 3), the NSW Police Service was implementing a substantial planned and long-term reform program covering management, resourcing, financing, structure and training. "The organisational structure had been flattened to allow for closer liaison and understanding between local communities and local Police Commanders, more supervisory direction at the front line, better service delivery, improved accountability and more efficient management of people". Also, business planning, guided by risk management principles, was being implemented.

The 2000 *Budget Estimates* (NSW Treasury, 2000, p. 16 - 3) reported 98 per cent of all Royal Commission recommendations as having been or are being implemented. On the PIC Strategic Directions, it was reported that "the Commission will also be overseeing the second year of the Qualitative and Strategic Audit of the Reform Process of the NSW Police Service. The program has an external auditor reporting to the Commission in respect of the effectiveness of the implementation of reforms contained in recommendations and findings of the Royal Commission".

The *QSARP Report for Year 2: July 2000-June 2001* (Hay Group, 2002a) reported some positive initiatives and evidence of innovative, open and participative leadership. As noted by Chan and Dixon (2007, p. 450), however, the auditors were again highly critical of the management of reform, especially the continuation of a mindset in the Service that an initiative, once described and delegated, is itself a completed reform. The 2001 *Budget Estimates* (NSW Treasury, p. 14 - 5) reported the Police Service's key priorities included ethical cost efficient crime reduction, improved public safety and continuing improvement in cultural and workforce reform. This meant continuing

⁶¹ Reasons were: (1) the police organisation's decision to pursue a crime reduction agenda instead of the reform agenda; (2) poor implementation of reform ideas; (3) a fragmented and uncoordinated approach to change; and (4) the Police Commissioner's view that the reform is near completion.

emphasis on addressing community expectations through improvements in service delivery and addressing long term organisational reform issues identified by the Royal Commission. They also refer (p. 14 -10) to increasing demand for the PIC to undertake additional functions and responsibilities, including QSARP and establishment of a Response Unit to address matters emanating from the Royal Commission.

The *QSARP Report for Year 3: July 2001-June 2002* (Hay Group 2002b), concluded the formal role of the PIC in overseeing the audit of the reform process. PIC's *Annual Report* for 2002-2003 (p. 32) said that NSW Police are now at a point where reform has the best chance of success since the Royal Commission. It is now critical that NSW Police build on its recent work. Included, under a list of reform related activity that had occurred since the audit, was implementation of a PM framework for reform and establishment a reform program office. On the third audit Chan and Dixon (2007, p. 450) observed that it covered a year of unstable leadership at Executive level, which culminated in an abrupt termination' of Peter Ryan's appointment as Police Commissioner and various other changes at the top tiers of police leadership. They noted NSW Police had dropped the word "Service" from its name and the new leadership team decided to drop the word "reform" from corporate objectives altogether, citing reform weariness among staff. Instead, the Service wanted to pursue continuous business improvement as its management framework, which they saw as weakening the intention to reform and transform the organisation. In their view (Chan and Dixon, 2007, p. 451) the external audit was a potentially valuable exercise and its reports should have provided the basis for continuing reform. However, they became irrelevant as the political will to push on with reform dissipated.

6.3.2.1 Findings on the project office

As reported in the *QSARP Report for Year 1* (Hay Group, 2001, p. 193) the second of three threshold activities examined under KRA 10 was the role of the project office to support the reform process, particularly oversight and coordination:

The establishment of a dedicated project office or change management unit is a recognition of the scale of the change being faced and of the high level of coordination that the change process requires. An integrated approach to the management of change is imperative if implementation is to take place in a planned and thorough way. Without an integrated approach, the change agenda will become task focused rather than outcome focused and successful implementation will be severely limited (2001, p. 202).

The *Report* (Hay Group, 2001, pp. 202-3) advised that in its written response to the audit questions, the Police had outlined the role of the Reform Coordination Unit (RCU) in progressing reform. The RCU comprised a Reform Team⁶² and an Operations and Crime Review Team. While the *QSARP Report* as it relates to the RCU is outside the scope of my inquiry, the Report did note (Hay Group, 2001, p. 204):

The RCU informed us of the development of project management software as “a joint research project between the Service and the University of Technology, Sydney”. The project management software is said to utilize a database that has project index, project brief, project milestones and status reporting capabilities. We are informed by the RCU that ownership of the system is being transferred to the Service’s Information Technology Services.

6.3.2.2 Findings on project management

Searching the *QSARP Report for Year 1* finds one other PM reference; under KRA 6 (*Focus on Staff and Teamwork*) Threshold activity #1 – “Identify and assess team processes and practices for operational efficiency and effectiveness and improved work environment” (Hay Group 2001, pp. 123-4). The response included advice about other teams across the Service, one being PM teams established to manage key reforms and to progress other initiatives. Although outside the collaboration’s timeframe, the following two QSARP Audits referred to PM in the NSW Police Service response to managing change.⁶³ In its integrated view of the progress of reform, the *QSARP Audit for Year 2* included (Hay Group, 2002a, p. 251):

More than ever before, leadership on reform is crucial. Progress is being made. New initiatives are planned or in place. The efforts now need to be guided and steered towards successful implementation and measurement. This guidance should focus on the adoption of disciplines around project management – a professional discipline to which the Service has not had exposure and has not yet developed the high level of skills required. Support will be needed for more efficient management of resources and management of the risks of over-committing and fragmenting effort.

⁶² The Reform Team monitored and reported on the progress of Interim and Final Report recommendations. Also, it had continuing responsibility for liaising and working with representatives of the Hay Group during the external audit (QSARP) process.

⁶³ The *QSARP Report for Year 2* (Hay Group, 2002a) contained references to PM in the context of:- (a) *Changing culture and values*: the Police Service response identified the necessity for staff to reflect critically and constructively on their own practice and the practices of the organisation (2002a, p. 65). Also, a practical PM framework was being developed to encourage projects to fit coherently within corporate strategies. (b) *Building a new human resource system*: various sub-committees progressing the reforms had been operating without a project management protocol (2002a, p. 179). (c) *The Local Area Command as the Service Hub* – including issues relating to promotions, transfers, succession and resource management and professional PM practice (2002a, p. 225).

The *QSARP Report for Year 3* (Hay Group, 2002b, p. ii) found pockets of progress towards reform against a background of continuous change and reported (2002b, p. 372) a new emphasis on the value of good PM⁶⁴. However, while this represented progress it needed to be understood in a broader context:

A project may be well managed but its success in contributing to reform will depend on whether it is capable of delivering reform outcomes and whether it is being progressed in priority sequence in according to its place in an integrated reform plan. If projects are set up within a project management framework, it will be important to go back and test progress against the plan and outcomes. It has been too often the experience within NSW Police that projects begin, even when established within a project management protocol, only to be “dropped” in favour of another idea without evaluation. Organisation Policy and Development Directorate documentation refers to “*consistency and integration with other activities of the organisation*” as the measure of the success of a project.

6.4 Reading the Domain Specific Texts

While aspects of the developing PM approach can be located within “grand discourse” texts, there were few published intermediate sources. Various developments being reported in the *Police Service Weekly (PSW)*⁶⁵ included the Project Planning Office, which was providing professional assistance in starting up and planning a project including mentoring, coaching, training, supporting and demonstrating effective application of project management principles (*PSW*, 16 August 1999, Vol 11 No. 2, p. 10). Reference is made to PM receiving executive level commitment and support and to standard tools, documentation, guidelines and formats being developed for project managers and their teams⁶⁶. As advised, “PM skills are gradually being developed throughout the Service. This translates into sound management practice being recognized as a professional discipline”. In September, 1999 (*PSW*, Vol 11 No. 35, pp.

⁶⁴ In the context of: 1. *The Leadership Development Program and succession planning* – workshops in PM were included in those being offered in the Program. 2. *Management Audit of Command Management Framework (CMF)* – findings included reference to a standard Organisation Policy and Development Directorate project format. They noted (2002b, p. 173) the CMF initiative was developed within a PM framework but the project milestones defined in the plan end with implementation. Formal planning of major reform projects needed to recognise the full management cycle that includes post-implementation feedback and refinement, analysis of outcomes for emerging patterns and evaluation. 3. *Engagement of external reform contractors to provide PM expertise* – in November 2001, the NSW Police appointed APP Corporation Pty Ltd to work with it in implementing an integrated reform plan.

⁶⁵ The *Police Service Weekly* was, as entered in the catalogues of the National Library of Australia and State Library of NSW (held in the Mitchell Library), published by the NSW Police Service between December 1989 (Vol. 1 No.1) and 18 February 2002 (Vol. 14 No.4).

⁶⁶ Under the heading of “how PM can assist you” were: Improve communication; Improve your business management skills; Capture and archive historical information; Reinforce continuous improvement; Provide you with a global view; Optimise your resources; Improve delivery times of your projects; Provide you with mentoring and coaching support.

4-5) the online “Register of Best Practice” included the Project Planning Office as providing support and training for project managers.

6.5 Reading the Practice Texts

One point emerging from the “grand discourse” texts was the shift occurring in the NSW Police focus from reform to continuous business improvement. The latter was (arguably) being informed by the NPM discourses⁶⁷, as adopted and applied in the NSW Public Sector and reflected in its PM guidelines.

The PMIS would be building on existing NSW Police approaches, most of which were available in the PM mainstream and were essentially “hard” project management systems developed for projects with well-defined goals and methods in the traditional project based industries (Crawford, 1998, p. 14). They were based on the *PMBOK® Guide*, the Australian National Competency Standards for Project Management (Australian Institute of Project Management, 1996) and practice in industry and Police services both in Australia and overseas, including New Zealand and in the NSW Public Sector. The latter included (as referenced in Costello, 1998, *Personal Research Papers (Collaboration Research) Vol. 1*) the NSW Department of Public Works and Services (DPWS) *Project Management Guideline* (1997b; later issued by NSW OICT, 2002c) which, although primarily intended to promote improved management of information management and technology projects, could equally apply to other projects⁶⁸. Its scope covered the entire project life cycle (Figure 6.4).

In the *PMBOK® Guide* (PMI, 2000, p. 12), the project life cycle is said to determine which transitional actions at the beginning and end of the project are included and which are not. Most project life cycle descriptions are said to share common characteristics and reference is made to them often being called PM methodologies. In the DWPS *Guideline* a clearly defined business objective is first on the list of attributes required for a successful project and it emphasised the importance of formal and informal communication mechanisms and a proven PM methodology to provide consistency across project areas.

⁶⁷ Vickers and Kouzmin (2001, p. 18) refer to managerialism within police service reform as a thinly veiled control agenda that was alternative to the parliamentary bureaucratic model. Chan (1999, p. 251) referred to it as a shift in emphasis to managerial accountability from legal or public-interest standards.

⁶⁸ As advised (NSW DPWS, 1997b, p. 2), the *Guidelines* were to be read in conjunction with current Government policies and other Guidelines, particularly the Guidelines on Develop the Business Case, Benefits Realisation and other Guidelines in the series on “Managing the IM&T Project”: Quality Management (NSW OICT, 2002d), Change Management (NSW DWPS, 1997a and NSW OICT, 2002a) and Risk Management (NSW OICT, 2004).

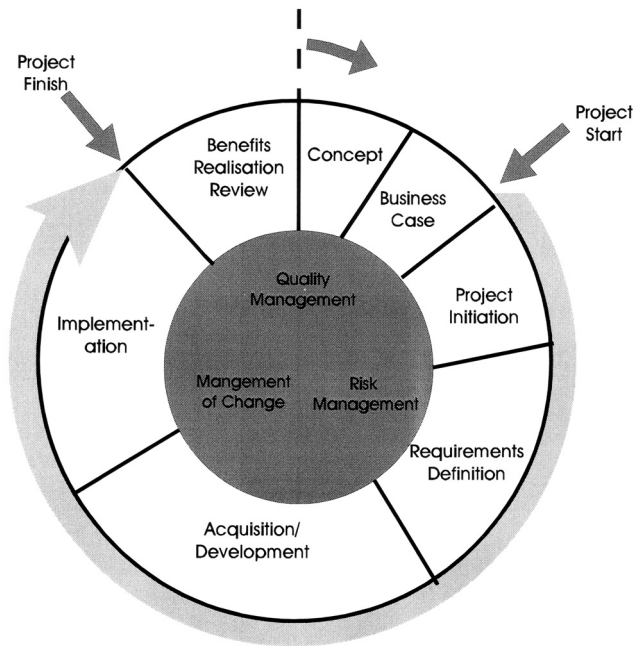


FIGURE 6.4: The Project Life Cycle: the scope of the DPWS Project Management Guideline (NSW DPWS, 1997b, p4) – representing the seven major aspects of PM.

The DPWS *Management of Change Guideline* (1997a; NSW OICT, 2002a) also informed our approach to the developing PMIS. Figure 6.5 depicts the five aspects that need to be addressed throughout the project. Change management was said to involve understanding the level of change a project will cause to an agency and its people and proactively developing strategies and action plans to manage the impact. It also required tolerance for ambiguity and open communication up and down the organisational structure to allow all participants and other stakeholders to feed their views into the process. Communication mechanisms must be dynamic and adjusted as needed. An appropriate style was required as the higher the degree of change the greater was the need for a collaborative or participative approach to be adopted by the project team.

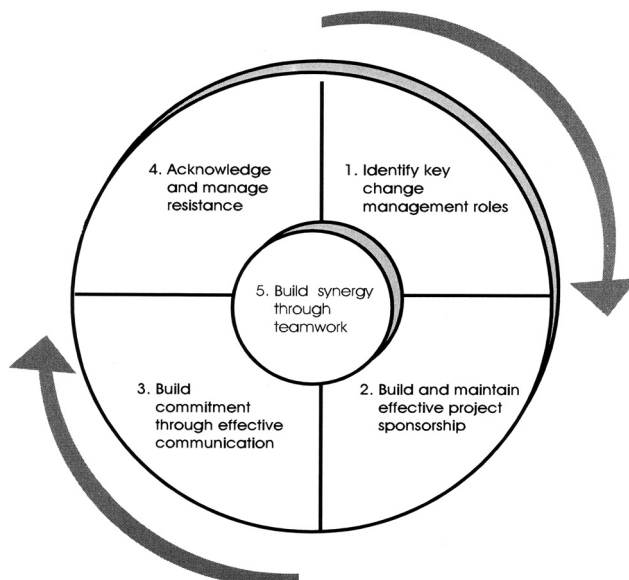


FIGURE 6.5: Five major aspects required to be addressed in Management of Change in NSW IM&T (and other) projects (NSW DPWS, 1997a, pp. 9-10).

6.6 Responding to Context

My attempt to map the various elements of the engagement as I understood them early in 1998 is in Figure 6.6. At that time, the project database was being developed for possible roll-out on the NSW Police Service intranet as a standardised PM system⁶⁹ and the project office was also being developed. As later noted (Crawford and Costello, 2000, pp. 3-4), initially the focus was on priority reform projects, many being managed simultaneously in a complex and dynamic environment. In this capacity, the collaboration was responding to the Wood Royal Commission with its some 174 recommendations for reform (NSW Treasury *Budget Estimates*, 1999, p. 16 - 3). With progressive adoption of the learning and techniques developed by the collaboration, the scope was extended to other corporate strategic and key operational projects.

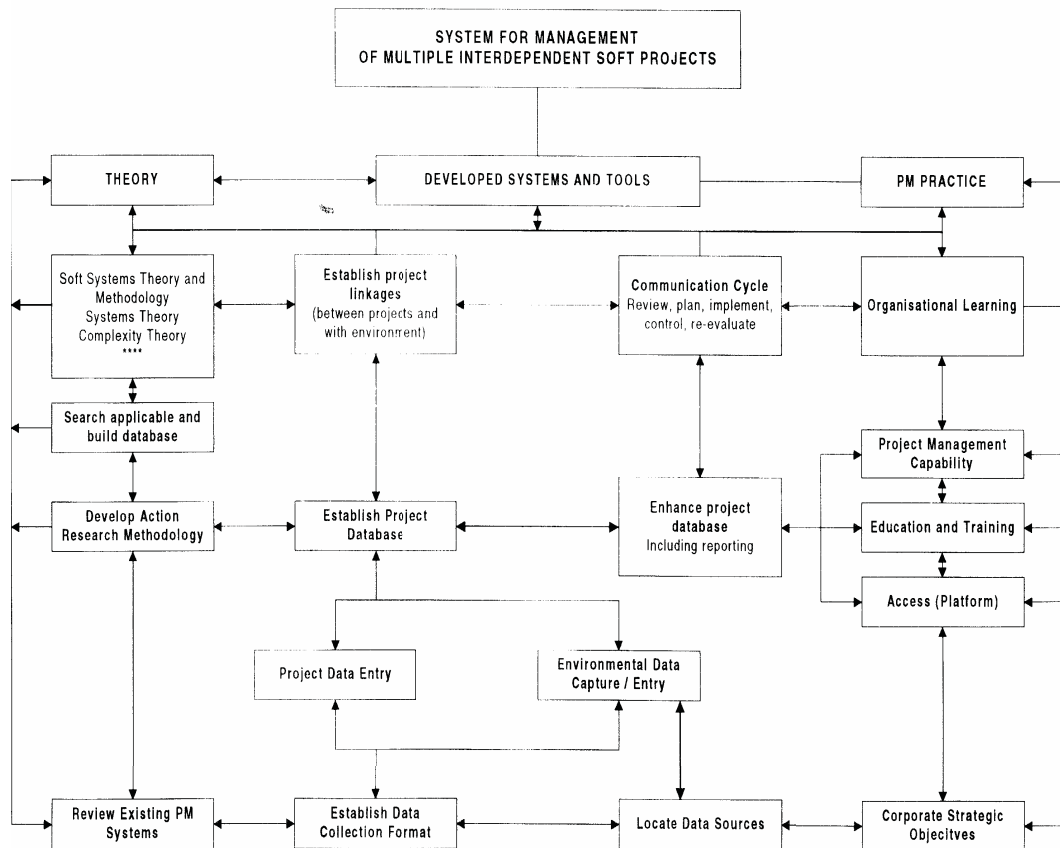


FIGURE 6.6: Map of the various elements of the Soft Systems for Soft Projects engagement (Costello, 1998, *Personal Research Papers (Collaboration Research) Vol. 2*) which was tabled at the Project Control Group meeting on 24/7/98.

6.6.1 Rethinking the research approach

The research plan (Figure 6.1) was to proceed through a stepped inductive approach that aimed, by Step 7, to have a theory and practical systems for managing multiple

⁶⁹ Costello, *Personal Notebooks* (No, N2 12/3/98 – 29/5/98)

interdependent “soft” projects. As indicated in Figure 6.6, however, theory and practice were occurring concurrently and we considered other approaches to changing our mind set, for example as represented Figure 6.7, to meet the developing requirements. In particular, we found another level of conceptualisation was needed for that larger abstraction, the organisation, than initially envisaged (Crawford and Costello, 2000).

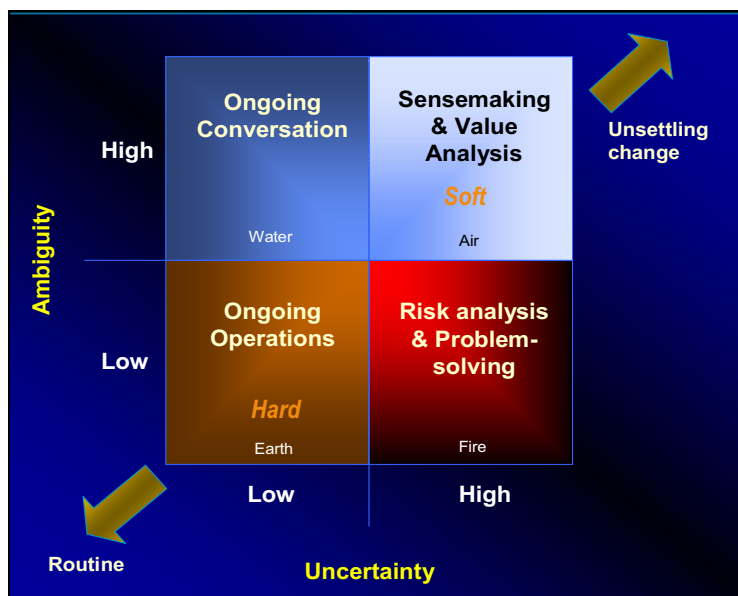


FIGURE 6.7: Responding to context - the uncertainty - ambiguity relationship in change situations (Crawford and Costello IFORS, 2002 - developed from Thiry, 2002, p. 222⁷⁰).

6.6.2 Managing organisational change as projects

Our initial intention was to use systems thinking to guide our PM practice as applied to organisational change projects on the basis of our understanding of PM development (Costello et al., 2002a, p. 49). Accordingly, in 1998 Adjunct Professor Alan Stretton (UTS) began exploring methodological frameworks for managing organisational change as projects as could be discerned from PM and general management literature. His paper, *A Note ‘Hard’ and ‘Soft’ Projects* dated 29/7/98, was tabled at the meeting of the Soft Systems for Soft Projects Project Control Group on 11 August, 1998 (Costello, 1998 *Personal Research Papers (Collaboration Research)* Vol. 2). While he found “soft” appearing from time to time in the management literature, the most precise use of the descriptors “hard” and “soft” was by Checkland (1981). He concluded that the primary difference between “hard” and “soft” problem situations is in ability to define precise objectives at the outset and proceeded to align Turner and Cochrane (1993), Obeng (1994) and Yeo (1993) according to their apparent best fit (Table 6.2).

⁷⁰ According to Thiry (2002, p. 222), “the ‘ambiguity-reduction’ process needs to take place before any attempt is made at uncertainty reduction...It is supported by: learning, value management, sensemaking, information sharing, group decision support and ‘shared construction’ of statements. In management, this process uses a range of ‘soft’ methodologies and techniques”.

Methods Well Defined	NO	TYPE-2 (T & C) [e.g. Product Development] SEMI-CLOSED (Obeng) ["Going on a quest"] SOFT (Yeo) [e.g. development of a new drug]	TYPE-4 (T & C) [e.g. Organisational Change] SEMI-CLOSED (Obeng) ["Walking in the fog"] SOFT (Yeo) [e.g. organisational restructuring]
	YES	TYPE-1 (T & C) [e.g. Engineering] CLOSED (Obeng) ["Painting by numbers"] HARD (Yeo) [e.g. engineering construction]	Type-3 (T & C) [e.g. Software Development] SEMI-OPEN (Obeng) ["Making a movie"] SOFT (Yeo) [e.g. information systems devel't]
		YES	NO

Goals Well Defined

TABLE 6.2: Aligning project management models/classifications into a model of hard and soft projects (Stretton, 1998, p. 8, citing Turner and Cochrane, 1993; Obeng, 1994 and Yeo, 1993).

While Professor Stretton (1998) found it could be misleading to classify projects simply as “hard” and “soft”, the “soft” attributes of initial uncertainty about project objectives, and /or methods of achieving them, were readily comprehensible. Indeed, my *Research Papers* and notebooks show that we used this way of communicating the distinction throughout the Soft Systems for Soft Projects collaboration and beyond. Professor Stretton (1998; 2000) noted an abundance of material on organisational change in the general management literature and many examples of steps / processes; however, he found no evidence of any generally agreed methods which could be determined at the outset of the project. He developed an organisational change process model for Type 2 projects (Figure 6.8) in Turner and Cochrane’s matrix (Figure 1. 12), which appeared to work well to guide people in planning and controlling Type 2 organisational change initiatives.

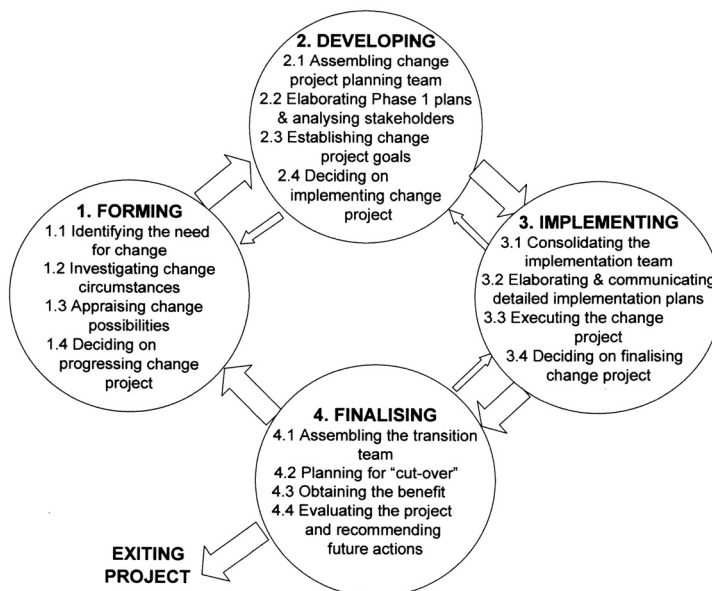


FIGURE 6.8: An organisational change project process model for Type 2 projects (i.e. where the goals are well defined but the methods are not showing phases and stages and indicating primary iterations (Stretton, 2000, p. 6, adapted from Durbridge and Stretton, 1997).

6.6.3 Engaging with Soft Systems Methodology

Professor Stretton’s analysis provided a methodological framework for Type 2 projects where the goals were well defined. As indicated from the “grand discourse” texts, however, the organisational situation was in flux and there were on-going changes in the projects being undertaken. Being organisational-wide reform projects, they would arguably meet *the PMBOK® Guide* (PMI, 2000, pp. 4-5) definition of a project as a temporary endeavour⁷¹ and were a means to respond to those requests that cannot be addressed within the organisation’s normal operational limits.

Professor Stretton’s search for a pattern in Type 4 projects (i.e. where both the goals and methods were not well defined) had found some commonalities, but they were far from constituting, or even suggesting a methodology (Stretton, 2000, p. 9). Following from Yeo (1993), Saunders (1992) and Neal (1995), who had connected Type 4 projects and Checkland’s (1981) SSM, Stretton mapped Type 4 organisational change processes from general management literature against the SSM model. He reported only partial success (Stretton, 2000, p. 9) but found they did have some promise for fitting into a generic project life cycle (Figure 6.9). He concluded that this revealed some gaps in the SSM stages towards the conclusion of the cycle which the PM part of the model helped to round out (Stretton, 2000, p. 9).

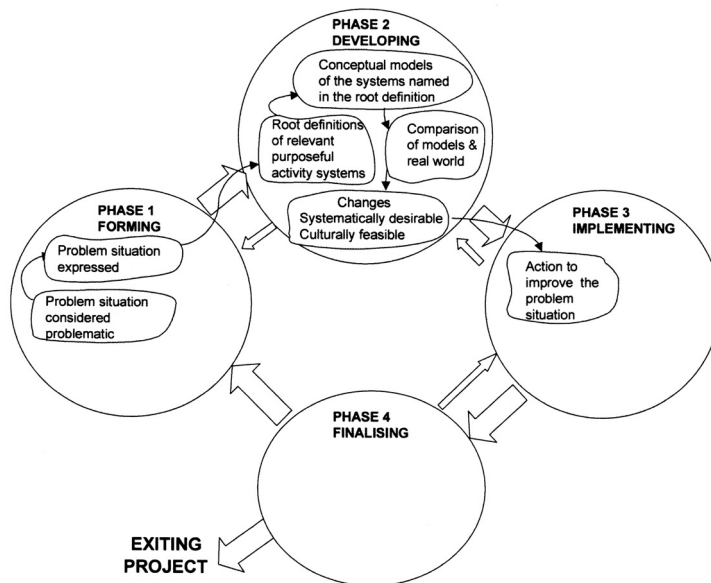


FIGURE 6.9: SSM (Checkland, 1981) model superimposed on the PM life cycle model suggesting that SSM is very strong in Phases 1 and 2, contributes to Phase 3, but does not have a stage in Phase 4 (Stretton, 2000).

⁷¹ As defined, *temporary* means a definite beginning and a definite end. The end is reached when the project’s objectives have been achieved, or when it becomes clear they will not or cannot be met, or the need no longer exists and the project is terminated. As defined, *unique* “means that the product or service is different in some distinguishing way from all other products or services”.

6.6.4 Engaging with the POM model

During the Soft Systems for Soft Projects collaboration we found SSM could be used to explore and define problems / projects at the front end, but not throughout the project life cycle for managing individual projects to completion. The reasons included that there were some 180 projects (Pollack et al., 2006, p. 6) being implemented under various arrangements covering responsibility, location, project process and team operation (Crawford and Costello, 2000, p. 2). Further, we had assumed police services had discernable organisational cultures and hence one discursive space; a closed traditional hierarchy in Constantine's (1993, pp. 36-7) paradigms (Table 6.3) whereby:

...standards and rules of operation promote continuity, and highly valued stability is maintained through control that counteracts any deviation from established norms and patterns. Such organizations are structured as pyramids or hierarchies with distinct and well-defined roles specified for each position...Information is carefully controlled and channeled along lines of authority, and decisions made by managers and supervisors are handed down to subordinates for implementation.

Paradigm	Coordination	System-regulation	Priorities	Decision making
<i>Closed</i>	Traditional authority hierarchy	negative feedback, deviation attenuating	Stability, group; secure continuity	formal, top-down by position
<i>Random</i>	Innovative independent initiative	positive feedback, deviation amplifying	Variety, individual; creative innovation	informal, bottom-up by individual
<i>Open</i>	Adaptive collaborative process	combined feedback, flexible responsiveness	Stability and change, group and individual; adaptive effectiveness	negotiated, consensual, by group process
<i>Synchronous</i>	Efficient harmonious alignment	shared programming, efficient uniformity	Harmony, mutual identification	unnegotiated, predefined, implied by vision

TABLE 6.3: Defining characteristics of four organisational reference paradigms as determined by group cohesion / intrinsic flexibility (Constantine, 1993, p. 39).

This notion has, however, been challenged, for example for the NSW Police Service by Gordon et al., (2009a, p. 18) who reference police literature reporting that within the formal organisational shaping of their actions, police have considerable discretion, their work being highly situational and context specific. These studies suggested there is ample opportunity for situational judgements to contradict the strict bureaucratic rules consistent with the [NSW Police] Service's bureaucratic frame. This accorded with our experience during the Soft Systems for Soft Projects collaboration when we began to

Finding our partner agency had no coherent PM culture (organisational appreciative setting as we understood it), we used the project teams as our interpretive filter, connecting them to the virtual project office through the discourse element (Crawford and Costello, 2000). As represented by element 7 (a, b and c), the PMIS as developed (Costello, 1998/99, *Personal Research Papers (Collaboration Research) Vol 2*):

- was flexible – capable of rapid response / innovative development to keep pace with action learning and changes in the project environment;
- was user friendly (albeit with managed security access) so there were no technological barriers to active user involvement;
- could generate accessible and reliable project documentation, for example as needed for project initiation and effective process management, including reporting and history / version control;
- had an advanced search capability supporting rapid location of files / documents;
- supported easy communication / access to desktop tools thereby assisting effective team formation and operation; and
- integrated with other applications, including learning modules on the same platform, most windows based applications and other (agency) data management systems (as required).

Similar attributes may be claimed for PM systems developed in other contexts, for example, Jaafari and Manivong's (1998, p. 249), Smart Project Management Information System (SPMIS) which, unlike the partnership prototype PMIS, promoted a centralised approach to the management of project information⁷³. The fundamental difference of perspective was that the prototype PMIS was based on a systemic "world outlook". Also, ownership (control) of the PMIS was with the participating project managers (the project office acted as facilitator).

The PMIS did provide a framework for negotiation / sign off on project scope with approving officers and a project manager could see how their project was contributing to achievement of reform and later operational and corporate business improvement objectives. They could share project information and experiences, were encouraged to collaborate and create alliances within the Service and externally, and were coached and mentored and provided with PM resources / guidance if required. The PMIS

⁷³ Its main capabilities (Jaafari and Manivong, 1998, p. 250) included systematic modeling, recording, storing, validating, retrieval and general management of information and data related to the life cycle management of a project, as well as direction, management and real time control of key information furnished to project teams, using a project structure.

incorporated user friendly PM techniques and tools, for example, risk management, stakeholder analysis, milestone planning and performance indicators. Inter-dependencies between projects, for example in objectives or shared resources, could be mapped from it and other applications or documents could be linked to fields within the PMIS. Workshops / briefing sessions were conducted, but mostly the agency officers engaged with the PMIS through the projects they were managing. As reported in the *QSARP Report for Year 1* (Hay Group, 2001, p. 204), the PMIS ownership was later transferred to the Service's Information Technology Services. The version being developed at the UTS site was made available to other NSW government agencies for trial, and ultimately was transferred (with approval) to the RFS site and to HPRB.

6.6.5 Engaging in action research

In the research plan (Figure 6.1) “hard” and “soft” systems approaches were to be used within an AR framework. Under Step 6, the systems and tools developed were to be trialled on a number of sub-projects following the AR spiral of plan, act, observe and reflect. This process assumed learning is experiential and reflective whereby people can learn and create knowledge on the basis of their concrete experience, through observing and reflecting on that experience, forming abstract concepts and generalisations, and testing implications of these concepts in new situations, which will lead to new concrete experience and, hence, the beginning of a new cycle (Zuber-Skerritt, 1993, p. 46)⁷⁴. A summary of our experience with the collaboration within the framework of our AR approach, as depicted in Figure 1.4, is in Table 6.4.

AR Cycle Element	Summary of Experience
Research themes	<ul style="list-style-type: none"> • PM – increasing complexity from certainty to uncertainty and need for new methodologies • SSM – tempting potential framework for new PM methodologies, however, integration into mainstream PM practice unrealised.
Real world problem situation	<ul style="list-style-type: none"> • A NSW Public Sector agency responding to global pressures for PS reform had recognised the potential of PM within a phased program of change given impetus by a Government Inquiry. • Within the Agency: multiple, interdependent projects were being managed in a dynamic environment; there was no corporate-wide PM culture or support systems in organisational structure or practice of core business; and a traditional hierarchical structure and information flows.

⁷⁴Zuber-Skerritt (1993, pp. 54-5) refers to her ideas relating to adult and experiential learning being confirmed and enriched by a number of authors including Kolb. Pidd (2003, p. 12) says Kolb is perhaps the most widely known theory of learning. According to Baker et al., (2005, p. 412), Kolb's cycle provides a multilinear model of the learning process consistent with what we know about how people learn, grow and develop. It is referred to across many disciplines (for example Healy and Jenkins, 2000, in geography) including in PM by Turner et al. (2000).

AR Cycle Element	Summary of Experience
Action in the situation	<ul style="list-style-type: none"> • Collaborative research project with a university partner on management of multiple, interdependent soft projects. • Conducted through a virtual project office. • Simultaneously and interactively supporting development of PM capability of people and support systems.
Reflection on the involvement	<ul style="list-style-type: none"> • Research was proceeding through a “soft systems learning cycle” in which theory and practice were creating each other. • Learning from this process was being applied to another NSW Public Sector agency as a sensemaking framework for review of experiences. • Recognition that SSM had been used as an approach to define / explore problems but not throughout the project life cycle for taking action / managing projects to completion. • Strategically embedding SSM in PM processes as a learning system was providing a structure for action.
Findings	<ul style="list-style-type: none"> • SSM model adopted (ultimately the POM model) was not found applicable for the management of individual projects (although SSM tools might assist). However, it was applicable in helping create a sensemaking focus for developing an organisational learning capability (through the PMIS) supporting strategic management of multiple, interdependent projects. • As developed, the model had to be “accessible” to Agency practitioners and therefore could not capture complexity. It provided, however, a framework for sense-making and sharing of knowledge. • While the POM model was seen as relating to IS specifically, it had to be extended to locate the processes within the formal agency structure and adapted to accommodate a PM approach. • A focus for structured discourse emerged around the prototype PMIS which as developed was:- user friendly and flexible; responsive to user needs; capable of integrating fully with other Agency applications; internally developed and administered; being converted into an Agency wide intranet application; being adapted for inter-agency projects; and facilitating the sharing of PM learning. • Planned future action included: further iterations of the learning cycle; extension and testing of the approach through practical applications including to local operational projects; and refinement of the modelling process to take account of changes over time and complexity and project linkages.

TABLE 6.4: Summary of the practitioner-researchers’ review of their experience of the Soft Systems for Soft Projects partnership against the elements of the AR cycle in Figure 1.4 (Crawford and Costello, 2000).

6.7 Emerging Themes

The research themes for my inquiry established at the outset were:

- *conceptual models* in particular the POM model as an SSM approach to support people thinking through difficult issues;
- *lessons transfer* in particular how the SSM version of AR (Figures 1.4 and 4.8) may support learning / lessons transfer and how this compares with PM models;
- *practical guidance* as may be discerned from an exploratory reading of (public domain) texts to gain a contextual practice view.

6.7.1 Conceptual models

When the research plan was being developed, affiliation members saw SSM (Checkland, 1981; Checkland and Scholes, 1990) as having attributes recognisable in PM. Both were arguably practice oriented methodologies that require recognised professional expertise / competence to implement i.e. they have constitutive rules. Also, both had a process view of modelling, albeit that this was shifting in later SSM literature to sense-making, and well-developed tools and techniques.

The collaboration was not, however, a static engagement but was continuously being shaped by a complex flux of events and ideas. There were clear boundaries on our scope of PM action that challenged our planned combined PM / SSM approach. Conducting (applied) research over this time and scale would ultimately require a different approach to the research plan. In my *Personal Learning Journal*⁷⁵, I developed an appreciation, informed by PA literature (as in Matheson, 2000) and the relationship between the social and the technical in ISD (Rose et al., 2004), that positioned PM on a vertical axis representing hierarchical relationships that enable an agency to take and enforce technically rational decisions in pursuit of consistent goals. I positioned SSM on a horizontal axis representing relationships of bargaining, negotiation and persuasion that enable an agency to make broadly based decisions which have group / agency/ government assent / support. The intersection between the two, as experienced in the collaboration, was continually in a process of adjustment. In this context we began to explore the POM model as a defensible device with a structure and language which can be used to make sense of life in real organisations and their provision of IS (Checkland and Holwell, 1998b, p. 107). Our attempt to adapt it for the developing PMIS we understood to be a Mode 2 interpretation (Crawford and Costello, 2000), distinguishable from Mode 1 which was understood to be a prescriptive set of stages to be followed in sequence. The latter we equated with the generic project life cycle from PM literature (Stretton, 1998, p. 1). This was an exploratory interpretation, so an emerging issue was whether it was defensible upon closer analysis in terms of its practical application and theoretical foundations in the light of our experience and the critical challenges posed to SSM generally. Also at issue was the defensibility of our interpretation of Mode 2 in terms of SSM as well as in management research generally (for example as in MacLean et al., 2002).

⁷⁵ Covering the period 11/11/00 to 20/4/01

6.7.2 Lessons transfer

According to Smyth and Morris (2007, p. 424), the absence of a received theoretical framework for PM and the importance of context “puts a special burden on ensuring that we pay attention to epistemology and hence methodological issues”. However, having “an appropriate research methodology is part of the way we epistemologically perceive (construct) knowledge”. The other part is through paradigms “embodying systems of ideas and beliefs...[which] shape the way practitioners, professionals and academics perceive the discipline and directly shape many of its tools, techniques, service offerings and certification programs”. They refer to a number of paradigmatic approaches, including those directly informing the Bodies of Knowledge, of which the *PMBOK® Guide* (PMI 2000, 2004) is an example:

Attempts by the BOKs to systematize the knowledge required are largely based on the underlying assumption that there are identifiable patterns and generalizations, from which rules, controls and guidelines for best practice can be established that are replicable, even if not in absolutely every circumstance...[Nevertheless] many believe that the pursuit of such generalizations is futile, arguing that the variety of different contexts is too great to allow for much to be said that is useful...Others, however, conscious or not of the epistemological difficulties, have pursued the attempt to externalize the lessons learned and to generalise practitioner insight and research findings (Smyth and Morris, 2007, pp. 225-6).

From this review it appeared there was no general PM view of learning lessons / knowledge creation, the difficulty being compounded according to Smyth and Morris (2007, p. 426) by the range of disciplines involved. For the purposes of my inquiry, I understood learning within PM as applying best practice, variously represented for example in Table 6.5, a number of which were implemented by the collaboration’s project office or incorporated into the PMIS. However, the exemplar NSW public sector PM guideline (Figure 6.4) ended with implementation, a benefits realisation review being a stage beyond. NSW Public Sector post implementation review guidelines appeared to be of a later date and in any event were not considered during the Soft Systems for Soft Projects collaboration.

The SSM of Checkland and colleagues, by contrast, included an epistemology which made sense of the process of SSM, a process by which data were transformed into

knowledge in the field of IS and an AR process of inquiry, albeit there were criticisms⁷⁶. AR, according to Zuber-Skerritt (1993, pp. 54-5), provides a theory of learning as well as a methodology and technique. Further, as observed by Jackson (2000, p. 247), although Checkland insisted SSM was a result of experiences, SSM has benefited all along from being theoretically informed.⁷⁷

- | |
|--|
| <ul style="list-style-type: none"> • Systematic collection of learning [on projects] • Clarity of project development process • Periodic project review points <ul style="list-style-type: none"> ○ Post-project evaluation • Distinguishing between tacit and explicit knowledge • Identification of key persons as repositories of tacit knowledge and as 'owners' of subject matter areas: <ul style="list-style-type: none"> ○ Subject Matter Experts, Coaches, Mentors • Information Management tools to capture, store, process, archive, retrieve and present explicit knowledge • A discipline of accessing knowledge (using checklists or other 'look up' guides etc) by the project teams before beginning a new project task • A definition, in some way, of the knowledge in a particular area: the 'Body of Knowledge' • Establishment of an integrated KM program in place [informally even if not formally] • Formal management of this KM program <ul style="list-style-type: none"> ○ A KM manager • A formal program of learning defined, using this knowledge • The distinction made between individual, team and organizational learning • A mechanism for updating the knowledge. How frequently are old, out-dated paradigms / bits of knowledge discarded? • A program or programs developed to use the knowledge/ learning that is 'identified', for example in: <ul style="list-style-type: none"> • Metrics/ benchmarking, of knowledge effectiveness • Continuous improvement/upgrading • A competency development program related to organizational learning <ul style="list-style-type: none"> ○ Individual ○ Organizational • Training (as part of the above): face-to-face and IT/e enabled |
|--|

TABLE 6.5: Best practices for learning in PM from Morris and Loch (2002, p. 5).

During the Soft Systems for Soft Projects collaboration we used tools and techniques from both PM and SSM in developing our practical system; however, a theoretical perspective would require bridging the paradigmatic differences. This dimension remained unresolved during the collaboration and was carried forward into the HPRB engagements. Another issue carried forward was the concept / process of organisational learning / learning organisation, referred to by Commissioner Ryan

⁷⁶ Kemmis and McTaggart (2000, p. 597) for example suggest a weak relationship between the process of inquiry and the literature and critique of the organisation from a theoretically informed position.

⁷⁷ Jackson (2000, p. 247) refers the influences early on being Churchman and Vickers and later the interpretive philosophical and sociological theories of Dilthey, Husserl, Schultz and Weber and the social theory classification of Burrell and Morgan.

(1996) as indicated by adapting to change and having the ability to change focus. A later perspective by Clegg et al., (2005, p. 1350) saw learning not as something that is done to organisations, or something that an organisation does; rather learning and organising are seen as mutually constructive and unstable, yet pragmatic constructs that might enable a dynamic appreciation of organisational life. Much documentary material was generated during the collaboration through the PMIS and related activities including questionnaires on its use, presentations, workshop and coaching sessions, and PM guidance material as well as documentation associated with the Project Control Group. However, it was in the context of the subsequent PM engagements that we would recover the lessons learned and this would in turn lead us to re-examine the Soft Systems for Soft Projects experience within other frameworks.

6.7.3 Practice guidance

Through the Royal Commission and the responses by the Police Service and other NSW government agencies (including the PIC), the PM context of the Soft Systems for Soft Projects engagement was extensively documented in the public domain. Within the “grand discourse” texts, a key process for implementing structural change was alignment and coordination of systems, processes, projects and structures (Wood, 1997b, p. A253) and a project office was considered significant in supporting this. The first PIC QSARP audit, covering March 1999 / 2000 (Hay Group, 2001, pp. 202-3) reported on the project office recommendation and on the PMIS being transferred to the NSW Police Information Technology Services. Therefore, the partnership produced demonstrable results that, under the ARC /SPIRT assessment criteria, addressed an important problem. Contemporary public domain evidence of achievement against other ARC / SPIRT criteria is fragmentary, although later examples would emerge as affiliation members looked back on the partnership experience or to experience being reported in other contexts⁷⁸.

Being embedded in the collaboration as a member of a virtual project team created particular challenges for reporting research findings at the local discourse level (Figure 1.8). Under the distance / engagement model between researcher and subject for different data gathering methods (Figure 5.10), I was undertaking AR and participant observation, two of the most engaged methods, while reporting evidence through

⁷⁸ For example, while outside any further engagement of the Soft Systems for Soft Projects collaboration, Bradley et al., (2006) who include the then Victoria Police Chief Commissioner Christine Nixon, document increasing engagement in collaborative research between Australian police organisations and tertiary education institutions.

reading of published texts, one of the most distant methods. While there was no specific report on the project office or the PMIS in the QSARP audits for Years 2 and 3 (Hay Group 2002a and 2002b), on reading the “grand discourse” texts I found reference to PM in the agency responses to issues raised by the auditors. Further, these often included terminology that was (arguably) recognisable in the PMIS as it was developed to support management of reform projects. These projects, albeit that they might be rolled together with other projects or even discontinued, appeared to accord with the traditional PM definition of a project as temporary and unique and amenable to management within a PM life cycle. Within the documented shift of focus from reform to continuous business improvement, the projects on the PMIS assumed more of the attributes of Hassen’s bureaucratic projects (Table 1.3).

The Soft Systems for Soft Projects collaboration continued for the duration of the research agreement despite changes in partner membership and was able to deliver the PMIS through trust that was established and maintained. In the process, it demonstrated the possibilities of SSM, including the POM model for application in PM (Crawford and Costello, 2000). However, it also raised many questions about PM practice and its theoretical foundations that were carried forward in the knowledge and prejudices the practitioner-researchers brought to their engagement in the RFS and HPRB, the second and third iterations in Figure 1.3.

6.8 Concluding Annotation

In this chapter I have examined the Soft Systems for Soft Projects collaboration between the NSW Police Service and UTS PM researchers (the first iteration of my inquiry), which explored how traditional PM practice may benefit from applying SSM to managing interdependent soft projects. The collaboration produced a practical PM system and demonstrated the possibilities for applying SSM, including the POM model, to its PM research and practice. It also raised questions about PM practice and its theoretical foundations that affiliation members carried forward into later PM engagements at the RFS (Chapter 7) and the HPRB (Chapter 8), respectively the second and third iterations of my inquiry.

CHAPTER SEVEN: Second Iteration Case Study (2000-2001) – Interacting Ideas and Lived Experience

Conference participants agreed that...theory alone, in the context of service delivery, is not very useful, but can be important when it serves to solve practical problems. Public Administration, therefore, whether starved of theory or enriched with it, can only be useful if it contributes to practical knowledge. (The fourth CAPAM [Commonwealth Association for Public Administration and Management] conversation lights the way to improving the academic-practitioner interface - *Commonwealth Innovations*, August 2007, p. 6)

7.1 Summary

In June 2000 the RFS became a partner in the on-going development of the Soft Systems for Soft Projects PM methodology and supporting PMIS. The RFS had embarked on a change management process requiring review, reconstruction and development of key organisational structures and processes within a strict 12-month timeframe. Essential requirements included maintaining volunteer support and transferring over 300 fire control staff from local government to RFS employment without any interruption to RFS functioning and largely within existing resources. Teams were established with members from across NSW to implement industrial, workforce planning, legislation / service standards and policy, service delivery, information technology, finance, communications and accommodation programs.

When reviewing the change process that provided the organisational context for the Soft Systems for Soft Projects collaboration, affiliation members had noted that public sector reforms are usually multi-faceted and that success or failure is rarely clear cut (Crawford and Costello, 2000, p. 6). Successful development of the PMIS had required flexible arrangements to bring people with PM and IT expertise and users together in a less bureaucratic and more intensive way of working.

Reading the public domain texts on the RFS change management process, I found that it was widely considered a success. While the contribution of the many RFS service members, both volunteer and salaried was critical to this achievement, formal acknowledgement was also given to the contribution of the PM methodology. Supporting its implementation was a Project Planning / Support Office which adopted a facilitative rather than a control approach towards the projects delivering the RFS change portfolio. The PMIS, as transferred to the RFS, provided the template (project

brief) around which work was negotiated at integrative (portfolio), strategic (program) and tactical (project) levels. Also, it provided a technical platform to support the RFS Project Planning / Support Office to capture, store, monitor, communicate, report and archive program / project data.

The initial Soft Systems for Soft Projects engagement had entailed pushing the boundaries of PM research and practice whereas the RFS engagement represented more of a consolidation than a new direction. Over this time affiliation members were also undertaking research at other practice sites (Figure 1.1) and had continued their consideration of the POM model. This was at the conceptual level and various interpretations were coming out of different organisational contexts, including DPWS, about how it might apply to practice. The most tangible expression of the local discourse occurring within the affiliation about the POM during the RFS engagement was through the developing PMIS. However, within the affiliation's ethical and practical scope of action at the RFS, the lessons learned were elicited largely within traditional PM frameworks. Affiliation members nevertheless fully appreciated the limitations of these frameworks for capturing the full richness of their lived experience.

7.2 Rural Fire Service Change Management Context

As reported by Commissioner Koperberg in the foreword to *NSW Rural Fire Service Annual Report, 1999-2000*:

Reflecting the outcomes of the Parliamentary Inquiry [into the Rural Fire Service], the Government approved the transfer of fire control and district staff to State Government employment. Such a transfer will have a major impact on the culture and organisational structure of the Service and will accelerate the move towards the provision of a single Rural Fire Service, as opposed to 142 disparate services.

Commissioner Koperberg (*Annual Report 1999-2000*, p. 2) referred to the Committee's Inquiry as providing a unique opportunity for the Service to be examined on all aspects of performance and philosophy. Also, in responding to a diverse range of views expressed by volunteers and others, the RFS would be able to show the transparency with which the Service is managed. The Parliamentary Committee's recommendations were seen by the RFS as providing the Service with a springboard for consolidation and unification of aspects of management and leadership at all levels. As established under the *Rural Fires Act 1997*, the RFS is responsible for fire suppression and prevention activities across 90 per cent of NSW (Figure 7.1). At the time, the RFS

comprised 2,301 rural brigades⁷⁹ attached to 142 local government councils⁸⁰ and had a total volunteer membership of 68,983. Average staffing was 138 (full-time equivalent), engaged in emergency management, planning and co-ordination, administration and training and information services (APPENDIX 12).

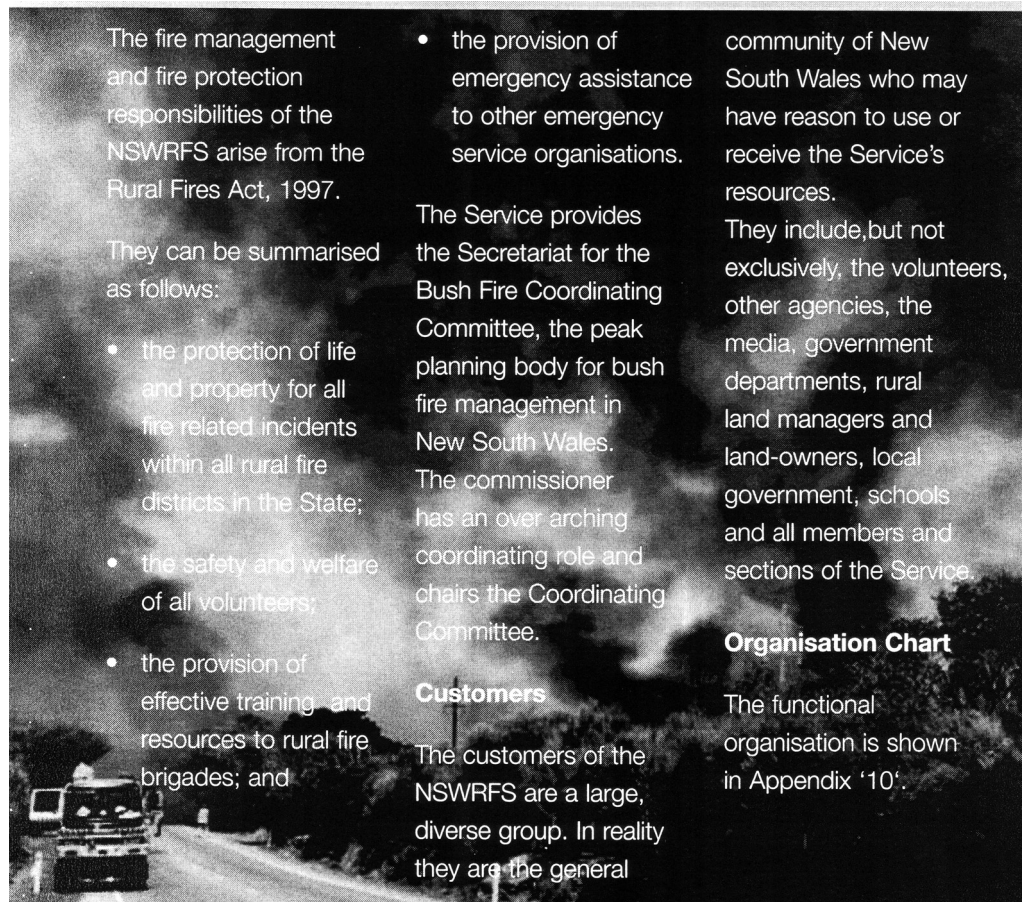


FIGURE 7.1: Rural Fire Service role and functions⁸¹ (*Annual Report 1999-2000*, p. 7).

Besides the Head Office at Rosehill (a suburb of Sydney), the RFS was maintaining eight regional offices throughout the State. It worked closely with the NSW Fire Brigades, National Parks and Wildlife Service and State Forests, and Local Government Councils were significant partners in its administration. As noted in the NSW Treasury *Budget Estimates Paper No. 3* for 2000-01⁸², the RFS was an integral part of a complex bush fire management infrastructure comprising volunteer bushfire

⁷⁹ Reported in its *Annual Report* for 1999-2000 (p. 6).

⁸⁰ Reported in the NSW Treasury *Budget Estimates Paper No. 3* for 1999-2000 (p. 7 - 21).

⁸¹ Responsibilities were: protection of life and property; volunteer welfare and safety; provision of effective training and resources; and provision of emergency assistance to other emergency service organisations. The RFS Head Office comprised five Divisions each headed by an Assistant Commissioner: Operations, Operations Support, Regional Management and Planning, Strategic Development and Corporate Services. The State Coordination Centre provided administrative support and coordination to the RFS Regions and Districts as well as a ready means of contact and communication with the community. The Centre was staffed on a 24 hour basis.

⁸² Under Minister for Environment, Minister for Emergency Services and Minister for Corrective Services.

brigades, local government councils, land management agencies and other fire authorities. During 1999-2000 (*Annual Report*, p. 8), work had begun on various programs and projects which collectively formed part of the change management process whereby the RFS would develop according to the goals of the Strategic Plan” (Figure 7.2).



Strategic Plan

OUR VISION

To provide a world standard of excellence in the provision of a community based fire and emergency service.

	KEY OBJECTIVES	KEY STRATEGIES
1	SOUND LEADERSHIP AND MANAGEMENT PRACTICES	<ul style="list-style-type: none"> • Develop leadership and management skills for all members of the Service. • Enhance customer service by developing and implementing a programme of continuous improvement. • Strengthen links between the Service and the Rural Fire Service Association. • Facilitate a change in culture through implementation of an organisational change management programme. • Allocate resources and funding to meet identified risk management outcomes. • Support effective management by developing and implementing a human resource management information system.
2	PROFESSIONAL INCIDENT RESPONSE TO FIRE AND OTHER EMERGENCIES	<ul style="list-style-type: none"> • Establish and maintain a standardised incident response and management infrastructure. • Identify, develop and implement response protocols for all emergency incidents in support of other agencies. • Establish, implement and manage a programme for the development and maintenance of information technology and communications networks. • Develop and implement a statewide logistics support system.
3	COST EFFECTIVE RISK MANAGEMENT PRINCIPLES, POLICIES AND PROCESSES	<ul style="list-style-type: none"> • Develop, implement and maintain community awareness and safety programmes. • Establish a research and development function to lead risk management. • Develop a comprehensive Geographic Information System to support the management of fire and emergency incidents. • Develop and implement incident prevention programmes for the protection of the community and the environment. • Develop and implement a comprehensive risk management programme.
4	A CONTINUOUS LEARNING CULTURE RECOGNISING THE VALUE OF ALL SERVICE MEMBERS	<ul style="list-style-type: none"> • Prepare and implement a strategic Human Resources Plan. • Develop processes to measure and manage the demands placed on volunteers. • Develop and implement a continuous process of effective and efficient human resource management within the Service. • Develop a team culture throughout the Service. • Develop a programme to promote wider community acknowledgement of the Service’s contribution to all aspects of community life.
5	PROVIDING COMPETITIVE INCOME EARNING SERVICES TO MEET CUSTOMER NEEDS	<ul style="list-style-type: none"> • Develop and implement policies and procedures for the development of revenue and non revenue based business opportunities. • Develop strategic alliances and partnerships. • Develop and implement appropriate marketing plans. • Develop a programme and guidelines for the participation of volunteers in cost-recovery business ventures.

FIGURE 7.2: NSW Rural Fire Service Strategic Plan (published on <http://www.bushfire.nsw.gov.au/strategicweb/strategi.htm> accessed 20/03/2000).

A newly established Organisational Change and Continuous Improvement Steering Committee (OCCISC⁸³) was given overall stewardship (*Annual Report 1999-2000*, p. 8) and a Program Management Working Group⁸⁴ (PMWG) was established to provide executive support to the OCCISC. The PMWG was also responsible for facilitating and managing the organisational change programs and ensuring: all issues, decisions, milestones and critical dates are identified and recorded; accurate minutes of program meetings are recorded and distributed; and all programs / projects are professionally managed and all teams are appropriately resourced to meet their objectives. Chaired by the Assistant Commissioner Strategic Development, it comprised the program manager from each program team (APPENDIX 13), the project office manager, executive support and project officers.

7.3 Scope of the Affiliation's Engagement

When the RFS became a partner in the research and development of the PM methodology and systems initiated during the Soft Systems for Soft Projects collaboration (Costello, *Personal Research Papers*, 2000, RFS correspondence) Lesley Bentley was appointed to assist with the implementation, improvement and management of the PM methodology (Figure 7.3). On her appointment she said (Bentley, 2001b, p. 2):

With me I brought "hands on" experience in applying project management processes to organisational change projects. I also brought with me knowledge of a Soft Systems Project Management Approach (SSPMA) gained from my experience of working in collaboration with a research team from the University of Technology, Sydney. This team had been developing and applying project management theory and practice to strategic change management projects being undertaken within several NSW government agencies. I had been given the opportunity to test this approach previously when I was invited to facilitate a problem solving exercise involving a government agency working directly with community representatives. This proved particularly successful and encouraged me to apply it again within the RFS change program.

⁸³ The OCCISC role was support and guidance to nine program teams established to implement the organisational change portfolio through: strategic direction and guidance; monitoring progress; making decisions on a range of organisational, functional and resourcing issues; intervening when problems are occurring; and ensuring appropriate stakeholder contributions to all decisions. It was chaired by the RFS Commissioner and included the five Assistant Commissioners and 12 other members representing diverse interests including a farmers' representative.

⁸⁴ (<http://www.bushfire.nsw.gov.au/stratgic web/pmwg.htm> accessed 16/11/2001)

Lesley Bentley Manager Project Office



Lesley is on secondment to the Strategic Development Unit, RFS from the NSW Police Service. Lesley commenced in the Police Service in Jan 1994 and was involved in project management of reform initiatives resulting from the Wood Royal Commission.

Lesley has spent the last three years working on a major collaborative research project with a leading University in Sydney, both developing and embedding project management methodology within the NSW Police Service. This has involved establishing and managing a fully functioning Project Office and facilitating and scoping dozens of projects at all levels of the Service. This involved working with senior executives and Local Area Commanders and included mentoring, coaching, training and assisting managers to structure and project manage both organisational change and crime reduction projects.

Global interest in the research collaboration emerged from organisations such as NASA and multiple other private and public sector agencies. Also developed during the research was an on line project management application for capturing, monitoring, managing and communicating project status.

Project Management is being used by the RFS and a Project Office has been established to assist in project management of the organisational change programs. Lesley is the Manager of the Project Office and since her commencement has focused on assisting program managers to establish and manage their programs and projects, developing project management training material and assisting in the development of the on-line project management application and issues/risk database.

FIGURE 7.3: Extract from Lesley Bentley's staff profile as reported on the Rural Fire Service website (<http://www.bushfire.nsw.gov.au/strategicweb/lesley.htm> accessed 16/11/2001).

In August 2000, the Soft Systems for Soft Projects Chief Investigator gave approval for the RFS to pilot the PM methodology and online system (Costello, *Personal Research Papers*, 2000, RFS correspondence) on the condition that feedback on the experience would be provided for research purposes. This was to be made through Lesley Bentley and myself as referenced in APPENDIX 5. On the distance / engagement scale (Figure 5.10) our engagement could be characterised as insider consultancy / participant observation in the case of Lesley Bentley and consultancy / passive observation in my case. However, we both considered ourselves facilitators. From the literature, open facilitator awareness (Kirk and Broussine, 2000) is expected to be supported by reflective practice and reflexivity on the part of the researcher. Most importantly, it should be supported by establishing a relationship that promoted trust (Romm, 2002; Koskinen et al., 2003; Korac-Kakabadse et al., 1999).

7.4 Reading the Organisational Texts

My source texts for my reading of the affiliation's RFS engagement are grouped in Table 7.1 within the framework I developed for my research inquiry (Table 5.2).

Discourse Level (i.e. level of public exposure) [Level of interest] <i>i.e. close range v long range</i>	Document
Society-at-large – including the state [the political-administrative system] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> • Legislation • Parliamentary papers / reports / inquiries • Ministerial statements / press releases.
Public sphere [realm of public discourse and action] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> • NSW <i>Treasury Budget Paper No. 3 – Budget Estimates for the Department of Rural Fire (1999/00 to 2002/03)</i> • NSW Government / Premier’s Department / Treasury - policies / strategies / guidelines • Audit Office performance audit (1998) and follow-up (2001) • NSW Rural Fire Service Annual Reports.
Domain-specific discourses at various intermediate levels <i>[Meso discourse]</i>	<ul style="list-style-type: none"> • NSW Rural Fire Service website • <i>Professional guides</i> <ul style="list-style-type: none"> - NSW PS PM Guidelines - UK Government PM Guides - Professional Association publications (e.g. AIPM & PMI, including PMBOK®) • Academic / practice publications – practitioner-researchers • Other publications e.g. AIPM; UTS.
Local discourse [closed down at some point by those in control] <i>[Meso / micro discourse]</i>	<ul style="list-style-type: none"> • Project Management Information System • Research partnership documentation / management (including meetings etc.) / submission to the AIPM • Personal practitioner-researcher journal

TABLE 7.1: Documents considered in the second iteration of the research inquiry grouped according to the framework in Table 5.2.

When applied to the Soft Systems for Soft Projects collaboration with the NSW Police Service (Table 6.1), I had found that the “official discourses” as they concerned implementation of reform / organisational change had been mainly proceeding at the “society-at-large” level of Ulrich’s (2003) multiple sphere model of discourse (Figure 1.8). Under my interpretation they were, as represented by the Wood Royal Commission and the QSARP process, external to the agency and this situation was reflected in my readings of the public domain documents. The public accounts of implementation of the RFS organisational change were, by contrast, mainly proceeding at the “public sphere” or “domain-specific levels”, particularly through accounts being produced by the RFS itself in its Annual Reports, on its website or through submissions / responses to Parliamentary Committees and NSW Audit Office inquiries. The apparent difference between the two agencies in the level of the discourse represented and, consequently, the textual material accessible in the public domain could arguably be seen as a reflection of different organisational cultures but on closer examination this was not found to be clear cut. Affiliation members had assumed police organisations would most closely fit with the attributes of a “closed traditional hierarchy” under Constantine’s (1993, pp. 36-7) organisational reference paradigms (Table 6.3).

They found, however, the actual situation akin to the literature referenced by Gordon et al., (2009a) that reported police as having considerable discretion within the formal organisational shaping of their action.

According to Commissioner Koperberg, commitment to volunteers was a fundamental tenet of the RFS (*Annual Report 1999-2000*, p. 3). Starting at this point, affiliation members initially viewed the RFS as an open collaborative organisation under Constantine's (1993) paradigmatic structure (Table 6.3) wherein: *system regulation* is by combined feedback and flexible responsiveness; *priorities* are stability and change and group and individual adaptive effectiveness; and *decision making* is negotiated, consensual by group processes. Subsequently, Lesley Bentley would test this view by asking the RFS program managers about their perception of the model as it might be applied to the RFS (Bentley, 2001a, p. 35) prior to the change management portfolio and after it was implemented. Her survey results indicated that the RFS was perceived to be stable and conservative with a focus on continuity of core business. Accordingly, she understood it as a closed paradigm in Constantine's (1993) framework. Later in the process, she reported that over two thirds of survey respondents clearly perceived the organisation as having moved to being more open (Bentley, 2001a, p. 36).

Another dimension for distinguishing the "official discourses" concerning reform of the NSW Police Service and the RFS is suggested by Alvesson and Karreman's (2000 p1135) categories of close range versus long range and autonomy versus determination as represented in Figure 5.13. Considering discourse at "close range" emphasises the local situational context and, at the other extreme, discourse may be seen as a rather universal set of vocabularies. As may be seen from Table 7.1, the texts I considered do not exactly fit within the scale of "micro" to "grand" and also here I have not included consideration of the NPM "mega discourse".

7.4.1 "Grand discourse" texts

These texts include elements of the RFS governance framework as generally indicated in Figure 3.1, albeit in that case for the Australian Public Service (APS) i.e. the corporate structures and processes by which the organisation acquits its stewardship accountabilities. Within the APS, governance has been identified as a key element in an agency's capability to align learning with business so as to be able to deliver government objectives and outcomes (Australian Public Service Commission and Australian National Audit Office, 2003).

In Table 7.1 “grand discourse” texts for the RFS are included under the “society-at-large” and the “public sphere levels”. I interpreted the former as part of the “official discourses of the State and their legitimation function” as represented by Parliamentary papers and Ministerial statements. The latter I interpreted as representing “the realm of discourse and action for implementation” and included Treasury Budget Estimates, Auditor-General Performance Reports and the RFS Annual Reports.

As I noted in relation to Figure 1.8, these are not necessarily discrete categories and at each level there will be many partly overlapping discourses concerning different object domains and audiences (Ulrich, 2003, p. 331). Further, what matters is that *together* the different discursive spheres and domains offer *multiple chances* for the articulation of particular concerns that may be suppressed in particular discourses. Under an alternative interpretation, I could have assigned the Parliamentary and Ministerial texts to the “public sphere” level for as Ulrich (2003, p. 331) observed:

...multiplicity of discursive chances is vital for a functioning *public sphere*; it makes it accessible (however imperfectly) to normal citizens. The public sphere is that realm of discursive chances which lies between the realms of the entirely private and the state’s political administrative system. To the extent that it is accessible to ordinary people, it offers them an arena for unrestricted articulation and discussion of concerns that have been suppressed elsewhere.

In calling for submissions from the public, as well as special interest groups, the Wood Royal Commission and the Legislative Council Committee had offered such discursive chances. These were what Vickers (1965, p. 50) termed examples of appreciation which have the advantage of being matters of public record. By exposing what they regard as the relevant facts and their own value judgements thereon and the processes whereby they have reached their conclusions, their reports provide the authority which appointed them and also all who read them with a common basis for forming their own appreciations. In this sense I considered these texts as representative of “grand discourse” (“society-at-large” / political) texts that may be distinguished from the public domain “implementation” texts at the next level. While these latter texts report on or review implementation of recommendations for action coming out of “grand discourses”, they also feed back into the discourses proceeding at the “society-at-large” / political level. Accordingly, I understood that the distinction I had drawn between the two levels could, in different practitioner-researcher readings and under different assumptions, possibly break down or at least blur at the boundaries.

7.4.1.1 “Society-at-large” / political texts

As noted in the Chairman’s foreword to the Legislative Council Committee’s inquiry into the RFS (NSW Legislative Council, 2000, p. xv), the submissions it received reflected a diverse range of views by volunteers and this highlighted the need for flexibility by the Committee when considering the issues, particularly the question of dual accountability. Transfer of fire control officers had been announced by the Minister before the Committee’s Report to Parliament on 23 June 2000. On 7 December 2000, the Minister announced⁸⁵ legislative amendments had been passed by Parliament. While fire control officers would become State employees, they would remain with their local brigade. He said that both the Government and the NSW Rural Fire Service recognised that local knowledge and local involvement is key to success of the Service and essential to its future.

On 27 February 2002 the Minister announced a Joint Select Parliamentary Committee of the Legislative Council and Legislative Assembly (the “Joint Committee”) to investigate the Christmas bushfires occurring between 25 December 2001 and mid January 2002. In a statement to the Parliament, the Premier had said that despite the recent bush fire crisis being the most successful fire-fighting operation in the State’s history with not a single life being lost, there are still lessons that can be learnt. The Joint Committee Report, tabled on 28 June 2002 (NSW Parliament, 2002) addressed terms of reference on application technology, hazard reduction during bushfires, environmental impact and bushfire safety standards. In Section 7 of the Report, the Joint Committee (NSW Parliament, 2002) considered the adequacy of changes made to bushfire planning and fighting, development planning and other relevant matters. Recommendations under this section included [7.1] that “the government acknowledge the significant operational improvements already evident from the reform and consolidation of command of the firefighting services in NSW, and endorse the continuation of the reform strategy”.

7.4.1.2 “Public sphere” texts

In December 1998 the Auditor-General had handed down a performance audit report (“the Audit”) on the coordination of bushfire fighting activities (NSW Audit Office, 1998). The NSW rural fire fighting model was considered complex and requiring extensive coordination and cooperation to function properly, albeit that in general it had been

⁸⁵ Accessed through www.bushfire.nsw.gov.au.

made to work quite well and much improvement in rural fire fighting had been achieved over the previous decade. Nevertheless, the Audit had noted (1998, p. 3) that:

...past tensions and difficulties have left pockets of disagreement and resistance. The rural fire fighting culture which was developed over the course of a century has always been highly dedicated, as it is today. However, changed organisational, technical, legal, financial and environmental factors have necessitated major and continuing changes. Bringing about large scale changes to a massive volunteer-based operation is a daunting task, with no single body having complete authority over all aspects.

The Audit had made 14 recommendations (1998, pp. 7-8), the first being that the RFS and local government give higher priority to addressing outstanding issues regarding fire control officers. Other recommendations concerned clarifying roles and responsibilities, training, communication strategies, financial expenditure guidelines, performance measures when reporting on fire suppression activities, review of administrative procedures, education activities, developing cooperative arrangements to share resources, compliance with legislative requirements, hazard reduction reporting and promoting community involvement in their own protection.

By 2000, as reported in the *RFS Annual Report (1999-2000, p. 11)*, the RFS change management process was providing volunteers with a greater voice in the future directions of the Service. The Commissioner referred to the establishment of program teams and committees to provide the conduits by which organisational change and continuous improvement will begin to flow through the RFS. In the following *Annual Report (2000-01)* the Commissioner said it had been a year of significant change culminating in transfer to the RFS of over 300 district fire control staff from local government. In just twelve months, the Service had been able to achieve the establishment of all the necessary management systems and infrastructure to cope with the direction and administration of these new staff, largely within existing resources. These changes were also reported in the 2000-01 NSW Treasury Budget Paper for the RFS which observed that “new administrative arrangements, which commenced on 1 July 2001, have proved successful in providing a cohesive emergency service and have addressed concerns by the Coroner in relation to dual accountability of fire control staff to both State and local government”⁸⁶. Funding estimates and average staffing figures for both years are summarised in APPENDIX 12.

⁸⁶ NSW Treasury, Budget Estimates Paper No. 3, p. 4 - 27.

As reported by the Commissioner (*Annual Report 2000-01*, p. 2), program teams were established to ensure the input of district staff, volunteers and salaried staff. More than 100 members of the various teams, which covered the full gamut of issues facing the Service⁸⁷, had contributed to the design and implementation of the new organisational structure and supporting mechanisms. The *Annual Report 2000-01* also referred to work on the various programs that collectively formed the change management process being coordinated and facilitated by the Strategic Development Division and advised (*Annual Report 2000-01*, p. 8):

Of significant importance, and a key contributor to the process, was a newly designed project management system that enabled a coordination template and methodology to be tested and then applied to the entire process. That it worked is a testament to the skills and dedication of a small band of people who worked tirelessly to keep the program on track and in sequence. The project management system used has deservedly been nominated for a National project management Award.

The follow-up to the 1998 Performance Audit (NSW Audit Office, 2001c, p. 32) found eight of the 14 recommendations reported as implemented, although not all had taken effect. Also it noted the RFS was currently implementing arrangements which aimed to address many of the outstanding issues raised in the original audit (NSW Audit Office, 1998).

Effective PM was one of 12 goals included under *Sound Leadership and Management Practices* in the RFS *Annual Report* for 2001-02. Under *what we did* were guidelines and templates produced and endorsed and regular reports on corporate projects to the Corporate Executive Group; under *how well we did it* were templates in use for major corporate projects. Under *future goals* were: promote and disseminate guidelines; extend centralised reporting on key projects; and strengthen link to strategic planning. PM techniques were being “applied to all major Service projects enabling co-ordination of resources and resource allocation, and providing the facility for regular reports to the Corporate Executive Group”. Subsequent Annual Reports⁸⁸ indicated effective PM was a corporate goal within the RFS (Figure 7.4).

⁸⁷ The issues identified included: Workforce Planning and Organisational Structure Review; Communications and Change Management; RFS Award Negotiating; Strategic / Business Planning; Zoning Program; Information Management; Financial Review; Legislation, Service Standards and Policy Review; and Accommodation Review.

⁸⁸ The *Annual Report 2007-08*, under the heading of *Management*, referred to key projects being managed using the Service’s PM methodology. The RFS Corporate Plan 2007-09 included, under the list of Programs (p. 2), “ensure effective and efficient management of major service projects”. Performance indicators were key corporate projects being managed using the Service’s PM methodology and key projects completed on time and on budget.

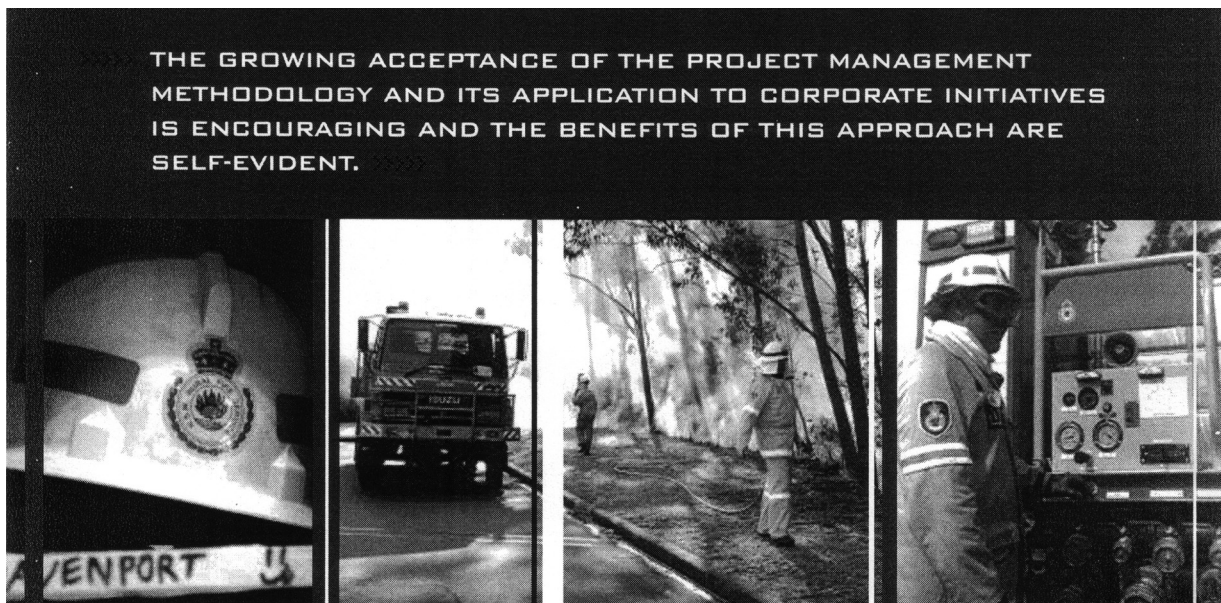


FIGURE 7.4: Reference to the project management methodology under the Strategic Development heading, *Rural Fire Service Annual Report 2004-05*, p. 27.

7.4.2 “Meso-discourse” texts

In Table 7.1, I have interpreted “domain specific discourses at various intermediate levels” (Figure 1.8), according to my understanding of Alvesson and Kärreman’s (2000, p. 1133) conceptualisation of “meso-discourse”. Referring to use of “meso” in the context of organisational communications research under the metaphor of “voice”, Putnam and Boys (2006, p. 556) say that in the majority of research where “meso” is employed, it is an approach that is sensitive to language but centres on broad patterns linked to local and global contexts. They refer to discourse “with a big ‘D’” as being studies of the general and enduring systems of texts or the culturally standardised constellations that constitute organisations and individuals in a particular way. This approach subsumes work that examines the micro-practices of language and focuses on intertextuality, a notion attributed by Cunliffe (2003, p. 489) to Kristeva who:

...suggested that writer, reader and a myriad of exterior texts (that have influenced both the writer and the reader) intersect in a textual space to create meaning. If we situate the notion of intertextuality in the research context, then meaning is constructed as researcher, “subject” and reader interact in a particular moment of time and space – each being informed by prior experiences, speech genres and texts...we, as theorists and bricoleurs construct new arrangements...In other words, we make meaning between us as we talk and listen to the voices of others and of self.

Through my reading of the texts, I endeavoured to elicit two perspectives on the RFS response to the issues coming out the “grand discourse” texts. The first was the practice perspective gained from:

- the RFS Strategic Development Division’s implementation of the program teams (APPENDIX 13);
- the affiliation members’ account of the RFS engagement within the roles agreed with the Service; and
- the RFS submission to the Australian Institute of Project Management Achievement Awards in August 2001.

The second was the research perspective. Lesley Bentley’s experience in the RFS became the subject of her Master of Project Management Thesis, *The Use of Soft Systems Methodology and Project Management Practice for Organisational Change*, (University of Technology, Sydney, 2001a) and affiliation members’ appreciation (individually and collaboratively) of the RFS engagement was incorporated into a number of the research outputs listed in APPENDIX 1.

7.4.2.1 Practice perspective

Requirements for the RFS change management process emerging from the “grand discourse” texts particularly included:

- Maintaining volunteer support was essential for the functioning of the RFS.
- The RFS placed great emphasis on contact and communication with volunteers and the community in general.
- The RFS was cooperating with government inquiries that it saw as an opportunity for demonstrating the transparency with which the Service was managed.
- Transfer of fire control staff from local government to State (RFS) employment was recognised in the public domain as a complex, long-standing and contentious issue that required negotiation about and flexibility in implementation.
- With the transfer, the fire control staff would still be based with their local brigades.
- The RFS was one member, albeit the most prominent, of a complex bush fire management infrastructure that included other NSW public sector agencies, ensuring a smooth transition would require the RFS to negotiate with them.
- The one-year deadline set for the transfer of fire control staff was non-negotiable.

- While the transfer was the immediate goal, it was recognised as part of a longer-term process of structural, cultural and organisational change within bushfire fighting services.
- The transfer would have to be undertaken without any interruption to usual RFS functioning and largely within existing resources (APPENDIX 12).

Overall stewardship of the RFS organisational change initiative had been given to the OCCISC which met monthly to review the RFS change portfolio and endorse findings and it was supported by the PMWG chaired by the Assistant Commissioner Strategic Development. Details of the individual members of the Strategic Development Team were provided on the RFS website and profiles given of each member (as in Figure 7.3 for Lesley Bentley). Nine areas were identified for reform (Figure 7.5).

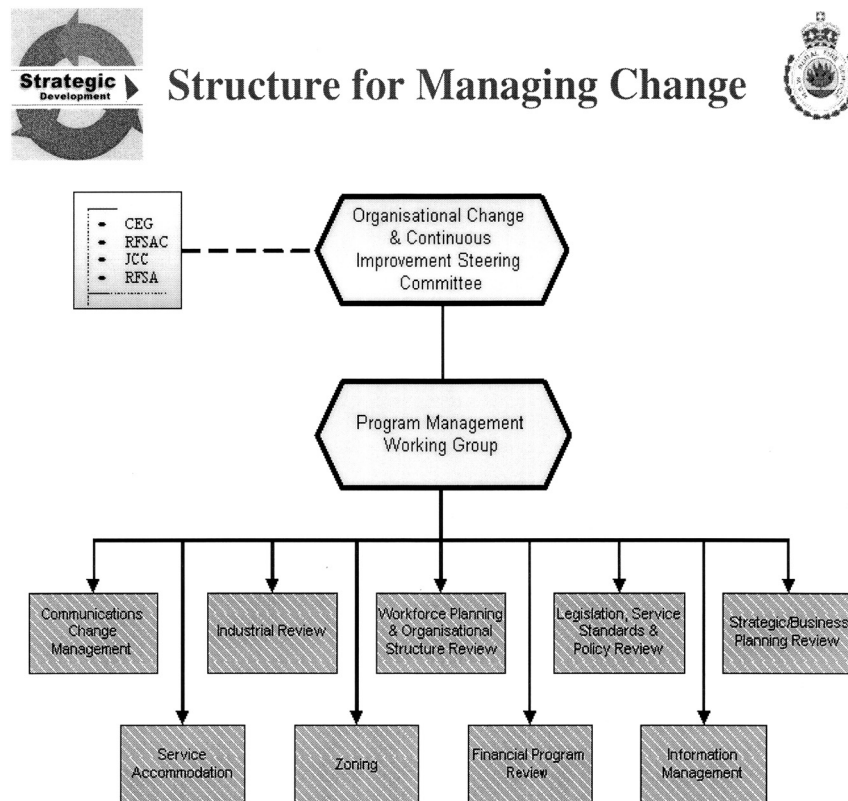


FIGURE 7.5: NSW Rural Fire Service structure for managing change (published on <http://www.bushfire.nsw.gov.au/strategicweb/change.htm> accessed 16/11/2001).

Nine program teams were established comprising over 100 members (APPENDIX 13). The program managers were required to perform normal functional duties while prioritising work to deliver the change initiatives (Bentley et al., 2002, p. 3). Recognising the volunteer centred culture of the RFS and the resource constraints, the teams comprised RFS staff and other stakeholders who responded through expressions of interest inviting their participation (Costello et al., 2002b, p. 10).

At the outset, the collaboration partners had recognised the change needed to be tackled as a whole system and scoping of the work was undertaken within a portfolio of projects structure (Costello et al., 2002a, p. 52). The objective was progression of a cohesive, responsive and accountable emergency service through the smooth transition of the fire control officers and district staff of the RFS in order to improve service delivery to the broader community and accountability of all Service officers (Bentley et al., 2002 presentation) that unpacked into eight programs (Figure 7.6).

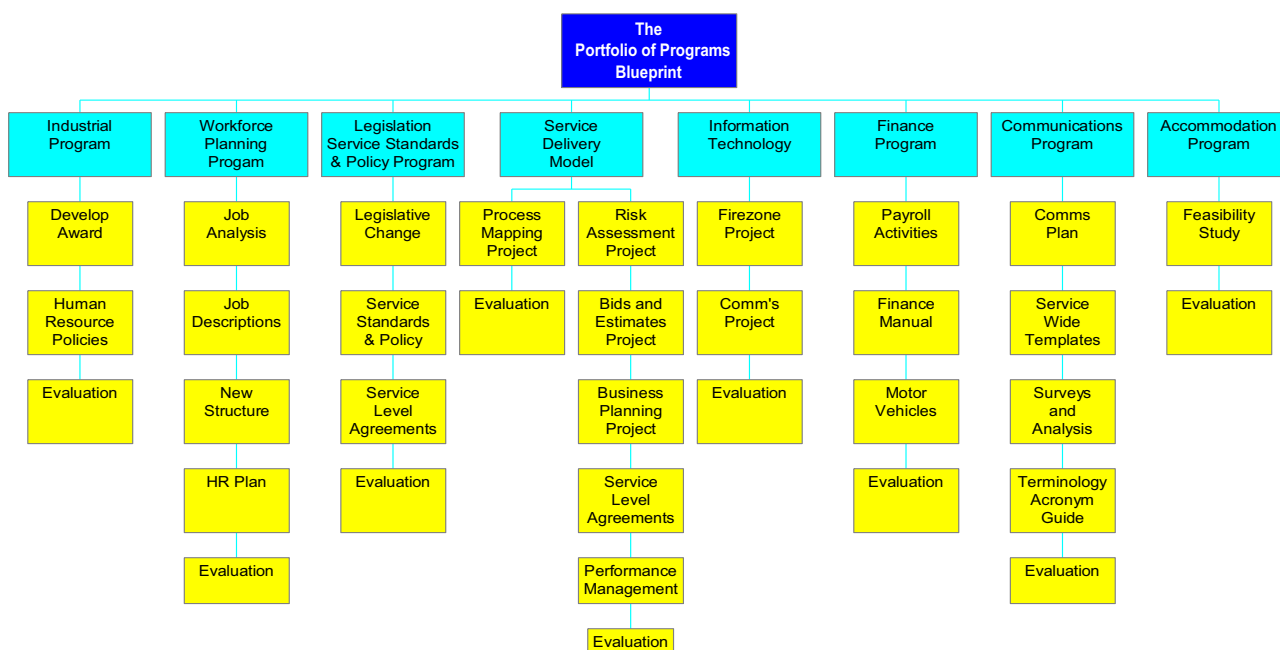


FIGURE 7.6: Portfolio of Programs Structure for the Rural Fire Service change management initiative (Bentley et al., 2002 presentation). The work packages listed at the project level are indicative only.

For affiliation members, the portfolio represented the “big picture” and programs the strategic level (Bentley, 2002b, p. 3), both of which we found difficult to conceptualise and largely intangible, thereby requiring extensive integration of the often-conflicting views and expectations of the multiple internal and external stakeholders. This created a high level of complexity and the need for a (“soft”) systemic approach that enabled stakeholders to debate, empathise and accommodate each others’ viewpoints.

As Lesley Bentley (2001b, p. 1) subsequently observed, it was considered that specific projects or work packages could be more clearly defined. Reporting on implementation of the programs, she referred (Bentley, 2001b, p. 1) to applying a combined SSM and PM practice approach (termed SSPMA). However, the action taken was reported against the nine units of the Australian National Competency Standards for PM which were equivalent to the nine knowledge areas in *the PMBOK® Guide* (PMI 2000; 2004). An evaluation within this framework was incorporated into the RFS submission to the

Australian Institute of Project Management Achievement Awards in August 2001 as reported in the RFS Annual Report 2000-01. One requirement for the Award was demonstration that all nine PM elements had been met (Costello et al., 2002a).

7.4.2.2 Research perspective

According to Colebatch (2010, p. 76), there are differences in the way academics and practitioners apprehend the world and talk about it:

Practitioners tend to appraise ideas about governing by reference to what they already know, and in particular to their own practice – questions like “What does this tell me that I don’t already know? What can I do as a result of knowing this that I couldn’t do before? What questions and puzzles that I confront are clarified by this knowledge?” Academics believe that they are asking similar questions, though they tend to see new ideas through existing conceptual screens. Those using an “interpretive” approach would be asking “how does the public value approach frame the problem, the participants and the appropriate modes of practice and how do participants use this framework of ideas and relate it to other frameworks in the shaping of practice?”

Endeavouring to combine both perspectives, Lesley Bentley (2001a) evaluated the SSPMA as it facilitated the RFS organisational change process (Bentley, 2001a, p. 1). As she explained, the SSPMA provided a framework for systemic thinking about a problem situation, which then enables purposeful action to follow (Bentley, 2001a, p. 9). Its value was seen to lie in the debating, learning and conceptualisation processes that result from participants comparing problem situations with possible solutions (Bentley, 2001a, p. 10). Various evaluation models were applied to aspects of the RFS change program / portfolio⁸⁹ as no single model, suitable for evaluating a combination of SSM and PM could be sourced from the current literature (Bentley, 2001a, p. 2). Her evaluation, undertaken through six models and at three levels⁹⁰ (2001a, p. 3), was conducted throughout the project cycle as well as through post program evaluations with program manager participants. She reported SSM being applied in structured scoping sessions to assist participants make sense of the complexities:

The approach had given me a framework for systemic thinking and the ability to achieve agreed resolution of problem situations in facilitated sessions, which led to purposeful action being taken. I considered that my knowledge of this process based on previous

⁸⁹ Defined, following the Central Computer and Telecommunications Agency (CCTA) UK, 1999), as the coordinated management of a portfolio of projects that change organisations to achieve benefits that are of strategic importance.

⁹⁰ *Organisational*: - contribution of SSM in making this happen and enabling sense to be made of the process; *Technical* - benefits of using PM and success in terms of quality standards and the PMBOK® Guide; *Personal* - success / benefits of the process for individual program managers and other RFS staff affected by the change as determined from surveys, interviews and storytelling.

trials in the Police Service was valuable. I also had a clear understanding of the theory and found that demonstrating the practice was the most effective way to communicate it. Trying to communicate it verbally to others had previously caused frustration and was a fruitless exercise' (Bentley, 2001a, p. 21).

As was the case with Professor Stretton (1998) during the Soft Systems for Soft Projects collaboration (Figure 6.9), the SSM model in this case was Checkland's (1981) seven step model, albeit interpreted in the light of Checkland and Scholes (1990) wherein emphasis was placed on how the steps fit together rather than how each step is taken in isolation (Bentley, 2001a, p. 12).

7.5 Engaging with the POM Model

At the time, affiliation members were also considering how the POM model might apply to the DPWS Managing by Projects (MbP) initiative as a sense-making framework (Crawford and Costello, 2000, p. 9). As in the NSW Police Service application (Figure 6.10), in the DPWS application (Figure 7.7) individual POM model elements (APPENDIX 11) rather than the relationship between them were considered. In this case, however, only the researchers were working with the model whereas in the NSW Police case both the agency representatives and researchers had been actively engaged. A major difference that emerged from comparing the two applications was in relation to POM elements 7a, b and c, respectively formally organised information systems, technology support, and the knowledge needed to operate, maintain and modify the technology. Within DWPS the primary systems for information support were the agency's intranet and electronic mail system (Crawford and Costello, 2000, p. 12) whereas in the Soft Systems for Soft Projects collaboration it had been the PMIS.

Robert Howard (2002) examined the POM in Figure 7.7 as applying to the DPWS MbP program. He referred to MbP as a process for introducing a PM matrix system within an organisation exhibiting significant hierarchical features and examined its implementation using DPWS published literature as his primary information source⁹¹. Howard viewed SSM as a problem solving methodology that avoids many of the scientific reductionist approach's problem solving limitations. Further, he considered SSM provided the tools necessary to accommodate the cultural elements of the MbP organisational change process.

⁹¹ In his UTS Masters of Project Management thesis, Howard (2002, p. 8) explained that he was reluctant to interview senior managers who had a significant level of career ownership of MbP. Also, he thought it not appropriate to use internal documents not intended for wider distribution in his study.

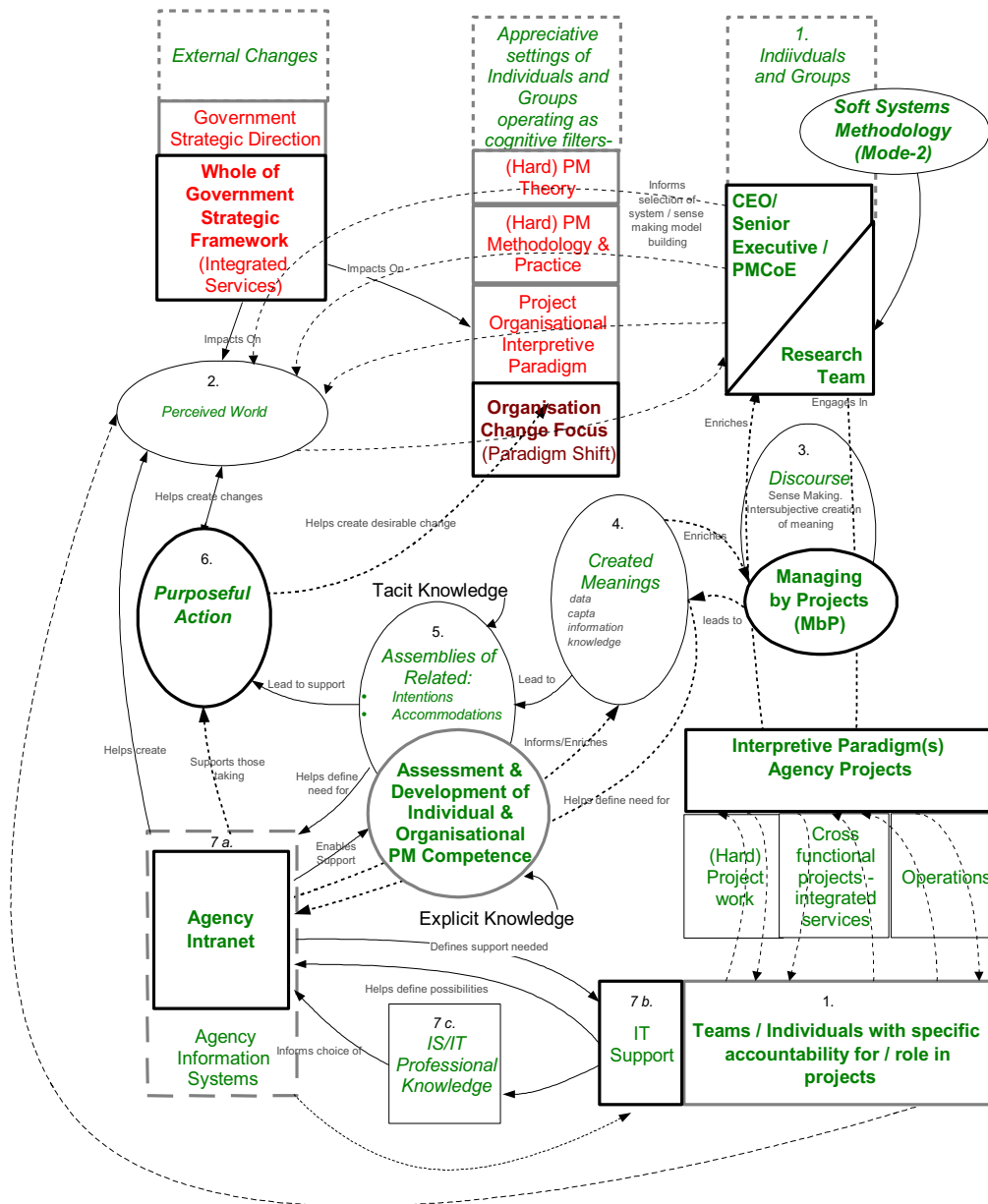


FIGURE 7.7: An adapted POM model as applied to the NSW Department of Public Works and Services MbP Program (Crawford and Costello, 2000, p. 318 and Costello et al., 2002a, p. 51).

From his examination, Howard (2002, pp. 126-39) developed an alternative interpretation of the POM model (Figure 7.8) whereby the IS element should be broadened to create an awareness of all communication options. In his interpretation, the POM model represented a continuous process of learning and understanding, especially when seen in the context of a continuously flexible organisation. Strategies he suggested for promoting this change included (Howard 2002, pp. 136-7) less reliance on proscriptive project procedures, demonstration of improved upward and sideways communication, greater acknowledgement of the need for interaction between all groups and individuals within the organisation, and breakdown of centralised functional groups.

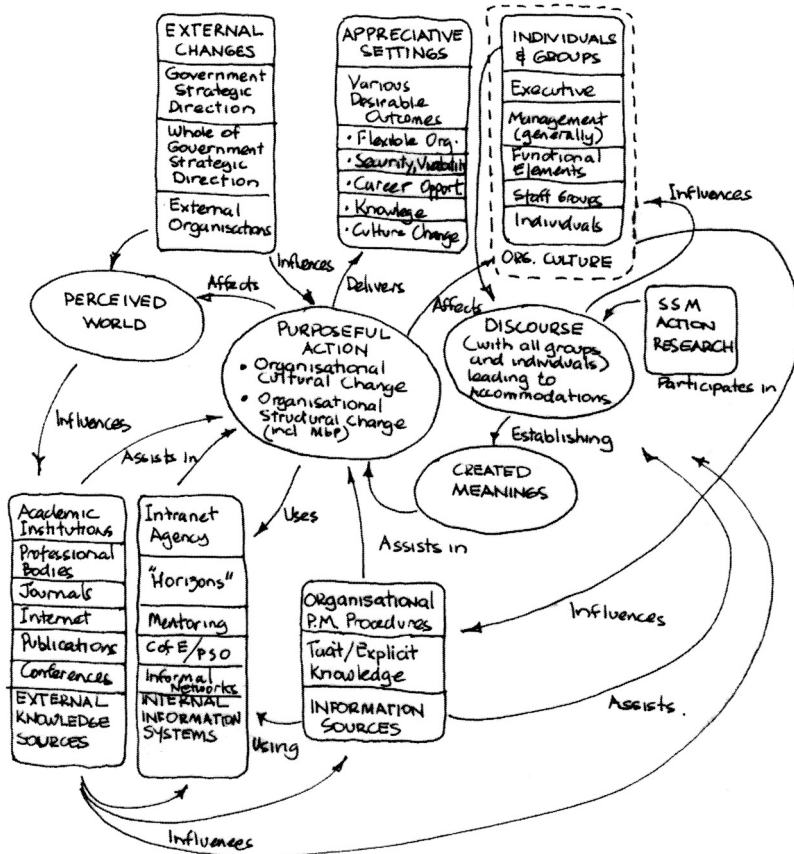


FIGURE 7.8: An alternative interpretation of the POM model for the Department of Public Works and Services "Managing by Projects Program" (Howard, 2002, p. 138)

In her RFS study, Lesley Bentley (2001a, p. 30) referred to a process wherein the SSM (seven-stage) steps became more iterative and the outcomes from the facilitated sessions improved with a greater level of complexity and debate being managed. She described how the POM model informed the RFS facilitated sessions as an approach to a shared understanding of the organisational context, saying this was demonstrated by the program managers' noticeable adoption of the facilitator's project language:

The participant's thinking had been altered...They became more sophisticated and the terminology had been incorporated into their dialogue...[they] came to realise that they shared common goals and found that the structured debate gave them an effective way forward to translating their ideas into agreed actions and outcomes

We understood "discourse" in the POM model to be a complex social process embodying politics as well as rational decision making (Crawford and Costello, 2000, p. 7). During the RFS partnership our perspective was an insider one that was not amenable to analysis as later done by Crawford (2006). She used discourse analysis principles to study the relationship between espoused theory and practice concerning organisational PM capability as discernible from reports over a five-year period within an organisation. Within the RFS engagement, the most tangible expression of the affiliation's discourse occurring about the POM model was in the developing PMIS.

7.6 Project Management Experience

Evidence of the success of RFS change portfolio is apparent in the “grand discourse” texts which acknowledged the PMIS as a key contributor. Also, the Highly Commended citation by the Australian Institute of Project Management (NSW) Achievement Awards (Figure 7.9) show it was well considered by PM peers. Later RFS texts indicated the PM format became the Service’s PM methodology at the strategic planning level, while other project methods (including PRINCE2⁹²) could be applied within particular areas.

Two aspects of the structures supporting the SSPMA process are reviewed below. First, is the project office, which Crawford (2006, p. 80) later found to be the most important recurring theme from her analysis as relating to organisational PM capability. The second is the PMIS as adapted for the RFS.

7.6.1 Project office

The RFS Project Planning / Support Office operated as a virtual team. Supporting key managers of priority agency projects, it engaged in strategic planning, training, mentoring and coaching (Crawford and Costello, 2000, p. 6). As Lesley Bentley (2002a, p. 4) later wrote its function was to facilitate rather than control.

The DPWS, as reflected in Figure 7.7 had adopted a different approach. Here the research team was depicted as separate from the DWPS Senior Management and personnel in the internal Project Management Centre of Excellence (CoE) implementing MbP. The RFS, therefore, arguably represented a fundamental difference in approach from the implied largely technically rational approach evident at DWPS⁹³ and indicated for the PM field generally (Crawford, 2006, p. 78). According to Crawford (2006, p. 77), while, it is generally agreed that one size does not fit all, there is some consistency in the types and functions provided by a project or program management office.

⁹² The RFS *Annual Report 2005-06* (p. 10) under Information Services referred to a key achievement during the year being implementation of a standards based (PRINCE2) project management methodology.

⁹³ However, an ARC /SPIRT project with DWPS as industry partner and the UTS Research Centre for Vocational Education and Training (Hager et al., 2003; 2000a and 2000b) was investigating generic (or soft) skills such as teamwork, communication and planning and organising in workplace reform as they represented a challenge to narrow conceptions that focus simply on specific technical skills.



SOFT SYSTEMS: LIFE SAVING RESEARCH

A CASE STUDY IN USING THE SOFT SYSTEMS PROJECT MANAGEMENT APPROACH IN A STRATEGIC CHANGE INITIATIVE FOR THE NSW RURAL FIRE SERVICE.

When the Black Christmas Bushfires ripped through NSW at the end of 2001 it seemed there was very little anyone could do. The truth of the matter is that there was a whole lot to do, just very few who knew how to do it. As most of us watched on helplessly as houses burnt, the Rural Fire Service (RFS) battled away with the skill and precision necessary to combat a foe as brutally destructive as fire.

The success of the RFS in saving lives and property during that period highlighted the need to have such a service working as a cohesive unit. Not only was there the front line fight to contain the flames but behind the scenes the RFS had to win the communication, organisation and resource battle as well. The victory is all the more impressive considering it was achieved against a background of organisational change.

In June 2000 the NSW government announced legislative measures requiring the restructuring of the management and organisation of the NSW fire control services. Fire control staff, who to date were employees of local governments, were to be transferred to and come under the control of the Rural Fire Services. The Rural Fire Services project, which required a concerted program of organisational change to support the growth and transition, provided an excellent opportunity to put into practice research undertaken at UTS.

In 1997 Dr Lynn Crawford, Senior Lecturer in the Project Management & Economics program at UTS, in collaboration with the NSW Police Service began work on developing a soft systems framework for understanding the dynamics of project management methods being implemented in complex organisational environments. Ms Lesley Bentley,

a graduate of the UTS Project Management Masters program, transferred these concepts into a Soft Systems Project Management approach (SSPM) to assist in bringing about the sort of change necessary in the Rural Fire Services project.

"In my experience, SSPMA has proved to be a particularly useful approach to projects involving organisational change, development or restructuring. By their nature these projects are generally soft, ill structured and ambiguous, falling outside the traditional 'hard' engineering/construction type project," Bentley said.

Recognising the importance of a system that focussed on the communication and personal skills side of change, the Rural Fire Services seconded Bentley to assist on the project. It was no easy task.

The Rural Fire Services community based organisation has an estimated 70,000 volunteers. As this project involved many community groups throughout NSW it was crucial to the success of the project that the volunteers give support and take ownership of the project. The Soft Systems approach provided flexibility in the initial exploration of the perceived problems and issues, enabling the solution to grow from the ground up in a way that best fit the requirements of the organisation and allowed for the greatest amount of community input.

The project received an Australian Institute of Project Management (AIPM) Highly Commended in the AIPM NSW Chapter Project Management Achievement Awards (2001) for successful strategic change initiative in the NSW Rural Fire Service using the Soft Systems Project Management approach.

FIGURE 7.9: The Rural Fire Service / UTS Project Management Program research partnership (Faculty of Design, Architecture and Building, *Exhibitions*, Spring 2002, www.dab.uts.edu.au).

Hobbs et al., (2008, p. 547) refer to organisations responding to the challenges of new contexts by developing new more flexible organisational forms, in particular project management offices (PMOs). They conclude (2008, p. 554) organisational tensions are the primary drivers behind implementation and reconfiguration of PMOs. In the RFS case, these tensions were largely accommodated at the "grand discourse" level. Accordingly, the RFS experience offered a different perspective on a PMO, one more apparently in line with the argument in Aubry et al., (2007, p. 328) that the study of complex relationships within an organisation (linking strategy, projects and structures) should turn away from the traditional positivist approach to a new conceptual

framework. They propose a theoretical framework drawing from three complementary fields – innovation, sociology and organisational theory – to form an understanding of the PMO and PM. Also, there is the issue of transferability of private sector approaches to public sector contexts, for example as observed by Fleming and Lafferty (2000, pp. 165-6) in the context of NPM and police services:

Techniques derived from the private sector cannot be transposed in an unmediated fashion to public sector organisations such as police services. Public sector accountability is usually more complex than the primary accountability of private corporations to stakeholders...The nature of police work creates a tension with community attitudes...New management techniques do not adapt readily to the police context. Police cultures articulate very different values (such as loyalty to fellow officers) from those articulated in new management techniques (such as individual performance and organisational accountability).

7.6.2 PMIS development

During the Soft Systems for Soft Projects collaboration, as reported in Crawford and Costello (2000, p. 8), our strategy had been to build the PMIS as an application on existing / developing agency platforms using existing agency PM approaches. Most of these were available in the PM mainstream at the time and were essentially “hard” project management systems developed for projects with well-defined goals and methods in the traditional project based industries (Crawford, 1998, p. 14). They included the *PMBOK® Guide* and the NSW DWPS (1997b) *Project Management Guideline*, developed to promote an understanding of some of the requirements for successful management of a project. The PMIS development that had proceeded in parallel at the NSW Police Service and the UTS site was not a static engagement, but was continuously being reshaped by a complex flux of events and ideas at the organisational level. Both versions of the prototype PMIS were user friendly and flexible and supported easy communication. From its earliest development the PMIS was functional as a decision support system and the participating project managers / team members were able to generate workable outputs according to user ability and requirements (Crawford and Costello, 2000, p. 8). Also, as the PMIS iteratively progressed, the users of the system at all the trial sites developed the capability to administer the system and undertake new design.

In its transfer to the RFS, the PMIS became the system supporting the SSPMA. It provided the template wherein, during a facilitated process that encompassed RFS

management and staff, volunteers and community representative and researcher members, different “worldviews” were elicited, compared and vigorously debated to identify common objectives, realistic solutions and necessary actions (Bentley, 2002a, pp. 11-12). In her role as facilitator, Lesley Bentley reported she strove continuously to find ways to develop the capability of individuals to undertake the work involved in order to empower, enthuse and create champions in teams. This demanded great patience and giving individual team members the encouragement and time necessary to talk through difficult issues. In turn, she said that she was sustained by their professionalism and goodwill. Outputs (deliverables) identified during the process were allocated to program teams that took responsibility for their completion and formed smaller project teams (Costello et al., 2002a, p. 52). The nine PM functions were integrated into management of each program⁹⁴ (Bentley, 2002a, p.12).

During the Soft Systems for Soft Projects collaboration, the PMIS had been a Lotus Notes application. Its aim was to integrate with existing agency applications rather than provide an expert PM application as illustrated by extracts from a copy of screen dumps (screen capture) from a UTS version (APPENDIX 14). After adaptation for the RFS, access was provided to the sponsor, senior executive, project office and all program managers. In this respect, it facilitated communication across the organisation at the strategic level. It was not possible in the time frame to extend an online connection to all team members across NSW; however, a MS Word version was developed for this purpose. As implemented at the RFS, the PMIS enabled all program and project information and status to be captured, stored, monitored and communicated, reported and archived by the project office which became a repository of program / project information and knowledge (Bentley, 2002a, p. 13).

7.7 Research Themes

Our engagement at the RFS was an opportunity to test the PM methodology embodied in the PMIS in another context. As in the initial Soft Systems for Soft Projects engagement, any research would have to be undertaken within the constraints of the agency’s practice imperatives. Following from the research themes I had established for looking back on the Soft Systems for Soft Projects collaboration (Table 4.2), I

⁹⁴ For each output identified in the brief, a work breakdown structure was prepared to manage time and estimate costs and resources...Milestones and activities were identified for each output and schedules were formed to determine the level of human resources necessary to complete tasks. Assumptions were explored and a risk assessment conducted (Bentley, 2002a, p. 13).

proceeded to consider the RFS engagement within that framework. There was, however, a fundamental difference. The engagement with the NSW Police Service was over a longer timeframe and involved pushing the boundaries of PM research and practice whereas the RFS represented more a consolidation than a new direction.

7.7.1 Conceptual models

“Hard” and “soft” were communicated during the RFS engagement through our adaptation of the Turner and Cochrane (1993) matrix (Figure 1.13) and Checkland’s (1981) seven stage model as developed in Checkland and Scholes (1990). We acknowledged that our interpretation of the POM model (Figure 6.10) informed the strategic framework for supporting the RFS change management process and engaging stakeholders (Costello et al., 2000a and 2000b) and it continued to be the subject of on-going dialogue between us. We did not, however, examine its theoretical underpinnings as applying in PA where, as argued by Stivers, 2000b, p. 132) when discussing PA theory as discourse, theory can have more than one meaning:

When I apply it to my own work, I do not imply the explanatory scheme that is built block by block out of empirical hypothesis testing. I mean instead something that is part interpretation and part critique. To me interpretation entails sense-making; taking a more or less inchoate bundle of events and processes – what might be thought of as a situation or group of situations – and putting a frame around them based on more or less conscious assumptions about what is likely to be important, significant or meaningful... [nevertheless] interpretation remains (constitutively) open, therefore contestable in a field like public administration, where the focus of theorizing (of whatever sort) is ongoing practical work in actually existing agencies by actually existing people, who have their own “takes” on what they do.

7.7.2 Lessons transfer

In her thesis (2001a) and subsequent publications (2001b; 2002a; 2002b) Lesley Bentley reported lessons learned from three perspectives. The first was from the Australian / New Zealand Quality Standard (ANZQS) in PM perspective that suggested organisations need to learn from projects and that information necessary to enable learning should be defined and captured (Bentley, 2001a, p. 58). She reported survey respondents indicated that they had learnt substantially from their programs and projects and agreed that systems were in place in the RFS to collect, store, update and retrieve program and project information as a result of the portfolio. The second

perspective was lessons learned from stories, comments and tips,⁹⁵ and the third was concerned with identifying lessons learned from the application of SSM to PM.

From her RFS experience, Lesley Bentley concluded (2001a, p. 67) SSM supported effective PM practice and reported lessons captured for future project managers (2001a, p. 68). Her findings were incorporated into our collaborative papers wherein we considered the RFS engagement within a wider context of PM theory and practice (Costello et al, 2002a and 2002b; Crawford et al., 2003). Our reporting focus was, however, on the practice rather than the theoretical perspective. Accordingly, rather than considering the epistemological processes by which the learning was being created, we considered the RFS lived experience against Checkland's (2000b) framework of situation, people and process wherein he sought to bring out the emergent properties of SSM in use from a symposium of reflective practitioners (Costello et al.,2002a)

A key objective of the RFS Strategic Plan (Figure 7.2) had been a continuous learning culture recognising the value of all Service members and key strategies for its achievement were focused on developing a team culture throughout the Service and a strategic human resource management approach that promoted engagement of volunteers and contribution to all aspects of community life. In this respect, the RFS arguably was reflecting attributes of a Learning Organisation as indicated in Table 7.2. On these attributes, the RFS appeared engaged in a different process than reported in Turner et al. (2000) who outlined the practices⁹⁶ by which project-based organisations use structured experience to aid development of individuals and how they capture their experience of projects to feed back into the improved management of future projects and the experiential learning of individuals (Turner et al., 2000, p. 2).

As indicated by my reading the documents in Table 7.1, the RFS as an organisation rapidly adopted the SSPMA methodology as its framework for strategic planning / management of key corporate projects and this continued well after the practitioner-researcher partnership had concluded. A conversation between some 142 senior public service representatives, academics and consultants from Commonwealth countries in 2007 (CAPAM, 2007, p. 7) points to possible reasons for the successful

⁹⁵ These were grouped as demonstrating: a will to win; challenging the status quo; taking measured risk; fostering flexible systems and behaviour; legitimising judgement-based decisions; creating and maintaining a focus; involving the customer; developing teamwork; and building trust.

⁹⁶ Use of internal PM procedures; end of project reviews; benchmarking; PM self-support groups or conferences; use of the Intranet; moving people around the organisation; and development of people.

functioning of the RFS engagement. As noted there, while public service practitioners and academics do their work differently and the interface between them is complicated, nevertheless, it provides an opportunity to create new knowledge (CAPAM, 2007, p. 8).

Structure	Learning Organisations have flat managerial hierarchies that enhance opportunities for employee involvement in the organisation. Members are empowered to make relevant decisions. Such structures support teamwork, strong lateral relations, and networking across organisational boundaries both internal and external (e.g. project teams). These features promote systems thinking (see page 16), information sharing and openness to information necessary for organisational learning. Temporary forms are favoured as they cater for current needs but can be shaped through experimentation to respond to future changes.
Information systems	Learning Organisations require information beyond that used in traditional organisations where information is generally used for control purposes (single-loop learning). Transformational change (see page 16) requires more sophisticated information systems that facilitate rapid acquisition, processing and sharing of rich, complex information that enables effective knowledge management.
Human resource practices	People are recognised as the creators and users of organisational learning. Accordingly, human resource management focuses on provision and support of individual learning. Appraisal and reward systems are concerned to measure long-term performance and to promote the acquisition and sharing of new skills and knowledge.
Organisational culture	Learning Organisations have strong cultures that promote openness, creativity and experimentation among members. They encourage members to acquire, process and share information, to nurture innovation and provide the freedom to try new things, to risk failure and to learn from mistakes.
Leadership	Like most interventions aimed at securing significant organisational change, organisational learning depends heavily on effective leadership. Leaders model the openness, risk taking and reflection necessary for learning and communicate a compelling vision of the Learning Organisation, providing empathy, support and personal advocacy needed to lead others towards it.

TABLE 7.2: The main characteristics of the Learning Organisation (Iles and Sutherland, 2001, p. 65) in the context of change management in the NHS.

7.7.3 Practice guidance

Although the *Post Implementation Review Guideline* (Figure 3.7) in January 2001, (NSW Government Asset Management Committee, 2001), it was not applied to the RFS engagement. While it was intended to be generic, it was developed in the context of asset management / procurement whereas the RFS PM engagement concerned strategic / tactical management. Of more relevance appeared the NSW Premier's Department guidelines (1999) for projects involving service integration and collaboration across agencies. These included case studies and models; however, it was noted (1999, p. v) that these were not "one size fits all" answers but require flexibility and a willingness to modify the models and use them creatively.

A PM lessons learned format from PRINCE2⁹⁷ was also considered by affiliation members (Costello et al., 2002a, p. 53) who found, however, that while generic quality

⁹⁷ Accessed online through <http://www.ogc.gov.uk/prince/index.htm> (the latest being on 19/6/2003).

standards were met during the RFS engagement this did not capture the full richness of the experience. They concluded that themes emerging from the stories provided by RFS practitioners supported a view that successful projects require strong leadership as well as strong management and are founded on team work, and that plans need to be flexible enough to support unavoidable changes; and that direction and a focus on goals is more important than detailed schedules.

7.8 Concluding Annotation

This chapter has reported on the carrying forward of lessons learned from the first iteration of my inquiry (Chapter 6) to the RFS (the second iteration) which became a partner in development of the PM methodology and supporting PMIS. While the initial Soft Systems for Soft Projects engagement had entailed pushing the boundaries of PM research and practice, the RFS engagement represented more of a consolidation than a new direction, including our consideration of the POM model. Although affiliation members were using it to inform their “big picture” organisational view, where SSM was being applied it was through mainstream methodologies / methods. The circumstances of my HPRB engagement (Chapter 8) caused me to critically re-examine how the lessons learned during the Soft Systems for Soft Projects collaboration could be appreciated with a view to implementing them at my new practice-research site.

CHAPTER EIGHT: Third Iteration Case Study (2001-2006) – Researching at Boundaries of Project Management Practice and Theory

Many of the approaches to organisational change found in the literature give the impression that change is (or can be) a rational, controlled, or orderly process. In practice, however, organisational change is chaotic, often involving shifting goals, discontinuous activities, surprising events and unexpected combinations of changes and outcomes. Accordingly, change can be understood in relation to the complex dynamic systems within which change takes place. (Iles and Sutherland, *Managing Change in the [United Kingdom] National Health Service*, 2001, p16)

8.1 Summary

My account of the third iteration of my inquiry into the developing thread of PM practice and research beginning with the Soft Systems for Soft Projects collaboration is constructed from the position of a reflexive insider practitioner-researcher. Carefully observing the ethical and practical requirements of both roles, I would be engaging with multiple, changing discourses that were transforming the organisational context (perceived world) of my employing agency.

The practice focus at HPRB was developing its IS/IT capability to enable the Boards to provide online services to registered health professionals and to the public generally in accordance with NSW Government policies. Initially this was to proceed through connection to the GLS (a major external transformation) but this later changed to an internal development.

As planned, my HPRB *Online Services Development Portfolio* inquiry was to employ an AR methodology as had been the case during the Soft Systems for Soft Projects collaboration; however, this became precluded for my thesis writing phase. For my retrospective appreciations I had adopted the premise in Phillips et al. (2004) that discourse analysis provides a coherent framework for making certain ways of thinking and action possible and that making sense is a textual process. Accordingly, I would proceed to construct my appreciation of the HPRB shaping discourses, as could be determined from representative texts / practice documentation, using the framework I had developed for reading these texts. These would be determining my scope of action as reflected in the developing PMIS which had been approved for trial at HPRB. The PMIS carried forward in a concrete way the affiliation's learning during the Soft

Systems for Soft Projects collaboration about how PM may be introduced and grown as an organisational capability.

The HPRB documentation did not contain the equivalent of the “grand discourse” texts that had provided a structuring force for framing meaning in my other case studies, thereby making a connection between text and action problematic. Therefore, I would adopt two frames for engaging with the texts from different epistemological positions. The first was a project governance frame, which I equated with “hard” PM views of project control and with detail complexity. The second was a “soft” POM model informed frame as it might contribute to holistic appreciation of dynamic relationship complexities between the texts and HPRB’s internal organisational processes. When applied together to practice, these frames offered a different perspective than could be gained from PM mainstream approaches.

Following Orlikowski (2002, p. 1), I perceived myself to be engaged in a process for acquiring Mode 2 knowing, whereby individuals are understood to act knowledgeably as a routine part of their every-day activity. They are purposive and reflexive, continually monitoring the on-going flow of their own and others’ actions and the contexts in which their work and, in my case co-located research, are constituted.

8.2 Scope of Engagement

My position throughout my inquiry was Special Projects Officer (Figure 8.1). Responsibilities under my position description⁹⁸ included overall management of a change management strategy to position HPRB to meet the Government’s commitment concerning online services and, in particular:

- Promoting the capability of HPRB to sustain change processes through growing project management maturity.
- Supporting development of individual and team skills by training and mentoring.
- Progressively building a technical infrastructure capable of supporting continuous improvement. Initial focus was to be on a smooth transition (from existing legacy systems) to a flexible, more cost effective platform to meet current business needs while having a capability to respond to changes in demand / technical environment.
- Implementing an information / reporting system to respond to the new environment.

⁹⁸ Used with the permission of the Director, Health Professionals Registration Boards.

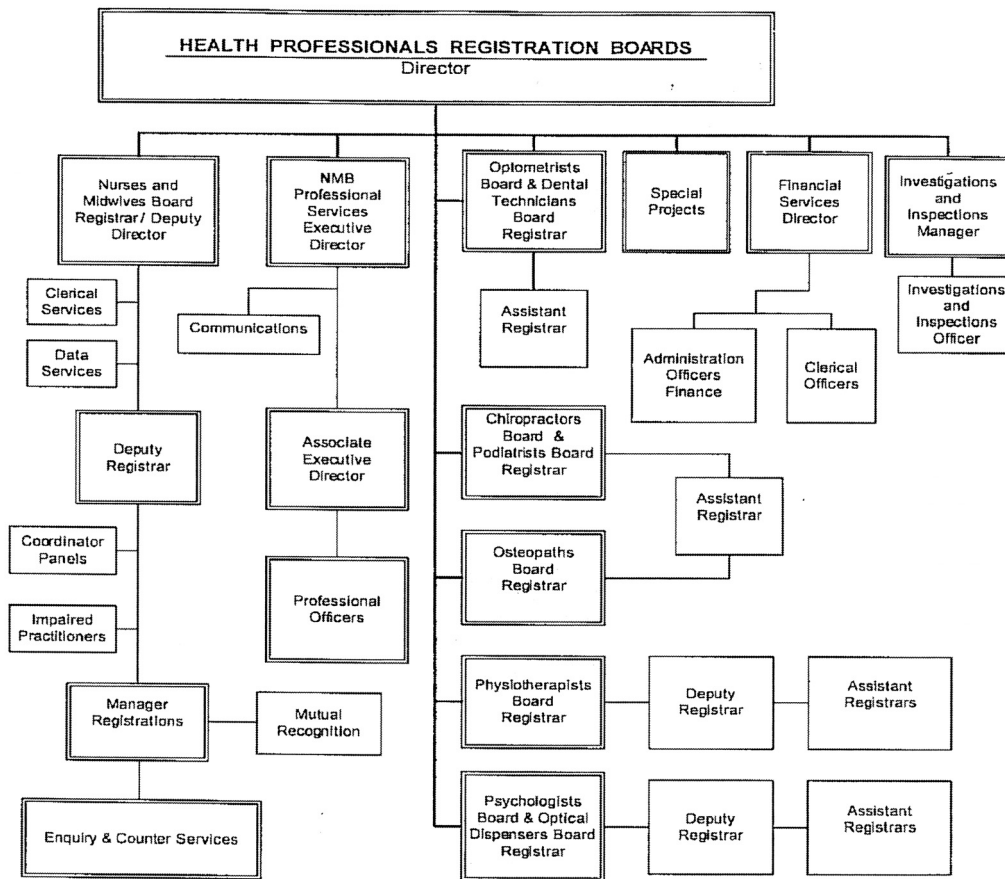


FIGURE 8.1: HPRB organisation chart (NSW Psychologists Registration Board *Annual Report 2005/06*, p. 14) showing the context of the Special Projects Officer position.

On 21 August 2002, the Director of HPRB had written to the Soft Systems for Soft Projects Chief Investigator (Dr Lynn Crawford) seeking to trial the PMIS on the same basis as it had been made available to other NSW agencies, which was in exchange for feedback on experience with implementing it. Dr Crawford responded on 9 September 2002, advising that lessons learned during experience with the prototype PMIS were being reported in case studies being written by the practitioner-researchers. As with the other agencies, the PMIS (APPENDIX 14) would be for trial use (Costello, *Personal Research Papers: HPRB Correspondence*, 2002 included with permission).

As an HPRB employee, I would be implementing NSW public sector PM policies and guidelines. Also, I would be working within the NSW Health policy framework wherein the Department was identified as a learning organisation with a cascading process for aligning organisational with individual learning plans (Figure 3.5). One mechanism was its *Coaching and Performance System (CAPS) Policy* (Circular No. 2003/19). In my agreement for 2003 / 2004⁹⁹ (APPENDIX 15), I identified areas for development as

⁹⁹ As provided in the *CAPS Guideline* individual performance details were confidential; however, I obtained approval to use mine for my research purposes.

research and problem solving and participate in and adapt to change. My agreed work goals related to the development of a viable framework for buy in to the GLS by the HPRB supported Boards, developing individual and team skills through mentoring, and promoting HPRB's internal (IS/IT) development capability. Under *learning and development*, my agreement included networking with other NSW public sector agencies confronting similar issues and with other PM practitioner-researchers.

8.3 HPRB Change Management Context

HPRB was an agency within NSW Health. Under “local background and environment”, my position description referred to the NSW public health system as employing approximately 100,000 people and having an annual budget of approximately \$8 billion. On the NSW Department of Health organisation chart (APPENDIX 16), HPRB was in the Operations Division under Legal and Legislative Services.

8.3.1 Internal context

Functions of the Boards supported by HPRB (Figure 1.6), as reported in the NSW Nurses Registration Board (NRB) *Annual Report* (2003, p. 49), included determining health professionals' standards and qualifications and experience required for registration as well as administering the disciplinary provisions in the legislation. NRB's clientele included NSW registered and enrolled nurses and anyone with cause to enquire about the regulation of nursing or complain about professional actions. Registration numbers for all Boards in 2001/02 and 2005/06 are in Table 8.1. Each practitioner was required to renew their registration annually and, as practitioners could apply for restoration after their registration / enrolment had lapsed, the actual number on HPRB databases was around 250,000.

NSW Health Professionals Board	Registered Practitioners 30/6/2002	Registered Practitioners 30/6/2006
Chiropractors	1,078	1,346
Chiropractors and Osteopaths	216*	*
Dental Technicians		
- Dental Prosthetists	405	439
- Dental Technicians	666	756
Nurses and Midwives		
- Registered Nurses	77,694	82,740
- Registered Midwives	n.a.	18,455
- Enrolled Nurses	16,076	16,898
- Authorised Nurse or Midwife Practitioners	n.a.	72**

NSW Health Professionals Board	Registered Practitioners 30/6/2002	Registered Practitioners 30/6/2006
Optical Dispensers	1,358	1,482
Optometrists	1,502	1,664
Osteopaths	242	541
Physiotherapists	5,789	6,617
Podiatrists	720	804
Psychologists (including provisionals ^{***})	7,156	9,052
<i>Total (note some practitioners had dual registration)</i>	<i>112,902</i>	<i>140,866</i>

TABLE 8.1: Registrations in the health professions being supported by HPRB – 2002 and 2006 (Source: NSW Department of Health Annual Reports for 2001/02, p. 171 and 2005/06, p. 197).

* Previously this had been a single Board and joint registrations carried over.

** Two of these were midwives.

***As reported in 2006 there were 1,336 provisionally registered Psychologists.

The Boards were self funding with legislation providing for the Health Administration Corporation, through the HPRB, to manage the accounts and employ staff. HPRB did not produce a separate Annual Report and its finances and activities were reported in the Annual Reports of the Boards and the Department of Health. In 2002/03 total expenditure incurred by all Boards was approximately \$6.6M (NRB *Annual Report* 2002/03, p. 50). Indicative expenditure budgets for 2003/04 are in Table 8.2. As there were no cross-subsidies between Boards, any development had to be suitable for both the larger and smaller Boards who all shared the same legacy registration and administration systems.

Expenditure Item	Nurses Board (\$)	Podiatrists Board (\$)
Salaries & Associated Staff Costs	2,969,199	82,188
Building Expenses	256,136	1,942
Subsistence & Transport	133,578	6,349
Members' Fees	227,818	14,480
Fees for Service	827,912	6,353
Post and Communication	240,700	2,396
Printing & Stationery	232,794	1,948
Plant & Equipment	3,437	13
Education & Research	315,000	5,000
Miscellaneous	141,561	1,920
Depreciation	22,000	190
<i>Total</i>	<i>5,370,135</i>	<i>122,779</i>

TABLE: 8.2: Representative expenditure budgets for HPRB supported Boards for 2003 / 2004¹⁰⁰ (Source: NSW Nurses Registration Board *Annual Report* 2002/03, p. 61 and NSW Podiatrists Registration Board *Annual Report* 2002/03, p. 17).

¹⁰⁰ Members' Fees were paid to Board, Committee and Tribunal Members and Education and Research was a separate amount approved by the Minister for Health.

In 2003 HPRB staff filled the equivalent of 52 full-time professional and administrative positions supporting particular Boards¹⁰¹ or shared between them, including 12 full-time and six part-time staff in finance, cashiering, word processing / stenography, computer operations, mailing and office administration. By 2005/06 as reported in the NRB *Annual Report* (2005/06, p. 40), total administrative expenditure for all Boards was \$8.7M and HPRB staff filled the equivalent of 57 full-time positions.

8.3.2 External context

The top level strategic driver for HPRB IS/IT development at the time was *connect.nsw*, the NSW e-government policy. The *IM&T Blueprint* (NSW Government, 1997) had set out implementation strategies; however, as noted by the NSW Audit Office (2001b), e-government was not simply about a new IT system but also about changing business processes and models.

In 2001 HPRB had been selected as one of five lead agencies for implementing the GLP (Figure 3.12), the largest NSW e-government initiative at that time. With passage of the *Licensing and Registration (Uniform Procedures) Act 2002*, standard provisions were enacted for granting of licenses / registration, including application amendment, transfer, renewal and restoration, determination of applications and administration of licensing / registration schemes across all NSW Public Sector agencies. This Act amended the legislation of eight of the nine Boards administratively supported by HPRB, the *Nurses Act 1993* not being included. Under the original GLP timetable, implementation of the final (third) phase of the GLS was to begin by 2005.

Subsequently, as advised in a report by the NSW Audit Office in 2009, the GLP was not expected to be completed before 2014. Under an agreement by Australian state governments, the nine Boards had become scheduled for inclusion in the national registration and accreditation scheme commencing on 1 July 2010.

8.4 Reading the Organisational Texts

Source documents for my HPRB engagement case study are in Table 8.3. These were not a static body of textual material but, like the practice itself, were continually being added to, refined and replaced. Also, as noted with Figure 1.8, the levels were not

¹⁰¹ NRB had seven professional nursing officers (two part-time), a communications development officer and 18 administrative / clerical staff, including Registrar, Deputy Registrar and Manager Registration. Particular clerical positions related to registrations, impairment, mutual recognition and Tribunal / Professionals Standards Committee coordination and telephone enquiries and enquiry counter staff.

discrete and provided a number of discursive chances for articulating a particular issue from different perspectives.

Discourse Level (i.e. level of public exposure)	Text / written material source
Society-at-large – including the state [the political-administrative system] <i>[New Public Management “mega discourse”]</i>	<ul style="list-style-type: none"> • <i>connect.nsw</i>: the NSW Government’s strategy of reform for government service delivery, launched in December, 1997 by the then Premier of NSW, The Hon. Bob Carr MP • <i>NSW Information and Technology Blueprint</i> (DWPS, 1997) • NSW Audit Office (2001a): <i>e-government: Use of the Internet and related technologies to improve public sector performance</i> • <i>E-readiness assessment guide for NSW Government agencies</i> • <i>Licensing and Registration (Uniform Procedures) Act 2002</i> • <i>People First – A new direction for ICT in NSW</i> (NSW Government CIO Executive Council, 2006) • NSW Audit Office (2009) <i>GLP Performance Audit</i>
Society-at-large – including the state [the political-administrative system] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> • Agency-specific legislation <ul style="list-style-type: none"> - <i>Health Professionals Registration Boards</i>: Chiropractors Act 2001; Dental Technicians Registration Act 1975; Nurses Act 1991 (from 2003, the Nurses and Midwives Act); Optical Dispensers Act 1963; Optometrists Act 2002; Osteopaths Act 2001; Physiotherapists Act 2001; Podiatrists Act 1989 / 2003; Psychologists Act 2003 - <i>Other NSW Health legislation</i> Health Administration Corporation Act 1982 Health Care Complaints Act 1993
Public sphere [realm of public discourse and action] <i>[Grand discourse]</i>	<ul style="list-style-type: none"> • NSW Government / Premier’s Department / Treasury -policies / strategies / guidelines – particularly the NSW Office of Financial Management <i>ICT Investment Process, Policy and Guidelines Paper</i> (2006) and Government ICT Planning Documents and <i>NSW Capability Framework</i> (2008) • NSW HPRB supported Boards / NSW Health / UK NHS publications including: Annual Reports; websites; NSW Health corporate governance and strategic change management documentation; NHS change management documentation
Domain-specific discourses at various intermediate levels <i>[Meso discourse]</i>	<ul style="list-style-type: none"> • <i>Professional guides</i> <ul style="list-style-type: none"> - NSW PS guidelines including PM and PIR - NSW OICT case studies - UK Government PM Guides - Professional Association publications (<i>PMBOK® Guide</i>) • <i>Academic / practice publications</i> – practitioner-researcher affiliation.
Local discourse [closed down at some point by those in control] <i>[Micro discourse]</i>	<ul style="list-style-type: none"> • Project Management Information System (PMIS) • Practitioner-researcher position statement / CAPS agreement • Personal practitioner-researcher journal / research papers

TABLE 8.3: Documents considered in the third iteration of the research inquiry grouped according to the framework in Table 5.2.

8.4.1 “Mega discourse” texts

I distinguish two *society at large* groups of documents according to the level of public exposure and close versus long range level of interest (Figure 5.13). The topmost is

NPM, interpreted as “mega”, an idea according to Alvesson and Karreman (2000, p. 1133) of (more or less) universal connection of discourse material that typically addresses (more or less) standardised ways of referring to / constituting a certain type of phenomenon. I had noted that while NPM discourses had been informing aspects of our PM engagement during the Soft Systems for Soft Projects collaboration, the main shaping influence had been the “grand discourse” of the Wood Royal Commission (Table 6.1). The RFS change agenda was likewise set externally as would have been the case for HPRB with the GLP. Such authoritative documentation would not be applying in HPRB’s case where the main external drivers would be general NSW Government e-government (NPM) policies as applying across the public sector.

In the PA literature NPM has been considered an ideology (Diefenbach, 2009, pp. 60-61), however, the status of knowledge produced and the methods for producing it were not clear. Gow and Dufour (2002, p. 375) argued it was a paradigm because it proposed values and an administrative conception of its own. Pure exemplars of NPM were, in their view, hard to find except perhaps through buzzwords, including “best practices, “customer service” and “steering not rowing” which may be considered somewhat as a substitute for experience. Lacking its own theory, NPM problem solving was seen as pragmatic and contextual (Gow and Dufour, 2002, p. 378). Nevertheless, it was driving major changes in Australian public services along the dimensions in Table 3.1. Referring to adoption of NPM in Australia, Johnston (2000, p. 361-362) observed that while it was consistent with the broad principles encompassed in neo-classical economic theory, in practice the model was highly dynamic and sensitive to a broader range of issues than suggested by rationally-based theory.

The documents I included under this category are representative of top-level strategic policies (Figure 3.2) for implementing the NPM IS/IT agenda in NSW and the Auditor-General’s reviews of / guidelines for implementation. They articulate the goals that were to flow down to individual agency strategic and corporate plans and thence to program / project plans. At this level, albeit on a narrower basis than the case in the UK¹⁰², the NSW Government was promoting PM and its associated skills / competencies as “better practice” for avoiding the risks of cost over-runs and failure to deliver expected benefits from e-government projects. Government strategic directions are, however, continually being reshaped as indicated by the development of Public Value Management (Table 3.2), a trend towards management by negotiation and

¹⁰² The Office of Public Services Reform, UK (2002) identified Programme and Project Management (PPM) as key skills in improving delivery capacity.

dispersed networks viewed in the literature as a move away from the NPM managerialist approach. As later developed, the NSW ICT Strategic Plan (NSW Government CIO Executive Council, 2006) included public confidence and expectations about service delivery under its list of strategic drivers. Nevertheless, its prime goal was rationalisation / savings in the delivery of ICT.

8.4.2 “Grand discourse” texts

I include here both *society at large* and *public sphere* documentation. Under the former is the Boards’ legislation which provided the legal basis for exercise of their powers and which would be the subject of wide community and professional debate / consultation if any changes were proposed. On my interpretation, these nine Acts most closely aligned with “grand discourse” as an assembly of discourses that may be ordered and presented as an integrated frame (Alvesson and Karreman, 2000, p. 1133). They generally followed a standard structure / approach, albeit adapted for each health profession. Any proposed changes or implementation policies / issues were reported in the public domain in the publications (including websites) of the Boards and NSW Health. Also, they would be subject to NSW Parliamentary / Cabinet processes. I differentiated *public sphere* documents according to whether they were generic NSW Public Sector requirements or NSW Health-specific.

8.4.2.1 Generic NSW public sector guidelines

I included here general guidelines relating to the ICT investment process. Agencies were to ensure consistency with Government priorities for transformation from traditional to electronic government (NSW Audit Office 2001b, p. 3). They were required to describe their PM methodology, risk management framework, change management framework, benefits management process and information security following the OICT memoranda and guidelines (Figure 3.3). Better practice principles (NSW Audit Office, 2001b, p. 4) included technology and information management (APPENDIX 17). Under “help”, they included NSW OIT case studies which I assigned to *domain specific discourses at various intermediate levels*. Accountability mechanisms in the NSW Treasury policy framework included Gateway and Post Implementation Reviews (PIRs). The profile of project work in HPRB fell well below the threshold for these processes (Figure 8.2) and other review mechanisms whereby

project governance issues might be specifically examined¹⁰³. Nevertheless, I would still consider them for my practice despite their narrow definition of project¹⁰⁴.

The screenshot shows the NSW Department of Commerce website. The navigation menu includes 'About Us', 'Business Services', 'Buildings & Infrastructure', 'Procurement', and 'Tenders'. The main content area is titled 'Project Profile Assessment Tool' and includes a breadcrumb trail: 'You are here: Home > Procurement > Gateway Review System > Project Profile Assessment Tool'. The page describes the Gateway Review process and the Project Profile Assessment Tool, which generates a score or index based on various factors. It also provides 'Further Information' including contact details for Policy Support Services.

FIGURE 8.2: NSW Department of Commerce: Project Profile Assessment Tool link (<http://www.dpws.nsw.gov.au> accessed 7/9/2006).

The NSW ICT Strategic Plan (NSW Government CIO Executive Council, 2006) contained no reference to PM and the NSW OICT PM guideline (2002c) still applied at that time. There was, however, indication of a broader conceptualisation of PM emerging across the NSW Public sector. I had noted in my personal research notes in May 2004 that, until the NSW Government's *Strategic Management Framework* (Figure 3.2), I had not located any published material directly connecting PM with strategic management capability. Subsequently, the *Public Sector Capability Framework* (NSW Department of Premier and Cabinet, 2008) would aim to provide a common and consistent language to describe knowledge, skills and abilities (capabilities) for delivering better services¹⁰⁵ relevant to all NSW public sector staff, regardless of location, agency or job role. As represented in Figure 8.3, they were grouped under organisational culture, direction and capacity to deliver, with PM under the latter. A project manager in this framework (2008, p. 26) participates in and leads successful

¹⁰³ For example, the *Review of Sydney Water's Customer Information and Billing System* (NSW Auditor-General, 2003) and the *Report on Review of the Integrated Cargo Systems Produced for the Australian Customs Service* (Booz, Allen Hamilton, 2006).

¹⁰⁴ They were defined (as included in NSW Treasury Circular TC08/07) as discrete, non-recurring scopes of effort that have explicit objectives and operate via a nominated schedule, budget and resources. A program was "a collection of projects that are highly inter-related in their delivery and objectives".

¹⁰⁵ From http://www.doc.nsw.gov.au/publications/news/stories/nsw_public_sector_capability_framework (accessed 28/11/2008).

projects, using strong communication and organisation skills to balance conflicting priorities and manage resources. While the *Capability Framework* was outside the timeline of my inquiry, it informed my subsequent reflection on my experience reading the NSW public sector PM practice guidelines as I was seeking to apply them to development of the PMIS within HPRB.

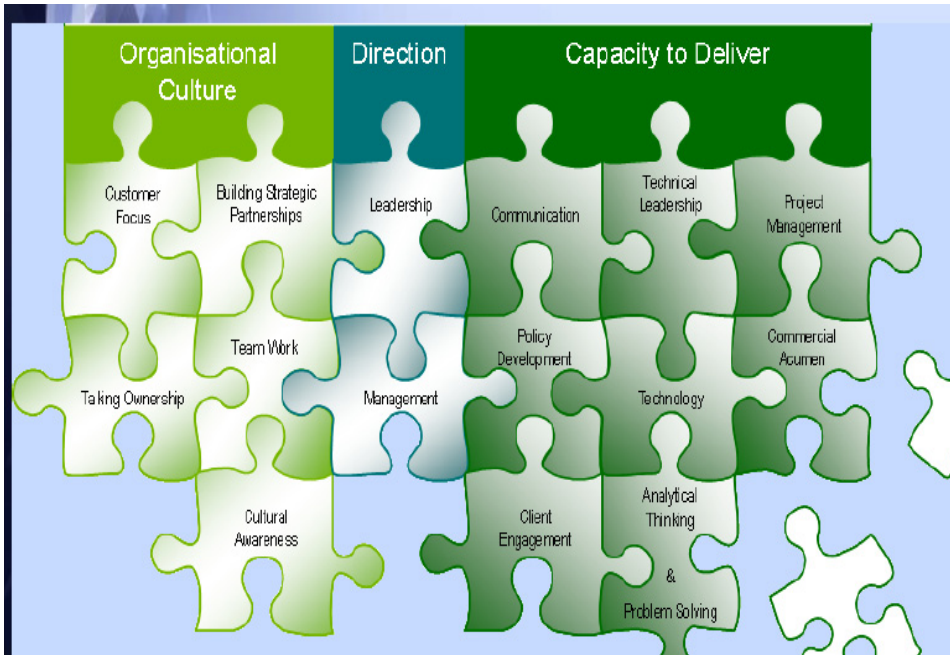


FIGURE 8.3: Elements of the NSW Public Sector Capability Framework including project management in the top right hand corner (NSW Department of Premier and Cabinet, 2008) ¹⁰⁶

8.4.2.2 NSW Health guidelines

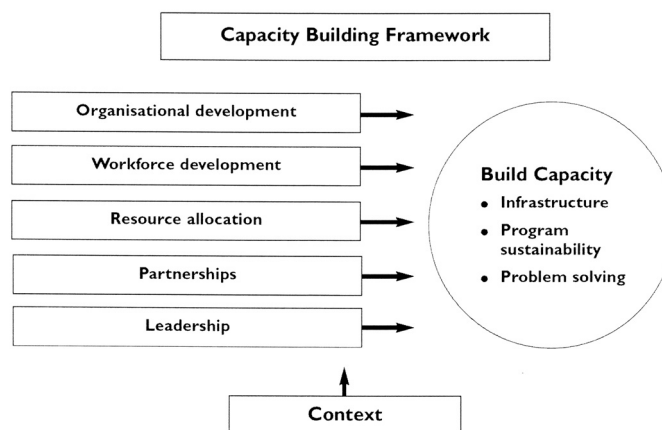
In my practice I also observed NSW Health’s corporate governance requirements as set out in its *Corporate Governance and Accountability Better Practice Reference Guide* (NSW Health 2002a) and *Corporate Governance and Accountability Compendium* (NSW Health 2005). These and associated NSW Health policies and guidelines set out the roles, relationships and accountabilities applying within NSW Health¹⁰⁷. As presented, good corporate governance practice was comprehensively viewed; for example, these guides offered a broader risk management framework than the OICT guidelines (Figure 3.3). Their view of PM was akin to the Office of Public Sector Reform, UK, (2002) view that PM principles were invaluable in policy delivery, translating policy into delivery plans and delivery plans into desired outcomes.

¹⁰⁶ As defined, *organisational culture* was common to all jobs in the public sector and used to define how people work together to deliver better outcomes for the people of NSW. *Direction* was how we go about planning, leading, managing and evaluating what we do and how we minimise risk and ensure goals are met. *Capacity to deliver* was the specific skills and knowledge and abilities which are needed in particular jobs which are common across the sector.

¹⁰⁷ They included the Health Administration Corporation (HAC) which, under the *Health Administration Act 1982*, gave the Director-General of the Department of Health corporate status in the provision of corporate and other support services as in the case of HPRB.

NSW Health had included PM in its capacity building framework for development of both individual skills and organisational structures to support change (Figure 8.4). Organisational development referred to processes ensuring that the organisation's structures, systems, policies, procedures and practices reflected its purpose, roles, values and objectives and ensured change was managed effectively (NSW Health, 2001, p. 10). Capacity building strategies were to be routinely incorporated as an important element of effective practice.

FIGURE 8.4: NSW Health capacity building framework schematic (2001, p. 2)



Building capacity was considered a complex task as no single theory was considered sufficient for explaining how and why organisations change. The NSW Health view was that the practitioner who understands the principles of organisational change and who has the tools and skills for analysing and facilitating such change will be more successful than his or her counterpart who does not possess such knowledge. A learning organisation was considered one that is more likely to take up new ways of working to respond to changes in strategic directions. In the NHS context, Iles and Sutherland (2001, p. 65) had said the main characteristics of learning organisations (Table 7.2) included a structure that promotes systems thinking¹⁰⁸, referring to it as a meta-discipline (2001, p. 89) wherein systems thinkers contrast dynamic complexity (the relationship between things) with detail complexity (details about things).

8.4.3 “Meso discourse” (domain-specific) texts

“Meso” refers to discourses that are relatively sensitive to context, but aim nevertheless to be generalisable to other similar local contexts (Alvesson and Karreman, 2000, p.

¹⁰⁸ For example, applying systemic PM approaches within the NHS, Bell and Christina (2006) used practitioner and client notes on selection and use of systemic methods, drawn from SSM workshops, to assist with managing complexity in the working environment. Later, Bell (2008, p. 238) argued the value of a systemic, reflective approach instead of one-off training events. The systemic manager was characterised as interpreting, sense-making and constituency bending and cooperative contrasted with the heavy duty characteristics of telling, fixing, dividing and ruling, and heavy-weight brokering.

1133). Here I included the NSW Guidelines for Change (NSW OICT, 2002a), PM (NSW OICT, 2002c), Quality (NSW OICT, 2002d) and Risk Management (NSW OICT 2004) which were listed under Strategy 8 (competent and confident user) of the *Information Management and Policy Framework* (Figure 3.3). Guidelines applying to project shaping and evaluation (Strategic Planning, Business Case and Benefits Management) were listed under Strategy 2 (use of IM&T to support government outcomes) thereby indicating the Strategy 8 guidelines applied only to technical implementation. While the NSW guidelines showed the influence of UK guidelines, they were considerably more prescriptive. The latter had made it clear that there were no cut and dried solutions in translating from policy to successful delivery.¹⁰⁹ Moreover, in the 2002 version of the PM guideline, there was indication of a narrowing conception of PM. The earlier DWPS version (1997b) had diagrams depicting the project life cycle process¹¹⁰ (for example Figure 6.4) which were not reproduced in the OICT version where the only diagrams carried forward were project structure (as a hierarchy of roles) to assist with management and control and the work break down structure (work plan) defining tasks to be achieved, identified as the responsibility of the project manager. At this level I also include PIR guidelines, including the *PIR Workbook* (Figure 3.7), re-issued by NSW Treasury in 2007, that identified seven project success factors (Table 8.4).

Success Factor	Questions
Service Delivery	Is the project delivering the anticipated benefits and level of service?
Affordability	Did the procurement project meet the approved budget? Is funding available to complete project realisation?
Sustainability	Did the procurement project meet the social, economic and environmental objectives? Are negative impacts being managed?
Governance	Were issues raised at the Gateway reviews addressed? Is feedback being provided to assist in improving future procurement processes?
Risk Management	Was the risk management process effective?
Stakeholder Management	Are stakeholders satisfied with the outcomes of the project and the level of consultation?
Change Management	Has the change management process been effective? Are there issues that should be considered more carefully in the future?

TABLE 8.4: Success factors for assessing whether the processes used in developing an implementing a project are sound (NSW Treasury, PIR Review Workbook, 2007, p. 5).

If the PMIS as implemented within HPRB had fitted the average NSW Gateway Review project profile, it would be expected to perform as mapped in Figure 8.5. Here, the

¹⁰⁹ (<http://www.ogc.gov.uk/sdtoolkit/keyissues/getting/delivery.html> accessed on 4/03/03)

¹¹⁰ In the *PMBOK® Guide* (PMI, 2000, p. 12), the project life cycle is said to determine which transitional actions at the beginning and end of the project are included. Most project life cycle descriptions were said to share common characteristics and reference was made to them being called PM methodologies.

governance dimension assessed whether the activities required for a successful project, including resource allocation, time management and process management had been addressed.

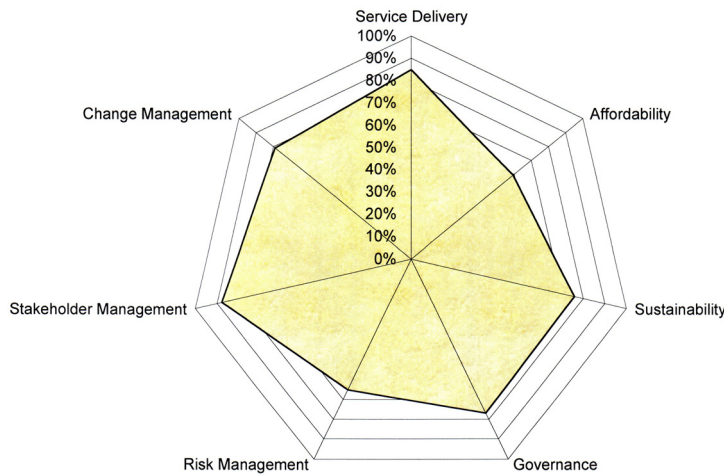


FIGURE 8.5: NSW Gateway Review results 2004-2006 across all procurement streams – capital works, goods and services and ICT and property for 29 projects with an estimated procurement value of \$2.4 billion (website accessed at <http://dpws.nsw.gov.au/Government/Procurement/Gateway+Review+Process> on 7/9/2006)

Also, I include at this level the affiliation’s published papers (APPENDIX 1) on the basis that they were accessible in the public domain. By 2005, our evolving interpretation of “hard” and “soft” that began with the Soft Systems for Soft Projects collaboration (Figure 1.13) was generally as represented in Figure 8.6.

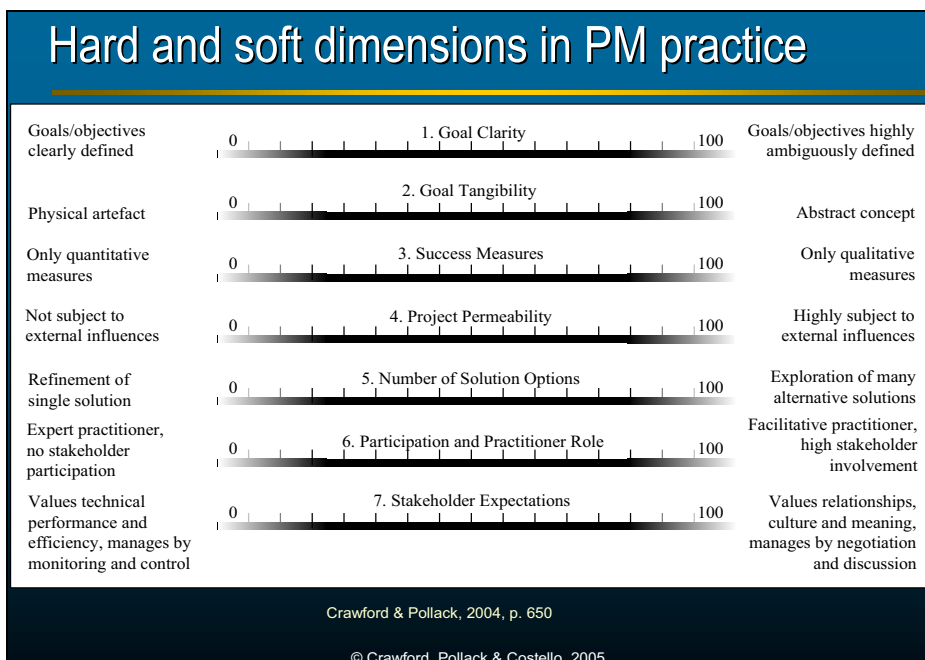


FIGURE 8.6: Practitioner-researcher’s affiliation’s interpretation of “hard” and “soft” in project management practice (Crawford et al, 2005).

In his HPRB inquiry, Julien Pollack (2005) had developed a model whereby the hard and soft paradigms might overlap to varying degrees at the levels of methodology, method, tools and technique. He argued some pluralist ecumenical accommodation was possible and this concept was incorporated into the affiliation’s published papers.

While observing that the influence of paradigm on practice could be subtle, we saw understanding the different paradigms associated with the terms “hard” and “soft” as providing us with different ways of conceptualizing and communicating problems, exploring practice options and learning from experience (Crawford et al., 2005). In our view, the distinguishing characteristics for thought and practice based on each paradigm tended to be by associations rather than defined by clear boundaries, these associations being more complex than a single dichotomy between “hard” and “soft”.

8.4.4 “Micro discourse” texts

I include here documentary material relating to my personal engagement in the *Online Services Development Portfolio* that was available to me for writing up the third iteration of my inquiry. This would comprise my personal practitioner-researcher journal / research papers, my HPRB position statement and extracted material on the PMIS format and operation in HPRB. Under Alvesson and Karreman’s model (2000, p. 1135), “micro discourse” was located as applying to close-range interest (local situational context). In their view what made discourse interesting when viewed from close range is how it is located in the stream of discourse rather than what it may say.

8.5 Practice-Research Frames

My retrospective reading of the documents in Table 6.1 and 7.1 had been informed by my interpretation of a model for exploring the roles of actions, texts and discourses (Figure 5.12) that rested on the premise that making sense is a textual process. Phillips et al. (2004, p. 635) had offered it as an alternative to realist investigations where examination of organisational practices has been disconnected from the discursive practices constituting them. They argued it is primarily through texts that information about actions is widely distributed and comes to influence the actions of others and had identified a number of attributes whereby textual material was more likely to become embedded in discourse (listed in Chapter 5: Section 5.8.3). When viewed according to the framework provided by Alvesson and Karreman’s (2000, p. 1135) model (Figure 5.13) there were, however, some fundamental differences between the documents in Tables 6.1 and 7.1 and in Table 8.3. First, they span a greater distance along the close-range (local-situational context) and long-range (macro-system context) axis in Figure 5.13. Alvesson and Karreman (2000, p. 1129) saw this as representing a difference between understanding discourse as a highly local context-dependent phenomenon and a more generalized, broader understanding.

As demonstrated in Chapters 6 and 7, the scale and nature of the public domain material available for reading meant particular issues concerning the role / implementation of PM could be followed across the various levels for these case study agencies. There was no similar documentation for HPRB.

Secondly, the HPRB case study documents could be distinguished according to the level of determination (collapsed meaning) and autonomy (unrelated meaning) on the scale in Figure 5.13. At the levels of micro- and meso-discourse, Alvesson and Karreman (2000, p. 1135) distinguished between close-range determination and autonomy and, at the levels of grand and mega-discourse, between long-range determination and autonomy. I had characterised my micro-discourse documents as close-range / autonomous. From this perspective, their meaning or significance in terms of framing action could not be determined in isolation from the interactions that were shaping their context as represented by the documents at the other levels in Table 8.3. They did, however, exhibit varying degrees of autonomy / determination across the different levels that may be contrasted to the long-range / determination position which was arguably the case with the Wood Royal Commission grand-discourse texts. The Royal Commission texts would appear to be representing *Discourse* in Alvesson and Karreman's (2000, p. 1134) view in that they provided a structuring force for framing meaning across all levels. *Discourse* is the idea that it is possible to cut through variations at local levels and move up the "discursive ladder" to identify overarching themes operating in specific circumstances. In organisation studies, in their view, there is one or possibly two *Discourses* that the empirical material may be "plugged into" (Alvesson and Karreman 2000, p. 1146).

My HPRB documents incorporated discourses from different domains that were sometimes complementary, ambiguous or incommensurable. There was not one, or even two, *Discourses* I could "plug into". Further, as Iles and Sutherland (2001, p. 75) observed, practitioners' knowledge about what works in health care settings is mainly derived from their own and colleagues' experience. Likewise, in PM the knowledge brought to make sense of new situations, as indicated in Turner et al. (2000, p. 3), is likely to be seen as having been gained by personal experiential learning.

For my HPRB inquiry I would develop two paradigmatic lenses for "reading" the documents in Table 8.3 that I based on affiliation members' emerging conceptualisation of "hard" and "soft" (Figure 8.6), and on Winter and Checkland's (2003, p. 191) contrasting images of real-world PM practice as a "hard" management process and a

“soft” process of management (Figure 5.8) wherein context is an ever-changing flux of messy situations. The first lens would be project governance, equated with “hard” PM views of project control and reductionist detail complexity as reflected in NSW Public Sector PM guidelines. The second lens would be a “soft” SSM / POM model informed frame, which in my FMA research framework (Figure 5.4) I had adopted as my personal theory for guiding my PM practice as it might contribute to appreciating dynamic relationship complexities at organisational level. Here, however, I would be applying it to make sense of holistic appreciation dynamic relationship complexities between the texts that were shaping the scope of my PM action within the *Online Services Development Portfolio*. It had become clear through our various affiliation engagements in NSW Public Sector agencies that, in our context, the traditional PM structural view of organisational framework (Table 1.6) was the exception.

8.5.1 Project governance frame

Project governance provides the structure through which the objects of the project are set, the means of attaining those objectives are determined and the means of monitoring performance are determined (Turner, 2006b, p. 93). Also, it involves a set of relationships between a project’s management, sponsor, owner and other stakeholders. Bredillet (2007b, p. 2) refers to governance as one of at least nine possible PM schools of thought for appreciating an organisation¹¹¹ and to research in this area as including the effective organisation and functions of the project management office (PMO), the project support office and the PM centre for excellence. Anticipating the GLS, I mapped the HPRB governance framework in Figure 8.7.

With the shift to developmental (Figure 4.1) or continuous change (Table 4.1) within HPRB, my implementation focus would shift to generic NSW Public Sector project governance documents. Accordingly, the governance criteria (Table 3.4) would have to be adapted for HPRB’s resources. Also, while I would still be considering the *PIR Guideline* (NSW Government Asset Management Committee, 2001, p. 7 accessed 11/8/03¹¹²), its focus was on procurement on a scale not applicable to HPRB. On my reading, the PIR requirements largely reflected the left-hand side of Figure 8.6 as was the case with the NSW Health PIR format for information technology projects (APPENDIX 19). In the UK guidelines, PIR was distinguished from the lessons learned

¹¹¹ Referring to Morgan’s (1995) eight metaphors of organisation, Bredillet (2007b) identifies at least nine schools of PM thought (Optimisation; Modelling; Governance; Behaviour; Success; Decision; Process; Contingency; and Marketing)

¹¹² The PIR was current when accessed on 22/2/2008 -<http://www.gcio.nsw.gov.au/library/guidelines/794>.

report (APPENDIX 19), a distinction not made in the NSW PIR *Guideline* or in the NSW Health template.

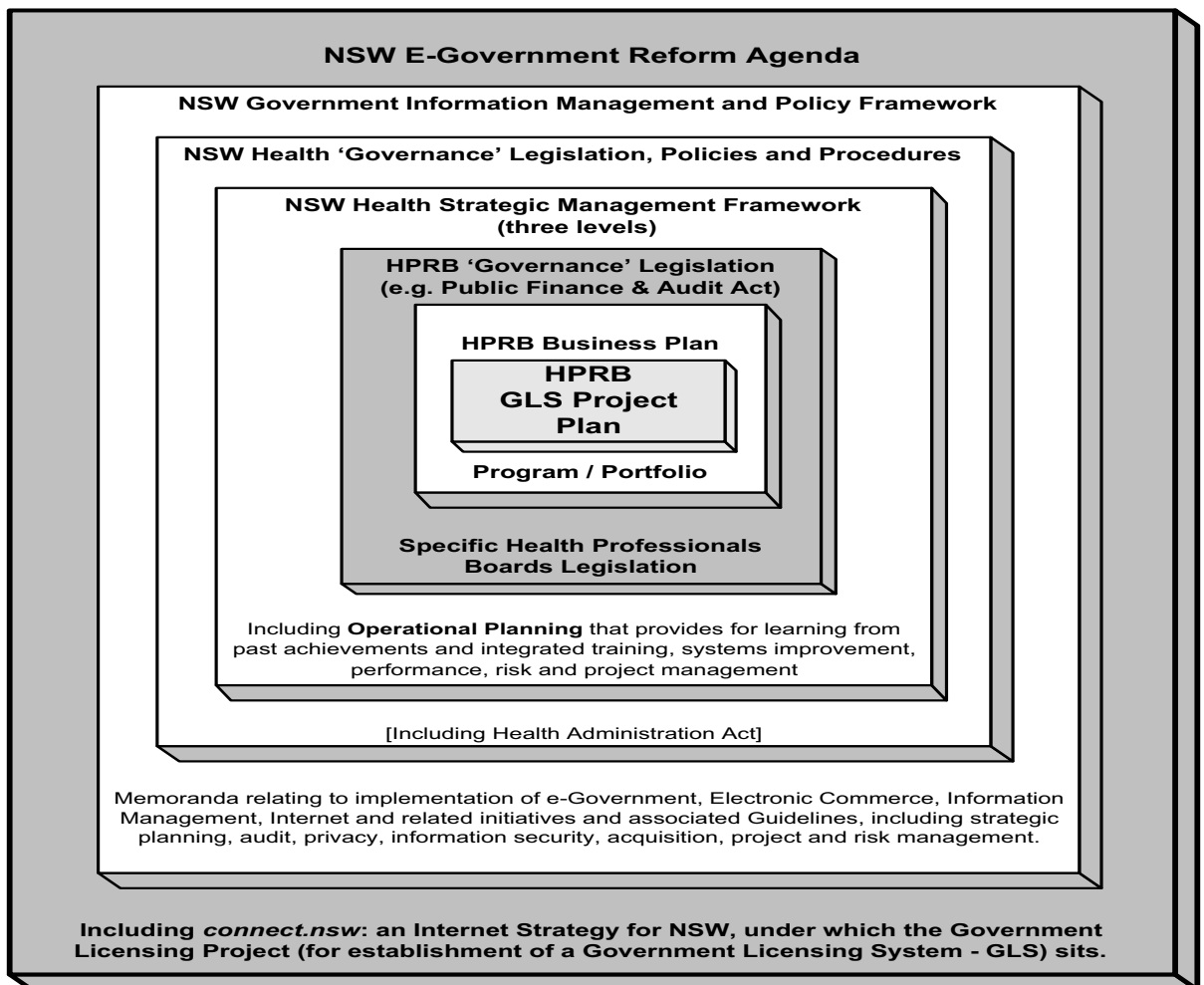


FIGURE 8.7: A nested project governance structure for the HPRB GLS Project, after a model by Hobbs and Miller, 2002, p. 145) (Costello, *Personal Research Papers*, dated 14/5/03)

8.5.2 The POM model frame

Although Lesley Bentley (2001a, pp. 31-32) at the RFS and Julien Pollack (2005, pp. 88-9) at HPRB had used the POM model to inform their big picture organisational view in their inquiries, they applied mainstream SSM methodologies / methods. Both cases arguably represented Type 2 situations (Figure 1.13), which would be expected to work well according to Professor Stretton's (1998) organisational change process model that superimposed Checkland's (1981) model on the PM life cycle model (Figure 6.8). The HPRB *Online Services Development Portfolio* would, however, mainly comprise Type 4 projects, many exhibiting more the attributes of bureaucratic than of technical projects (Table 1.3). Professor Stretton's (1998) search for a similar pattern for Type 4 projects as for Type 2 had resulted in only partial success (Figure 6.9). In terms of Thiry's

(2002) model for responding to change situations (Figure 6.7), the *Online Services Development Portfolio* would rate high on his uncertainty / ambiguity scales, suggesting sense-making as an appropriate response. The applicable process according to Weick and Quinn's (1999, p. 365) conception of continuous change (Table 4.1) would: recognise, make salient and reframe current patterns; show how intentional changes can be made at the margins; alter meaning by new language enriched dialogue and new identity; and unblock improvisation, translation and learning.

For my HPRB inquiry, I would be carrying forward the affiliation's experience of engaging with the POM model (Table 6.4) which had helped make sense of dynamic organisational situations (Crawford and Costello, 2000; Costello et al., 2000a and 2000b; Crawford and Costello, 2002; Crawford et al., 2003; Pollack et al., 2006). From my retrospective review, I had observed our interpretation of the POM model was an exploratory one. While we would be iteratively testing our experience to gain insights into the meaning creation processes where the PMIS was implemented (Costello et al., 2002a and 2002b), it was through my refocusing of my approach during the HPRB *Online Services Development Portfolio* engagement that this would particularly occur. Until then, as indicated in Pollack et al. (2006), we had been looking at the POM model through its constituent elements, beginning with Crawford and Costello (2000).

We had distinguished our approach from the DWPS Management by Projects Approach (Crawford et al., 1999) but had mapped both according to our adaptation of the POM model (APPENDIX 11). It was the Soft Systems for Soft Projects version (Figure 6.10), rather than the DPWS version (Figure 7.7) that would inform my approach at HPRB where it would act as a scaffold whereby our expertise could be applied interactively to guide users in PM thinking and practice. This contrasted with the expert (Centre of Excellence¹¹³) model deployed in DWPS and also with the NSW Police and RFS approaches where there had been a project support office facility.

8.6 Implementing the PMIS

The HPRB PMIS was a trial application. It was not a unitary system, but a series of applications that included various networked versions, a training version, an archive, a design tutorial, versions on local desk top computers and various management

¹¹³ O'Leary and Williams (2008) refer to the importance of CoEs in implementing UK Government objectives for improving public services. However, they reported that there were problematic mainstream PM assumptions.

applications (Figure 8.8). It aimed to achieve a balance between technical rationality and encouraging / maintaining working relationships between multiple users. At the outset, I had an affiliation informed view of it as being located in the space between “hard” and “soft” PM dimensions and this had informed my choice of research questions / themes of practical guidance, conceptual models and lessons transfer.

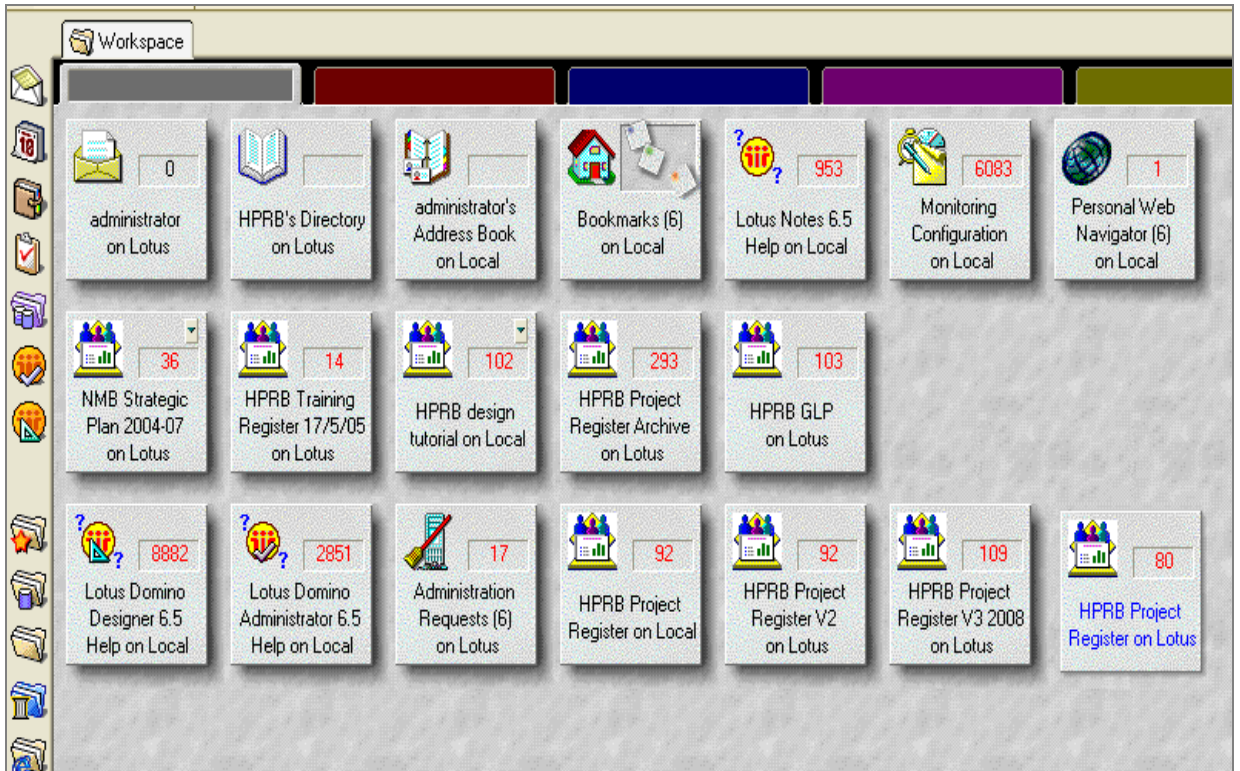


FIGURE 8.8: PMIS applications at the HPRB Lotus Notes workspace test site (Costello, *Personal Research Papers* HPRB, used with permission).

8.6.1 Observing governance requirements

Reviewing the OICT case studies (Figure 3.9 and APPENDIX 4), I found only one referred specifically to the PM *Guideline* (NSW OICT, 2002c); however, the actual methodology used was PRINCE 2. Various aspects of the *Guideline* were reflected in the approaches adopted, however, more consistently reported (under development approach and benefits/ lessons) were the terms *communication*, *managing perceptions*, *collaboration*, *local ownership* and *negotiation*. Nevertheless, they considered formally assigning key roles and establishing a clear project governance structure essential. In Table 8.5, I have mapped the HPRB PMIS Project Brief format (APPENDIX 18) against the PM *Guideline*. Various features of the PMIS would aim to give effect to this *Guideline*; however, they were incommensurable in fundamental ways with the basic principles of deployment in HPRB.

PMIS Field / Action	Project Management Guideline
Create Project	
<i>Vision / Mission / Overall Objective</i>	Clearly defined scope to ensure all stakeholders share a common view of what is included. There must be formal change management process. Changes in scope should be infrequent; otherwise justification and objectives should be reassessed.
<i>Start / Finish dates</i>	Project must have a clearly defined end point; a clear scope for the project is a key requisite for defining the end point.
<i>Project Alignment</i>	Support of senior management is essential; senior management will normally monitor progress in projects that are fundamental to the operations of the agency or require significant levels of investment.
<i>Project Focus</i>	To be successful, a project requires a clearly defined business objective as defined in the business case and formally approved by senior management.
<i>Management</i>	All projects should have a clearly defined structure that identifies the roles, authorities and responsibilities of all participants, including the project sponsor. A formal Steering Committee should be appointed. The Sponsor must ensure the Project Manager has the appropriate skills and experience and provide formal training if necessary (or contract a project manager).
<i>Team Members</i>	An effective (hierarchical) project structure to assist management and control of the project and foster appropriate levels of participation. Management positions within the project structure will have no more than five or six staff reporting to them.
Create Project Brief	
<i>Project Objectives (Outcomes)</i>	A benefits realisation process is undertaken to ensure all potential benefits are identified, quantified and delivered (these should have been identified during the business planning phase of the process).
<i>Deliverables</i>	A single integrated Work Plan covering initiation through to formal completion. Work planning defines detailed tasks required to achieve the outcomes documented. It is a continual process and should be reviewed and revised at the start of each phase and should increase in accuracy due to the knowledge gained on completed tasks
<i>Project Measures</i>	For each task (from the Work Plan) a tangible result / measurable deliverable should be identified.
<i>Key Stakeholders (Internal / External)</i>	A high level of user involvement is required to ensure business objectives are met. User representatives must have a good knowledge of the business and should be released from their normal duties. They must not be based on who is available.
<i>Key Assumptions</i>	Initial project risks are identified through assessment of the projects objectives and the anticipated implementation approach.
<i>Risk Assessment (Project and Corporate Risks)</i>	At the start of each project phase specific risks are identified through review of management and work plans and review of the technical risks of similar projects; an impact analysis is performed and its results are documented in a risk profile.
<i>Linkages / Shared resources, deliverables and /or stakeholders</i>	A large project may have a number of sub-projects, each with a Project Manager who reports to the Project Director. The work plan should identify resources for each task; allowing for overheads and including contingencies (of 10-20%)
Create Deliverable / Milestone	
<i>Calendar</i>	A scheduled start and finish date should be identified for each task in the Project Work Plan.
<i>Acceptance Requirements</i>	The skills required for the task should be identified; a project typically requires a mix of technical and business skills.
<i>Progress Report</i>	Objective data should be collected; normally this requires recording of activity on each project task. Reporting should be regular, consistent, clear and concise. Formal reports should include progress against milestones.
<i>Review</i>	A formal Quality Plan guides implementation of an independent quality assurance framework that monitors all project deliverables and ensures expected benefits are realised. A written change control procedure must be implemented.
<i>Approval / Sign Off</i>	A project will formally be closed down through finalisation of documentation, reconciliation of costs, performance appraisals post completion / implementation reviews. Team members must not be allowed to leave until their knowledge has been captured.

TABLE 8.5: PMIS fields mapped against comparative provisions under the NSW Public Sector *Project Management Guideline* (NSW OICT, 2002c).

Also, I would also be looking to reflect PIR requirements in the PMIS, both generic (Figures 3.6 and 3.7) and NSW Health specific (APPENDIX 19). The *PIR Guideline* advised a fully developed PIR model should be linked to an information management system providing easy feedback for continuous improvement of planning, procurement and implementation processes. It had to be able to integrate PIR results with other relevant project materials for application to future projects. While a range of data techniques were identified, ideally results would be translated into briefing or specification requirements for endorsement by the agency and incorporated into future project briefing or standard design guides. As I have noted, the focus for assessing the PIR process and reporting format was on performance (financial and operational) and meeting technical and documentation requirements (for project approval and management). The NSW Health Guideline (subtitled lessons learned) provided a more expansive reporting format (APPENDIX 19), albeit the focus was still on performance (technical and management) and contract, risk, financial and supplier management.

8.6.2 Sense-making through a POM model frame

In accordance with my HPRB position description, I would be having regard to work practices identified by Orlikowski (2002) that support organisational knowing in practice and to White's (2000, p. 167) advice that in the PA context an approach is needed that encourages and supports a systems perspective, allows the crossing of organisational boundaries, recognises ordinary people can be engaged and includes multiple perspectives and unusual mixes of people.

I would engage with the POM model from two perspectives, the first informing adoption of the PMIS to support the process for internally developing organisational PM capability in HPRB. The model brings together concepts of organisation, data, capta, information and knowledge with accounts of processes which IS work will support (Checkland and Holwell, 1998b, p. 90). At this level of appreciation, my interpretation was of POM as a middle-level theory for guiding professional practice as may be distinguished from a methodology or indeed meta-methodology. As advised (Checkland and Holwell 1998b pp105-106), the technology element in the POM model (Figure 1.15) requires the availability of professional knowledge of the technology and its possibilities which, in this case, was carried forward from the Soft Systems for Soft Projects collaboration as incorporated in the PMIS. In this respect, HPRB differed from the other two case study agencies, where our PM expertise was provided through formally established project support offices.

Secondly, I would be applying the POM model as a sense-making framework for holistically appreciating the dynamic relationship between the external discourses reported in the public domain documentation and internal organisational PM processes rather than describing HPRB in terms of the POM elements as we had done previously (Crawford and Costello, 2000). My starting point (Table 8.6) would be matching the POM elements against my interpretation of the level of the discourse applying to the documents in Table 8.3. I took NSW Health to be the POM model appreciative setting through which HPRB perceived the external world, in this case the policy drivers were giving effect to changes being promoted in the NPM discourse.

POM Element	Discourse Level in Table 8.3
<p>Element 1 – Individuals and Groups: individuals and group members acting as cognitive filters in perceiving the world (Element 2); may also be attributed to organisations. There will never be complete congruence between individual, the (attributed) group settings and the organisational as a whole despite the ‘conventional wisdom’ model of organisation that assumes all members share the same settings which lead them to unambiguously collaborate together in pursuit of organisational (corporate) goals.</p>	<p>[III] Grand discourse (<i>society-at-large – including the state [the political and administrative system]</i>): at the organisational level in HPRB the example of the documentary material is the NSW Legislation providing for the constitution and powers of the Health Professionals Boards and the framework legislation by which they were administered by HPRB. Legislation provides a greater degree of control in the public sector over what can / cannot be done than (unregulated) private sector models.</p>
<p>Element 2 - Perceived world: the data-rich world perceived selectively through various taken-as-given assumptions. Through this means, individuals and groups acquire capta-rich perceptions which may be affected by shifts in both thinking and action (external changes) that in turn change the perceptions of the appreciative settings and then (again) the perceptions they acquire.</p>	<p>[II] Mega discourse (<i>society-at-large – including the state [the political and administrative system]</i>): at the HPRB organisational level this is represented by documents that reflect adoption of NPM principles (a “global discourse”) within the NSW public sector.</p>
<p>Element 3 – Discourse: organisational discourse is the arena in which meaning is created inter-subjectively, leading to the attribution of meanings which yield information and knowledge (Element 4). In this element, perceptions (the result of previous individual and group) experience will be exchanged, shared, challenged and argued over.</p>	<p>Discourse at the organisational level is a complex process that may be observable from Royal Commissions, Committees of Inquiry, Parliamentary Papers, Annual Reports etc., Corporate Plans; special papers etc. These documents could be located at any level from [II] to [IV] but tend towards the latter</p>
<p>Element 4 – Created meanings (data, capta, information, knowledge): a very complex social process in which persuasion and / or coercion is attempted, battles are fought and scores settled – the whole process embodying politics as well as, perhaps, rational instrumental decision-making.</p>	<p>[IV] Meso –discourse (<i>domain specific discourses at various intermediate levels</i>): in this example the created meanings are viewed as arising from an agency-wide process being constructed within the frameworks provided by public sector guidelines.</p>
<p>Element 5 – Assemblies of related intentions, accommodations: organisations have to be able to encourage the Element 4 processes but at the same time contain such a process to survive.</p>	<p>[IV]/ [V] Meso / micro discourse: (<i>domain specific discourses at various intermediate levels / local discourses closed down at some point by those in control</i>) in this example this would be the remit of the portfolio / project manager and would be scoped within the “Project Brief”</p>

POM Element	Discourse Level in Table 8.3
<p>Element 6 – Purposeful action: organisations have to enable assemblies of related meanings, intentions and accommodations between conflicting interests to emerge (Element 5) so that purposeful action (best thought of and expressed as managing relationships) can be taken.</p>	<p>Purposeful action in this case is the provision of online services to the health professionals Boards supported by HPRB. As with element 3, relevant documents could be located at any level from [II] to [IV], but tend towards the latter.</p>
<p>Element 7 - Formally organized information systems: support organisational members in conceptualising their world, finding accommodations, forming intentions and taking actions (Elements 5 and 6). While the very existence formally organized information systems will affect both the information and knowledge created in the organisation (Element 4) and the image of the perceived world of organisation members (Element 2), its main role is support; such systems do not exist for their own sake. Professional know-how will also include the knowledge needed to operate, maintain and, if necessary, modify the technology.</p>	<p>Information systems in the example in Table 8.3 are represented by the PMIS; this is an unusual circumstance because of the agreement to provide feedback on its implementation for research purposes. Agency ISD development may become available in the public domain through Case Studies or other material for example posted on the internet; or Parliamentary Reports (including the Budget estimates; Auditor-General Reports, Annual Reports, other special reports etc.)</p>

TABLE 8.6: POM model elements mapped against the documents in Table 8.3.

8.6.3 Functioning of the PMIS

Initially, the HPRB legacy systems were not flexible and could not readily integrate and share data within the agency or with third parties. While there was a need to move beyond older generation systems, there could be no interruption to the HPRB business processes and the development had to be achieved from the budget provision for existing IT / CT hardware and software and routine replacements / upgrades. As summarised in the NSW Audit Office (2001b) better practice principles for e-government implementation in NSW (APPENDIX 17), IS / IT systems should be developed with the flexibility to accommodate changes in technology and provide a continued ability to share information. Nevertheless, it was expected a formal system / application development methodology and standard applications would be used wherever possible and system components selected to ensure an agency did not become locked into a particular technology or supplier.

The PMIS format was initially introduced into HPRB as a MS Word format, the online application following when the technical infrastructure had been installed that could support the research version Lotus Notes application. This occurred at an early stage in the upgrade process through installation of a scaled down version of a Lotus Domino server onto a network connected desk top computer. The *IS / IT Platform Project* was transferred to the PMIS, as listed in the projects on its index screen (Figure 8.9). I had

observed implementation of the trial PMIS in other formats including as a MS Access database; however, I had found the Lotus application to be the most user-friendly.

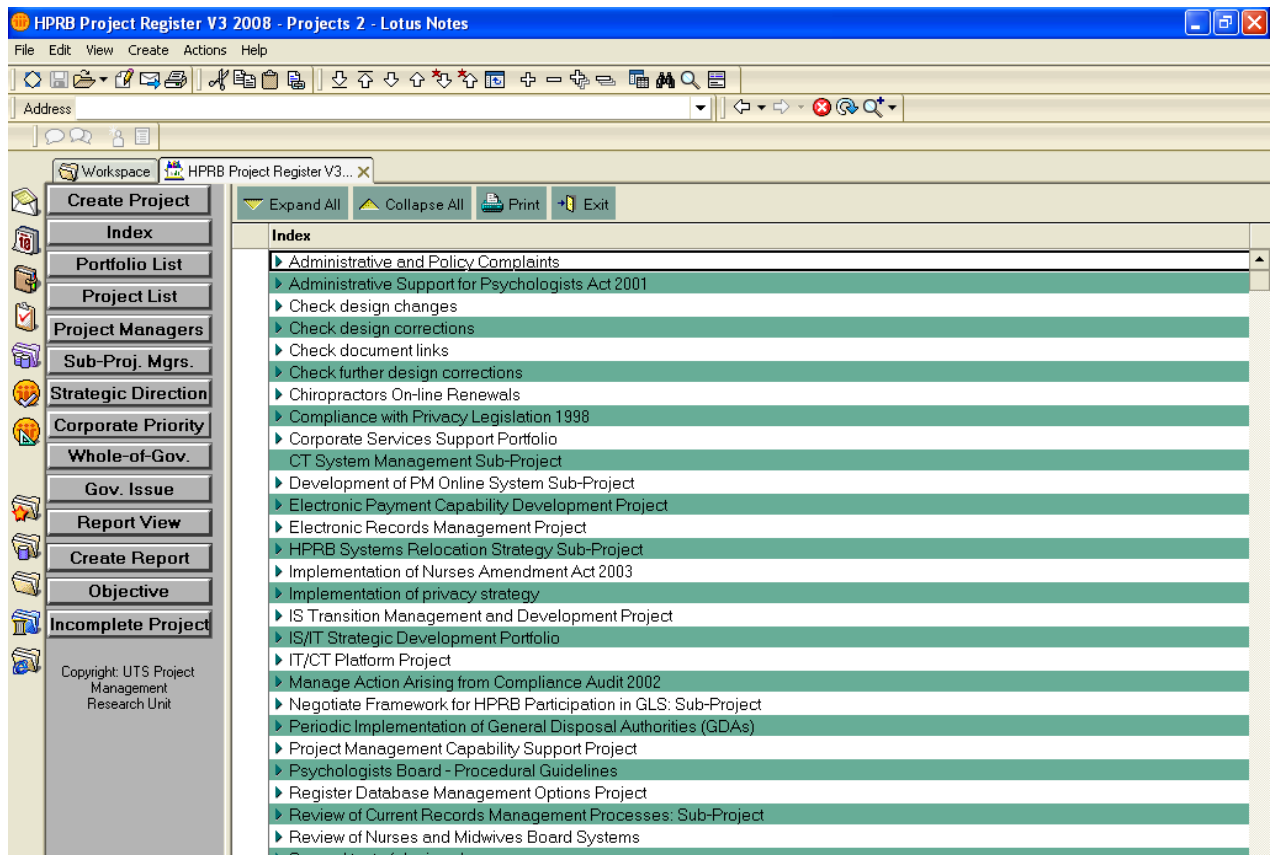


FIGURE 8.9: Extract from the index screen of the test PMIS (version 3) – collapsed view (Costello *Personal Research Papers* HPRB, used with permission).

Within HPRB any staff member could access the PMIS, could be mentored if they chose and could undertake external training in accordance with public sector policies. A few HPRB participants did go on to undertake some formal courses; however, for most users their only contact with PM principles and processes was through the PMIS. Users came from professional, technical, administrative and clerical full-time, part-time and casual positions across all levels of the agency. They had educational qualifications ranging from school-leaver to university post-graduate, experience ranging from new appointments up 25 years and diverse cultural backgrounds. They entered a variety of projects onto the PMIS at levels of engagement ranging from novice to expert. As an application, rather than a propriety system, the PMIS could be modified by non-expert users. Any work documents produced were incorporated into HPRB files in accordance with its document management policies and procedures.

The first screen (Figure 8.10) had mandatory fields to be completed before a full project brief could be generated (APPENDIX 18). This had been developed later than the

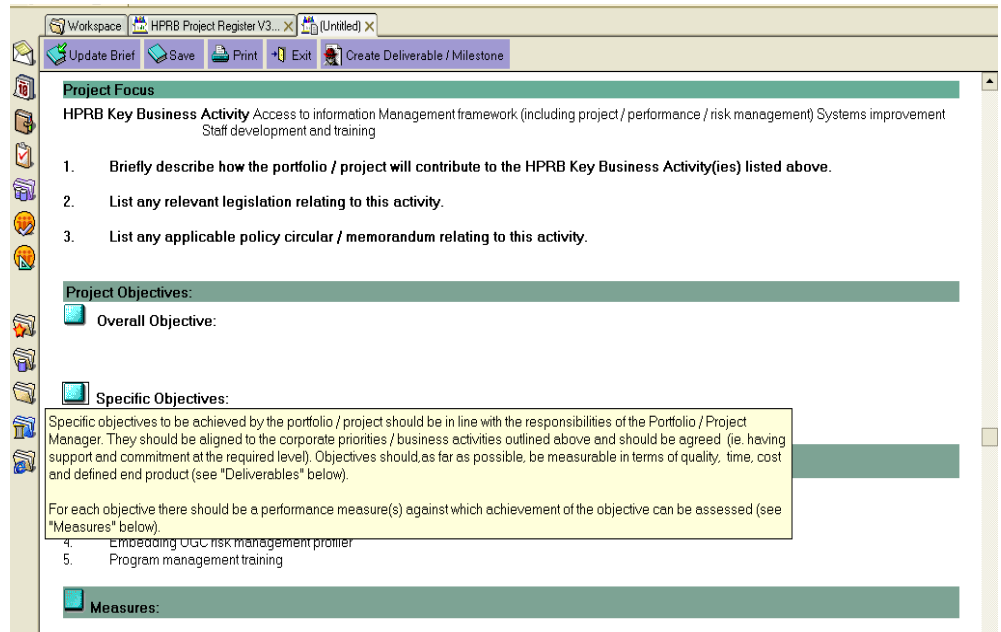
project briefing format in APPENDIX 14 and been retrofitted to the PMIS. It contained critical management information, including how the project aligned with and contributed to the HPRB strategic / business goals, the NSW Health strategic direction and whole-of Government priorities. The work could be managed at portfolio (program), project and sub-project level.

Whole-of-Government Strategy	
Negotiate Framework for HPRB Participation in GLS: Sub-Project	
Project Number: 02819115133KCostell	
Main Information	
Portfolio (Program) Title:	IS/IT Strategic Development Portfolio
Project Title:	G.L.S. On Line Initiative Project
Sub-Project Title:	Negotiate Framework for HPRB Participation in GLS: Sub-Project
Vision/Mission:	An effective quality improvement framework, Consumers and community access to better information, Technology and research practice
Overall Objective:	To ensure that the negotiated framework for participation in the GLS by Boards administratively supported by HPRB is capable of meeting their financial and functional requirements for providing online services
Start Date:	01/07/2001
Expected Completion Date:	28/01/2005
Actual Completion Date:	
Project Alignment	
NSW Health Strategic Direction:	Goal B: Fairer access, Goal D: Better value, Attribute 5: Informed decision making, Attribute 6: Embracing innovation
Regulation Better Practice Area:	C: Skilled and valued workforce, E: Informed decision making, F: Embracing innovation
Is this a NSW ICT Plan Strategy?: Yes	
ICT Priority:	
Project Focus	
HPRB Key Business Activity	Public protection, Maintenance of professional standards, Access to information, Compliance with statutory requirements, Budget, Management framework (including project / performance / risk management), Systems improvement, Staff development and training
File No:	
Management	
Sub-Project Manager(s)	Kerry Costello
Project Manager(s):	Kerry Costello
Portfolio Co-ordinator(s):	Kerry Costello
Portfolio Sponsor(s):	

FIGURE 8.10: Demonstration coversheet of a PM brief format on the HPRB PMIS (Costello *Personal Research Papers* HPRB, used with permission)

Online help features consisted of text (Figure 8.11), pick lists, embedded documents or links to other applications, for example MS Project or external web links. As indicated in Figure 8.9, the list of projects could be viewed by project / sub-project manager, strategic direction (from the HPRB corporate plan) or whole-of-government strategy, as indicated by the flag at the top of Figure 8.10. There was a report generator, with the "Report View" button providing a list of and link to the reports. Users could import their own documents into enabled fields, or create links to other locations.

FIGURE 8.11: Example of a help function embedded in the briefing format of the test PMIS (version 3) (Costello *Personal Research Papers* HPRB, used with permission)



Also, there was a “Create Deliverable / Milestone” function (Figure 8.12). As implemented, the briefing and milestone formats provided a framework for negotiating work and had features that recognised that in HPRB it was a dynamic process. However, an audit trail was provided of all the changes made and different access levels could be set and security features invoked as required.

File Number: _____ Project Number: 0382993836

Portfolio (Program) Title: Boards New Legislation Portfolio
 Project Title: Administrative and Policy Complaints
 Sub-Project Title:
 Deliverable / Milestone Title: [info](#) 1. Develop a policy relating to administrative and policy complaints received in regard to HPRB.

Deliverable / Milestone Description	Anticipated Start Date	Anticipated Completion Date	Actual Completion Date
1. Administrative and policy complaints policy.	29/08/2003	12/09/2003	

- Acceptance Requirements:**
1. Policy is well researched and informed by sources both within HPRB and externally from other government departments.
 2. Policy relates to administrative and policy complaints received in regard to HPRB only.
 3. Policy is simple, easy to follow and is congruent with current HPRB practices.
 4. Policy is accepted and approved by Director, HPRB.

Progress Report for [period to be entered]:

Project Manager's Review
 Comment:
 Any Corrective Action Required:
 Project Manager's Approval:

Completion Date:

FIGURE 8.12 “Create Milestone” screen in test PMIS (version 3), (Costello *Personal Research Papers* HPRB, used with permission).

Formal use of the trial PMIS ceased in HPRB in 2006. By that time eight of the nine transition strategies proposed in the 2003 *IS / IT Strategic Plan* had been implemented, two years ahead of schedule. The ninth related to implementation of the GLP. My assessments under my CAPS agreement (for example APPENDIX 15) demonstrated that my contribution was pivotal to a successful outcome in HPRB meeting the core objectives of its strategic directions. The Nurses and Midwives Board *Annual Report* for 2005/06 reported, under development and maintenance of systems to ensure accurate and accessible Registers and Roll:

- further development of systems for authorisation, enrolment and restoration;
- commencement of development of a tracking / contact management system for the some thousands of applications received in the Board's office each year;
- streamlining of processes for annual renewal to ensure integrity of the process was maintained while providing necessary support to accommodate legislative changes (which was on-going) and education of nurses and midwives about the requirement to submit annual returns, relating to their fitness to practice (also on-going); and
- introduction of a facility on the Board's website for searching the Register online to check if a person was registered or enrolled as a nurse or a midwife.

In 2006, the *IS / IT Strategic Plan* was updated and four strategies were proposed for developing internal work management and electronic service delivery capability. IS / IT was being tackled at different levels: hardware, network, operating system, database, business process and presentation. Online services progressively developed since 2004 included payment and online Register Search facilities. Subsequently, as reported in the *NMB Update* in March 2009 (on <http://www.nmb.nsw.gov.au>), an online registration and renewal option was available, through a secure log in, for registered practitioners to submit their annual declarations, make payments, fill in the Department of Health Workforce Survey and change their address details on the Register. All of this had been achieved through developing an internal HPRB PM capability.

8.7 Reflecting on the HPRB Engagement

During the Soft Systems for Soft Projects and RFS engagements I had been in a position where I could clearly distinguish between my personal practitioner participation and research observation and translate this experience into each of the research themes established at the outset of my inquiry: conceptual models; lessons transfer; and practical guidance (Table 4.2). The context in both cases was an externally driven

transformational change initiative where there were formal organisational structures in place to respond (for example Figure 7.5), including a project support office through which affiliation members' Mode 2 knowledge could be exercised and the "double loop" learning gained could feed-back into the PMIS process.

In HPRB, however, my practitioner-researcher roles would effectively merge in the context of an ever-changing flux of events and ideas (Figure 1.3). Also, HPRB exhibited a different organisational culture than NSW Police and the RFS where it had been found to have attributes of the closed organisational reference paradigm in Table 6.3. Decision making was essentially top-down and coordination was largely hierarchical, albeit the RFS mechanisms provided for the participation of volunteers and other agencies. HPRB exhibited more of the attributes of the open organisational reference paradigm whereby coordination was adaptive and collaborative (meeting the requirements of nine independent statutory health professionals Boards) and decision making was negotiated, consensual and by group process. These differences were reflected in views about the role PM and were also played out in the opportunities for alignment individual and organisational learning. HPRB as an agency of NSW Health would demonstrate more of the generic characteristics of learning organisations (Table 7.2) than the other two case study agencies.

The multiple, overlapping and dynamic projects and programs comprising the *Online Services Development Portfolio* had not been collectively amenable to the mapping undertaken of the *HPRB IT / CT Platform Project* near initiation and near completion along the dimensions in Figure 8.6 as reported in Crawford et al. (2005). My appreciation of hard and soft would, accordingly, proceed through my project governance model and the POM model respectively as frames for my reading of the texts in Table 8.3. This was, on my interpretation, in accordance with my positioning under multi-perspective practices in Table 4.5 (Alvesson et al., 2004) in the sets of reflexive practices and their juxtaposition that help the researcher break the habits of routine thought. Through providing different understandings and by combining them, greater insight might be achieved (Alvesson et al., 2008, p. 486). Table 8.7 is a summary of the PM and the POM model elements that I construed as mediating my practice and practitioner-researcher engagement during the HPRB trial.

PROJECT STAGE	PM 'PRACTICE'	ELEMENTS MEDIATING / INFORMING PRACTICE ENGAGEMENT	'POM' MODEL	ELEMENTS MEDIATING / INFORMING PRACTITIONER-RESEARCHER ENGAGEMENT
Project Definition	<p>Initiation</p>	<p><i>Triggers for the PMIS deployment.</i></p> <ul style="list-style-type: none"> • <i>Need / crisis</i> – problems within the organisation or opportunities; or as directed by the leadership of the organisation; or for other reasons. • <i>Future vision</i> – commitment to improvement / preparedness to engage with new ideas / take risks. • <i>Leadership mandate</i> – promoted / supported by the leadership of the organisation 	<p>Situational Analysis</p>	<p><i>Practitioner-researcher investigators, as would-be improvers, explore a perceived problem situation including its social and political nature</i></p> <ul style="list-style-type: none"> • <i>Public sector knowledge</i> – specific know-what (situational appreciation) • <i>Professional experience / knowledge</i> – specific know-how, including some general concepts / models for thinking about the problem area. • <i>Personal experience / ethics</i> – knowledge attributed to own internal sense of wisdom / appropriateness. • <i>Awareness of prejudices / biases/ limitations</i> - hermeneutic process of interpretation.
Project Execution	<p>Legitimation</p>	<p><i>Creating legitimacy for the PMIS so as to move it forward.</i></p> <ul style="list-style-type: none"> • <i>Observance of PS policies / strategies / requirements</i> – e.g. Gateway Reviews • <i>Governance</i> – clear assignment / understanding of accountabilities / responsibilities (“scope of action”) • <i>Ethical engagement / practice</i> – establishing trust. • <i>Stakeholder management</i> – clear framework for engagement in trial PMIS development. • <i>Dissemination</i> – communicating the opportunities provided by and the process of the proposed PMIS implementation. 	<p>Framing</p>	<p><i>Making sense of the social processes occurring within the organisation supported by IS (technology and professional knowledge) i.e. to make sense of the organisation and its provision of IS</i></p> <ul style="list-style-type: none"> • <i>SSM philosophy and process</i> – practitioner-researcher engagement in “real-world” practice and learning from experience. • <i>Literature</i> – academic and practitioner publications specifically pertaining to topic of interest. • <i>Expert advice</i> – use of others’ expertise, including technical know-how. • <i>Involving people in the situation</i> - who have a concern for the problem situation, or can help change it, or can veto the change or will be affected by the changes.
	<p>Management</p>	<p><i>Invoking organisational project management conventions (PS Guides and the PMBOK® Guide, PMI) incorporated in PMIS fields:</i></p> <ul style="list-style-type: none"> • Planning tasks • Scheduling tasks • Monitoring tasks / risk and quality control to ensure that the project moves ahead. 	<p>Assessment</p>	<p><i>A stream of action mediated by theoretical frames and systemic / systematic methods</i></p> <ul style="list-style-type: none"> • <i>Data gathering</i> – quantitative / qualitative approaches. • <i>Valid research</i> – defensible approach addressing aspects of relevance, validity and reliability. • <i>Analysis</i> – systemic / systematic analysis / modelling techniques.

PROJECT STAGE	PM 'PRACTICE'	ELEMENTS MEDIATING / INFORMING PRACTICE ENGAGEMENT	'POM' MODEL	ELEMENTS MEDIATING / INFORMING PRACTITIONER-RESEARCHER ENGAGEMENT
	<p>Experiential enactment</p>	<p><i>Stream of action invoked in experientially enacting the PMIS and gaining feedback from the process.</i></p> <ul style="list-style-type: none"> • <i>Multiple Trials</i> – to test PMIS performance in a “real work” agency context and carrying it forward to test at another site. • <i>Enhancing the PMIS</i> – testing its adaptability in different contexts. • <i>PM capabilities / skills</i> – deployed / developed. • <i>Closure process</i> – ensuring appropriate arrangements for any follow-through actions. 	<p>Implementation sense-making</p>	<p><i>Knowledge-mediated action for making sense of the implementation process.</i></p> <ul style="list-style-type: none"> • <i>Reflection</i> – process of gaining insights from thinking about experience, drawing upon a background of theoretical knowledge involving the use of other mediational tools to help make sense of the experience. • <i>Literature review</i> • <i>Writing / synthesis</i> – to help communicate thoughts to others and to develop insights and conclusions. • <i>Dialogic partnering</i> – to help make sense of work experiences and the implementation process.
<p>Project Realisation</p>	<p>Outcomes</p>	<p><i>Practical business impacts that help demonstrate successful functioning of the PMIS.</i></p> <ul style="list-style-type: none"> • <i>Engagement/ insight</i> – generating attention the organisation level. • <i>Enactment / use</i> – supporting changed work practices (i.e. officers able to take action on new knowledge / use the new system, technique or process.) / agency capabilities. • <i>Metrics of effectiveness</i> - reviewing business effects achieved • <i>Customised models</i> – creating a business model/process specific to the organisation that could be used as a “how to” workbook and implementation template for future use. 	<p>Outcomes</p>	<p><i>Theory-based mediational elements helping promote transdisciplinary Mode 2 knowledge recovery from collaborative inquiry:</i></p> <ul style="list-style-type: none"> • <i>Empirical findings</i> – “telling the story” / producing basic facts and disseminating them. • <i>Transorganisational PM practices / models / theories</i> – potentially applicable to other NSW public service agencies / situations • <i>Personal insight</i> - forming (“mid-range”) theories on the basis of project experience / practitioner – researchers’ growth and development. <p>Disseminating the practice / theory insights gained -</p> <ul style="list-style-type: none"> • <i>Publications</i> • <i>Presentations</i>

TABLE: 8.7: Summary of PM and POM model mediating elements of my practitioner-researcher engagement in the HPRB PMIS trial (drawing upon Tenkasi and Hay, 2004, and Checkland and Holwell, 1998b).

I found PM as represented in better practice standards, including the *PMBOK® Guide* (PMI 2000, 2004) and the various NSW public sector guidelines, to be informing governance of my practice engagement under the headings of initiation, legitimation, management, experiential enactment. According to the affiliation's emerging understanding (Figure 1.13 and Figure 4.4), they generally aligned with the "hard" PM paradigm. I identified the outcome as being practical business impacts that helped to demonstrate the functioning of the PMIS as it was supporting HPRB's increasing in-house capability for online service provision.

For conceptualising the process of learning, PM has adopted theoretical frames from other disciplines, for example Kolb experiential learning cycle (Turner et al., 2000 p4) and the spiral of Nonaka and colleagues (Morris, 2004, p. 1145). On my interpretation, however, these had not readily connected with the organisational processes occurring within HPRB. Nevertheless, at the practice level, the NSW Public Sector governance requirements still had to be met. They could, however, vary according to the close / long range interest context (horizontal) and determination / autonomy (vertical) dimensions in Figure 5.13. Thus as represented in Table 8.3, it would be critical to comply with any requirements in the Acts governing the Boards supported by HPRB and NSW Health legislation, while the NSW PS guidelines could be distinguished on the basis of their applicability for the context. The HPRB projects being entered on the PMIS were clearly different to the dominant paradigm displayed in these guides in many material respects and the capabilities for managing them appearing to align with the later emerging *Public Sector Capability Framework* (Figure 8.3).

In their NHS guide Iles and Sutherland (2001) had included PM under "how can we make change happen?" Understanding complexity, interdependence and fragmentation would, however, require a different approach and their examples included SSM (Figure 2.3). As later reported in Pollack et al. (2006), we had generally found SSM relevant and useful to apply to the complex and ambiguous PM issues in our practice areas. We saw its value not so much for management of individual projects but as a sense-making framework to guide development of an organisation-wide capability. We found learning acquired during our engagements to be relevant to project goal definition, communication and strategic alignment of projects. In particular, we had found it significant when working through how information systems could support PM competence and delivery capability in organisational contexts where there had been a low level of previous exposure to PM concepts, as was the case in HPRB. However, while we found the relationship between PM, knowledge management and

learning to be recognised in the PM literature as drivers of organisational change, we had found little that explicitly addressed the processes for translating knowledge acquired by individuals into learning at the organisational level.

8.8 Concluding Annotation

In this chapter I have given my personal account of my HPRB practitioner-researcher engagement. Reviewing my journals, I construed the POM as mediating my engagement through situational analysis, framing (making sense of the organisation and its provision of IS technology and professional knowledge), assessment (of action in terms of data gathering, validity of approach and analysis) and implementation sense-making. As developed, the PMIS expressly exhibited only some of the characteristics identified as “best practices” for learning in PM (Table 6.5), for example its capacity for continuous improvement / upgrading. Yet it did support delivery of tangible results through a process that would be largely outside mainstream PM. From my experience in HPRB, the POM model did offer a viable sense-making perspective for appreciating the processes involved that was sustainable throughout my practitioner-researcher engagement. In Chapter 9, I deliberate upon the affiliation’s collective and my individual experience with co-located research and practice.

CHAPTER NINE: Living with Heterogeneity – Engaging in Co-located Practice and Research

Many public managers recognise that learning is important in their personal and organisational performance. But where does learning figure in your daily life? Where should it figure in your life? (Stoyko, 2001, p. 3, in: *The Learning Journey: A Guide to Achieving Excellence*, Canadian Centre for Management Development).

9.1 Summary

In this thesis I have examined my experience as a foundational member of a PM practitioner-researcher affiliation engaging in change management initiatives in NSW Public Sector agencies over an eight-year period. I was endeavouring to carry forward our lessons learned to guide my engagement at HPRB, adopting the approach of a reflexive practitioner-researcher. I was, according to Alvesson et al. (2008, p. 486), a traveller periodically moving from place to place so that I may see things differently. Also, I was a builder or “bricoleur” piecing together a richer, more varied picture by viewing my own and other affiliation members’ research from different angles.

Beginning with the Soft Systems collaboration, the affiliation had delivered practical results and demonstrated the potential for research and practice to enrich each other in a complex and dynamic PM context. Reports of delivery problems with public sector projects point to this being a significant area of PM practice. Moreover, as observed by Rashman et al. (2009, p. 463), public organisations constitute an important and distinctive context for the study of organisational processes and explanatory frameworks need to be sufficiently dynamic and complex to accommodate them.

Exploring the tension between PM “hard and SSM “soft” systems thinking, wherein we became an early adopter of Checkland and Holwell’s (1998b, p. 106) POM model, we had developed an emergent appreciation of organisation and practitioner role that differed from the PM mainstream. In their model, Checkland and Holwell (1998b) had conceptualised actions as managing a multiple and changing set of relationships rather than taking rational decisions to achieve goals. They considered the POM model as a learning system which embedded IS / IT, in our case the PMIS developed during the Soft Systems for Soft Projects collaboration and subsequently deployed at other sites including the RFS and HPRB, within the process of taking purposeful action.

At HPRB I sought to elicit a situational appreciation of the contextual discourses that were shaping my PM scope of action from “reading” applicable documents that enabled me, as an experienced practitioner, to feel my way through the new situation in implementing the PMIS. For my HPRB inquiry I developed two “appreciation” frames. The first, project governance, I equated with “hard” (vertical) PM views of project control and reductionist detail complexity, albeit that I noted the shift occurring in PA towards governance centred on management by negotiation and dispersed networks rather than traditional methods of hierarchical command and control.

The second was a “soft” SSM / POM model informed frame that provided a mid-level “theory in practice” about how to implement the PMIS in a way that promoted internal development of organisational PM capability. This entailed supporting (horizontal) relationships of bargaining, negotiation and persuasion that enable an agency to make broadly based decisions which have group / agency/ government assent / support. At some point the vertical and horizontal would intersect; however, I perceived this as being continually in a process of adjustment that was more pronounced during the HPRB engagement than in NSW Police and the RFS.

Also, I viewed the POM model from a completely new perspective, applying it as a sense-making framework for holistically appreciating the dynamic relationships between the external discourses as they related to the internal HPRB organisational processes. Applied in this way, the POM model provided a theoretical approach for “appreciating” the relationship between the documents and offered an alternative to Alvesson and Karreman’s (2000, p. 146) conception of being able to cut through variations in discourses at the local level and move up the “discursive ladder” to identify overarching themes operating in a specific circumstance, and also to the prevailing rational-linear mindset evident in much PM practice and theory.

9.2 Engaging as an Insider Practitioner-Researcher

Aiming to explore how far it is possible to carry forward the experiences of a practitioner-researcher affiliation working during significant change initiatives within NSW Public Sector agencies, my inquiry spanned an eight-year period of engagement with PM and SSM across a complex flux of events and ideas (Figure 1.3). I understood my involvement to be engaged, reflexive research. Engaged research, as later defined by Levin and Ravn (2007, p. 2), is a research praxis whereby researchers actively engage in the field in a pursuit of solving pertinent and practical problems. They note

(2007, p. 9) that the engaged researcher “is immersed, not in a stable and controllable data field, but in a dynamic, incalculable and ungovernable process that is ever developing and changing”¹¹⁴. In the reflexive practices identified by Alvesson et al. (2004, p.4) in Table 4.5, I was variously a bricoleur and participant, my research encompassing both insider and outsider perspectives. I did not, however, neatly fit into their categories, including multi-perspective practices and destabilising practices, although on balance I aligned more with the former. Alvesson et al., (2004, pp. 8-9) said these were the constructive juxtapositional practices to help the researcher “break the habits of routine thought”. In the context of nursing practice, where implementing research findings is problematic, Freshwater and Rolfe (2001, p. 528) had considered reflective practice an adjunct to professional and organisational development and the notion of reflexivity as a turning back of reflection on itself, a kind of meta-reflection.

The affiliation’s starting point for engagement with PM and SSM was the Soft Systems for Soft Projects Collaboration in 1998. Delivery of PM outcomes in this context would require alternative theoretical and methodological approaches to those based on the traditional “hard” PM assumptions as we had come to appreciate them (Table 9.1).

PM Practice Dimension	Assumptions about “Hard” Methods	Assumptions about “Soft” Methods
Goal clarity	Goals have already been clearly defined and, accordingly, do not need to be further examined.	Goals require negotiation, debate and accommodation. They focus on learning, exploration and problem definition.
Goal objective / tangibility	The link is not always clear and they need to be separately analysed to understand the degree of hardness / softness of the project in terms of goals and methods (Figure 1.13).	As for “hard” methods.
Success measures	Measure objective reality and readily translate into precise metrics from performance measurement.	Evidence is based upon subjective interpretation which adds a rich, in-depth understanding of a situation.
Project permeability	More useful for projects of short duration in stable environments i.e. with impermeable boundaries.	More useful where boundary is highly permeable i.e. focus is on learning and exploration and supporting multiple perspectives.
Number of solution options	Focus is on the optimisation of a predetermined solution, without undue examination of its intrinsic value or alternatives.	Support alternatives being explored where there is an opportunity to question assumptions about goals.

¹¹⁴ They refer (2007, p. 5) to literature distinguishing engaged research and AR on the basis that the engaged researcher enters the field in the hope of understanding the participants on their own terms. The action researcher, on the other hand, is a conscious actor in the process of change and is interested in developing new knowledge with meaning and applicability beyond the specific situation at hand. However, they go beyond this distinction, understanding “engaged” as active participation along with locals in problem solving, reflection and development much in the same way as AR.

PM Practice Dimension	Assumptions about “Hard” Methods	Assumptions about “Soft” Methods
Participation and practitioner role	Tend to be non-participative with a focus on experts with clearly defined roles.	Tend towards a participative, collaborative, facilitative approach and encourage crossing of professional boundaries.
Stakeholder expectations	Emphasise clear, logical relationships between project elements and associated with a “command and control” management style.	Focus on interaction between stakeholders and associated with management styles that have culture, meaning and value as central concerns.

TABLE 9.1: Representative assumptions about “hard” and “soft” dimensions of project management practice extracted from Crawford and Pollack (2004) who based their framework on previous research by affiliation members, use of the terms in PM literature and practice and identified differences in the philosophical basis of the “hard” / “soft” dichotomy.

Sustaining my engagement proved to be particularly challenging. As observed by Stivers (2000a, p. 13), public management research is hard to do and I found that the challenges compound when engaging in public sector change initiatives. They include, as noted by Pawson et al. (2005, S1:21) in relation to retrospective reviews in PA (“realist synthesis”): how much territory can be covered; the nature and quality of the information that can be retrieved; and what recommendations can be expected where hard and fast truths about what works must be discarded in favour of contextual advice.

Succeeding as a project manager required me to adopt a participative, collaborative, facilitative approach that entailed crossing professional boundaries. Succeeding as a researcher required me to continually re-balance relevance and rigour (Figure 4.5). Van Aken (2005) refers to the relevance problem of academic research in organisation and management as an old and thorny one, with the debate being strongly inspired by the distinction made between Mode 1 and Mode 2 knowledge production. Nevertheless, as argued by Starkey et al. (2009, p. 555), when engaging in management research rigour will not be possible unless relevance is clear to research participants, i.e. in certain contexts involving collaborative research effort, relevance and rigour can be inextricably intertwined and interdependent.

Beginning this inquiry half way through the affiliation’s engagements, I developed a research plan that aimed to look back on our previous engagements and then to carry the learning forward to the HPRB (Figure 4.9). Our previous experience had led me to hypothesise that the conceptual underpinnings of SSM, as we had translated them, could be effectively applied to guide application of PM practice in ISD support for public sector organisational change projects. I had a view of the PMIS, as developed during the Soft Systems for Soft Projects collaboration and subsequently deployed at RFS and HPRB, as a cultural artifact in Jelinek et al.’s (2008, p. 320) sense of (project)

organisations as artifacts that are being recreated continually over the course of their existence and given meaning through supporting PM action and interaction within the agencies. The extent to which I was able to realise my research aims would be directly determined by the continually shifting scope for action and research afforded by my practice context as was being expressed in the discourses occurring at the outer levels of Figure 1.8. As Young et al. (2011) would later confirm in their study of Sydney Water Corporation's Capital Investment Program, the NSW Public Sector is a complex strategic environment influenced by many legislative and regulatory inputs, customers and suppliers and overarching government policy and direction¹¹⁵.

My plan had been for my research to proceed within an AR framework as during the Soft Systems for Soft Projects collaboration (Figure 1.4 and Table 6.4). Following Checkland's FMA model, I had adopted the following (Figure 5.4):

- *F (framework of ideas)* comprising Checkland and Holwell's POM model (1998b, p. 106) as praxis, Vickers' "appreciative systems" which was acknowledged by Checkland and colleagues as a foundational influence on their work and hermeneutics, which provided a broad epistemology and philosophy to inform interpretation of practical action.
- *M (methodology)* encompassing Action Learning (AL) / Action Research (AR), the POM model (reflecting my undecided view about its actual nature) and the PMBOK® Guide (PMI 2000, 2004) as they may be considered methodologies and discourse analysis.
- *A (area of concern)* employing the term *problematique* to convey the dynamic and messy practice context wherein I would be aiming to elicit Mode 2 knowing in the form of lessons learned as they may be recovered according to public sector PM practice guides. In the process, I would be reviewing our ongoing engagement with the POM model as may be understood according to various conceptualisations of theory / practice relationships.

Engaging with practice across the timescale of my inquiry ultimately precluded my planned AR account. Repositioning my approach as organisational sense-making, I shifted my focus to the documents representing the outer levels in Figure 1.8 in which

¹¹⁵ Young et al. (2011 p. 430), refer to the continual re-balancing required, observing that "organisational priorities are not singular, linear or static, but are linked and dynamic in nature and change (is) based upon not only the interaction between these portfolios but also the interaction between each portfolio and their resultant effect each interaction has on the priorities of the organisation... Each individual portfolio establishes a set of priorities which interact dynamically with the priorities of each other portfolio as well as the overarching organisational priorities and the interplay with the...environment".

our local affiliation discourses (Figure 4.2) were embedded. Grant et al. (2004, p.4) had viewed texts as a manifestation of discourse and as providing the discursive unit upon which the organisational researcher focuses. According to Hardy (2004, p. 418), texts help to stabilise and reproduce organisational activities over time. For writing up my inquiry I used research and practice material from the public domain apart from some exemptions which included my personal research papers and practice material I had permission to use. In a private sector organisation this may have caused problems with accessibility; however, public sector agencies differ in the nature and extent of the available material.

For my “reading” of the documentation, I developed a model for exploring actions, texts and discourse (Figure 5.12) based on the premise that actions can generate texts that can mediate the relationship between actions and discourse and that discourse analysis can provide a coherent framework for making certain ways of thinking and acting possible. According to Phillips et al. (2004, p. 635), this offered an alternative framework to “realist investigations whereby examination of organisational practices has been disconnected from the discursive practices that constitute them”. Looking back to the affiliation’s earlier engagements to recover lessons to guide my practice in HPRB, I sought to test my framework’s capacity to elicit the “knowing” that Connell et al. (2003, p. 148) refer to as being embedded within systems of practice that enable an experienced practitioner to feel their way through new situation. It is an emergent construction that changes and takes new forms as different tools, methods, and techniques are added to the puzzle.

While responding to my practice context, I nevertheless continued to engage with my initial research questions, albeit that I had now matched them to research themes (Table 9.2). An important researcher skill in this context, as identified by Levin and Ravn (2007, p. 11) was to be able to live with ambiguities.

SSM Research Themes	Initial PM Research Questions
<p>Conceptual models: how the POM model may assist people thinking through complex / complicated organisational contextual issues.</p>	<ul style="list-style-type: none"> • Can SSM, in particular the POM model provide an effective framework to capture knowledge about lessons learned from previous research about engaging with ‘soft’ projects?
<p>Lessons transfer: how SSM through the “POM” model may support learning / lessons transfer and how this compares with PM models.</p>	<ul style="list-style-type: none"> • How does the outcome compare with standard project management lessons learned frameworks? • What recovered knowledge can be transferred to further develop an interpretive project-shaping model previously applied in NSW public sector agencies?

SSM Research Themes	Initial PM Research Questions
<i>Practical guidance</i> : as may be discerned from an exploratory reading of (public domain) texts to gain a contextual practice view.	<ul style="list-style-type: none"> • How can the enhanced model be used to guide (communicate knowledge about) project shaping in the electronic workspace (at HPRB)?

TABLE 9.2: Initial research questions and research themes as developed during my inquiry.

9.3 Looking Back on the First Iteration (1998-2000)

The Soft Systems for Soft Projects collaboration was, under the terms of its grant, an original work to acquire new knowledge with a specific application in view, involving risk or innovation. It proved not to be a static engagement but was continuously reshaped by a complex flux of events and ideas occurring across a number of levels which I examined according to my model for exploring the role of actions, texts and discourses (Table 6.1). Key to implementation was alignment and coordination of systems, processes, projects and structures (Wood, 1997b, p. A253). As Research Associate, I was responsible for day-to-day liaison between collaboration members and managing the conduct and direction of the research (APPENDIX 5). In looking back, I observed we delivered a practical system which was acknowledged in documents in the public domain. In looking forward, I observed that our engagement led us to search for a different concept of organisational processes than in the dominant PM discourse. In the process a number of our assumptions were challenged, for example that the NSW Police organisational model would be a “closed traditional hierarchy” (Table 6.3) and, in this respect, would differ from other NSW public sector contexts.

The Soft Systems for Soft Projects engagement had not unfolded according to our planned steps and timeline (Figure 6.1). We found that we could use SSM in its “classic mode” to shape projects at the front end but not beyond according to our PM understanding of the project life cycle. Therefore, we began to explore the POM model (Figure 1.15) which provided a “soft” interpretive stance to set alongside the “hard” goal-seeking model of organisation. It offered an alternative framework to the PM mainstream for engaging with organisational sense-making and learning processes (for example, Figure 1.16 and Table 6.5) and for embedding IS / IT through the PMIS within the process of taking purposeful action.

As promoted by the NSW Police Project Office and supported by collaboration members, the PMIS developed iteratively from the inside-out rather than following a staged ISD process. It had begun as a basic “Project Brief” to support people without

any formal PM training to scope their project work. Later, a “Project Alignment” screen (Figure 8.10), was grafted onto to the front end and a “Project Deliverable / Milestone” facility (Figure 8.12) was added to the back end for negotiating about work and tracking / reporting on progress. Therefore, while the PMIS had a “hard” PM capability at its conceptual centre, increasingly it evolved to connect with the organisational context. Reviewing our experience against the elements of our planned AR approach (Table 6.4), we had found that for our purposes the POM model had to be adapted to include a formal agency structure and our PM approach (Figure 6.10). I concluded my review by observing that differences in theoretical perspectives between “hard” as represented by PM and “soft” as represented by SSM, in particular the POM model, had remained unresolved and would be carried forward into our future engagements.

9.4 Looking Back on the Second Iteration (2000-01)

The RFS engagement was over a shorter time frame and more tightly focussed than the Soft Systems for Soft Projects collaboration. Whereas the latter entailed pushing PM research and practice boundaries, the RFS engagement was more a consolidation than a new direction. “Reading” the RFS texts (Table 7.1), I found the accounts of the change process were mainly at “public sphere” and “domain specific” levels of my model (Figure 1.8). In the NSW Police case, they had been mainly proceeding at the “society-at-large” level, as represented by the Wood Royal Commission. I initially thought the apparent difference in level and the greater amount of material available, particularly on the RFS web site, might reflect different organisational cultures; however, on closer examination, I found this not to be clear cut.

Secondment of Lesley Bentley (Figure 7.3) carried the Soft Systems for Soft Projects approach directly to the RFS, thus preserving continuity. There I assisted her to implement the PMIS and to apply our research approach and co-authored papers on our experience (APPENDIX 5). The RFS work was scoped within a portfolio of projects structure (Figure 7.6) that required integration of the conflicting views and expectations of multiple stakeholders (Bentley, 2002b, p. 3). While the POM model informed our engagement (Costello et al., 2002a and 2002b), the practice model was “traditional” PM and outcomes were reported against the nine units of the Australian National Competency Standards for PM that were equivalent to the nine knowledge areas in the *PMBOK® Guide* (PMI, 2000). As implemented in the RFS, the PMIS provided the template (project brief) around which work was negotiated at integrative (portfolio) strategic (program) and tactical (project) levels. Its implementation was supported by a

Project Office which functioned to facilitate rather than control, thereby offering a different perspective than “traditional” PM on the functioning of a PMO.

During the RFS engagement we did not apply the NSW public sector *Post Implementation Review Guideline (PIR)* (Figure 3.6) which had been developed within the context of asset management / procurement. Of more relevance to the RFS engagement appeared to me to be the NSW Premier’s Department guidelines (1999) for projects involving service integration and collaboration across agency boundaries. These noted (1999, p.6) that “collaboration was not an exact science with ‘one size fits all’ answers” but required “flexibility and a willingness to modify models and use them creatively”. We also considered a PM lessons learned format from PRINCE 2; however, we concluded that it did not capture the full richness of the RFS engagement (Costello et al., 2002a, p. 53). I carried this knowledge / prejudice into my HPRB engagement.

9.5 Reflecting on the Third Iteration (2001-06)

At HPRB my practitioner-researcher focus was the agreed target in my CAPS agreement of growing an organisational PM support capability through the online PMIS (APPENDIX 15). HPRB was an agency within NSW Health which had included PM in its capacity building framework for developing organisational skills and structures to support change (Figure 8.4). Success, in the NSW Health view, was more likely if the practitioner understands the principles of organisational change and has the tools for analysing and facilitating such change. In this respect NSW Health foreshadowed the emerging NSW Public Sector Capability Framework (Figure 8.3). Its requirements for achieving successful projects represented a considerable broadening from those in the *Project Management Guideline* (NSW DWPS, 1997b); NSW OICT, 2002c) as provided in the NSW Government Information Management and Policy Framework (Figure 3.3).

My engagement had begun in anticipation of HPRB being a lead agency for implementation of the GLS, the largest e-government ICT initiative in NSW at the time. GLS projects were, on my interpretation, likely to be “Type 2” under our categorisation (Figure 1.13) as the licensing process was to be standard across all participating agencies. With the refocusing to development of an internal online service capability that would transform HPRB business processes and the nine Boards’ relationship with their respective health practitioners, the context of my engagement changed from an externally driven episodic (transformational) mode to a continuous (incremental) mode

(Table 4.1). The projects now exhibited more “Type 4” characteristics, for which Stretton (1998) had reported only partial success when attempting to superimpose a SSM model on a PM life cycle model (Figure 6.9).

While we found the relationship between PM, knowledge management and learning to be recognised in the literature as drivers of organisational change, we found little explicitly addressing the processes for translating individuals’ knowledge into organisational capability development. Essentially, my HPRB engagement entailed a practice of learning by doing. However, it did offer me an opportunity to test the organisational sense-making framework provided by the POM model (Checkland and Holwell, 1998b, p. 106) first as interpreted by affiliation members and then in the context of a Mode 2 inquiry process (Figure 1.3). Checkland and Holwell (1998b, p. 169) had expected this process to vary according to the situation being addressed and the investigators involved. Nevertheless, it could be thought of as “action to improve” (1998b, p. 171), which would change the initial situation and provide a new position from where “the whole (hermeneutic) learning cycle can begin again”. I had also found a lack guidance for generation of Mode 2 knowledge (Table 4.4) in management practice and in research, albeit that Maclean et al. (2002, pp. 205-206) had identified the following attributes (APPENDIX 7): knowledge is produced in the context of the application; transdisciplinarity; heterogeneous teams populated from a range of organisations; social accountability and reflexivity; and diverse quality controls.

HPRB was the site of two affiliation engagements, the other being Julien Pollack’s *IS/IT Platform Project* (Figure 5.3), conducted between 2002-2005, which was one of the projects within the *Online Services Development Portfolio* (Figure 8.9). Our inquiries overlapped in terms of location and time, but proceeded at different levels of scope, appreciation and analysis (APPENDIX 5). A major assumption of my inquiry was that he would complete his project which was working through how to deliver the technical platform for supporting developing HPRB’s internal online capability through building on its existing resources until the GLS became available.

When viewed according to my model for “reading” my contextual material, the HPRB documents (Table 8.3) demonstrated fundamental differences to those for the other two case studies (Tables 6.1 and 7.1). First they spanned a greater distance between the local situational context and the shaping discourses at the macro-level. Secondly, they could be distinguished according to close-range and long-range “relatedness” (Figure 5.13). Unlike the Wood Royal Commission in the case of NSW Police and the

Parliamentary inquiries in the case of the RFS, the meaning or significance of the HPRB documents in terms of framing action could not be determined in isolation from the other interactions that were shaping their context, i.e. there was no one “Discourse” that could be “plugged into” across the various levels of the model.

Therefore, I developed two pragmatic frames for “reading” my HPRB documents based on our emerging conceptualisations of “hard” and “soft”. The first, project governance, I equated with “hard” PM views of project control and reductionist detail complexity. The second, a “soft” SSM / POM model informed frame, provided a completely new perspective for appreciating the dynamic relationships between the agency projects / programs, internal organisational processes and the external shaping discourses. As summarised in Table 8.7, I found PM better practice standards / guidelines to be informing my PMIS practice under the headings of initiation, legitimisation, management and experiential enactment. The outcomes were practical business impacts that helped demonstrate the successful functioning of the PMIS as it was supporting HPRB’s increasing in-house capability for online service provision. I found the POM model to be informing my engagement through situational analysis, framing, assessment and implementation sense-making. The outcome, I concluded, was theory-based mediational elements that were providing an approach to transdisciplinary (Mode 2) knowledge recovery from collaborative inquiry.

9.5.1 Appreciating through the governance model frame

In PM, project governance provides the structure through which the project objectives are set and the means of attaining them and monitoring performance are determined (Turner, 2006b, p. 93). In the PA literature I had found governance to be a multi-dimensional notion that was constantly shifting. Within HPRB, I found the governance structure for the *Online Services Development Portfolio*, broadly interpreted in the PA sense, to be effectively extending from the discourse level (Level V) to the NPM “mega discourse” (Level I) as represented in Table 8.3 and in Figure 8.7. Although I had found NPM to be the dominant voice across the time span of my inquiry, I had noted the shift occurring towards “new governance” (Table 3.3), which was centred on management by negotiation and dispersed networks rather than traditional methods of hierarchical command and control. Nevertheless, the latter was generally the case with the generic NSW governance documents specifically relating to projects / PM that I included in Table 8.3 under “public sphere [realm of public discourse and action]”.

With the shift in the focus of my inquiry within HPRB, the governance documents I particularly examined were the NSW *Project Management Guideline* (NSW OICT, 2002c), which I mapped against relevant fields in the PMIS (Table 8.5), and the NSW Government Asset Management Committee (2001) *PIR Guideline*. They represented the most readily found generic NSW public sector PM practice guidelines in the public domain. Although the *PIR Guideline* had been developed for procurement / asset management, it claimed to be generally applicable¹¹⁶.

As developed, the PMIS provided a format that included fields providing for such management details as roles, accountabilities, deliverables, timing deadlines and budget arrangements (APPENDIX 18). In practice, users engaged differently with these fields according to the nature of their project, their role and their experience with PM. The functioning of the PMIS also supported managing in a dynamic, complex environment by providing users with a framework negotiating about and reporting on their project work (initial scope and later variations) and an opportunity for obtaining online acknowledgement, feedback and sign-off by their manager / sponsor.

9.5.2 Appreciating through the POM model frame

In developing my research approach, I had an undecided view about whether the POM model was a methodology in the SSM sense of a set of principles (Checkland and Holwell, 1998b, p. 162) or a mid-level “theory in practice” for my practitioner-researcher engagement (Figure 5.4). Winter and Smith (2006, p.5) say that “theory in practice” is represented by moving from practitioners as trained technicians to reflective practitioners engaging in learning and development which facilitates their ability to learn, operate and adapt effectively in complex project environments, through experience, intuition and the pragmatic application of theory.

During my HPRB inquiry I would engage with the POM model from two different perspectives, the first informing me about how to implement the PMIS in a way that would support internal development of an organisational PM capability. Previously we had endeavoured to locate our PM structure and prototype PMIS within the POM framework (Figure 6.10) according to our interpretation of its constitutive elements (APPENDIX 11). We had considered “discourse” (element 3), as being realised

¹¹⁶ They were, however, of considerably narrower scope than the UK OGC guidelines, which included organisational learning including through a Capability Maturity Assessment Tool providing a high level, informal self-assessment of an organisation’s capability to deliver projects and programmes (<http://www.ogc.gov.uk> viewed 24/3/2003).

through the NSW Police Project Planning / Support Office and the PMIS, which was in turn being mediated by the agency organisational culture (paradigm). The PMIS, in our view, was providing the mechanism for achieving “created meanings” (element 4), which we took to be achieving consistency in PM practice across projects. The ensuing assemblies of related intentions / accommodations (element 5) we equated with PM competence. This was the version that I took forward into HPRB. Mapping the DWPS *Managing by Projects Program* (MbP) within our framework had produced a different result (Figure 7.7). Arguably, this represented a centralised “expert model” of engagement, as being provided by the PM Centre of Excellence which was not an available option at HPRB.

My second engagement was through applying the POM as a sense-making framework for holistically appreciating the dynamic relationships between the external discourses being reporting in the public domain documentation exemplified in Table 8.3 as they related to the HPRB internal organisational PM processes. My starting point was mapping the POM elements against my interpretation of the level of the discourse evident from the documentation (Table 8.6). I found it in this case to be providing a theoretical approach for “appreciating” the relationship between the documents that offered an alternative to Alvesson and Kärreman’s (2000, p. 146) conception of being able to cut through variations in discourses at local level and moving up the “discursive ladder” to identify overarching themes operating in a specific circumstance that empirical material may be “plugged into”.

9.6 Contributing to Practice and Research

Responding to the demands of my practice context, I adopted an inquiry process that was more akin to Action Learning, referred to by Pedler et al. (2005, p. 58) as an “ethos” that they defined as a general approach to learning from experience through engaging with actual work challenges. The knowledge I sought to elicit was, on my understanding, mainly “performative”, i.e. knowledge that helps action in the world to resolve problems. Considering my potential contribution to the field, I had noted Partington’s (1996, p. 13) observation, when referring to project organisations, about “little research into the detailed model or system of project management being used in a particular situation” and how it came into existence. Also, he referred to the tendency to bypass the question of whether the model being used was appropriate.

I began my inquiry not with specific research questions, but with the scope of PM action in my case study agencies. Problems with ICT and e-government projects were being acknowledged around the world¹¹⁷; however, in all three of my case study agencies affiliation members delivered acknowledged results. Moreover, by 2006 affiliation members had produced some 27 publications that included some aspect of the thread that began with the Soft Systems for Soft Projects collaboration (Figure 4.2). As Fletcher et al. (2010, p. 489) would later observe, critical reflection on one’s own practice can be confronting and difficult and an important enactment at the meta-level is reflecting on others’ reflections as well as our own. Therefore, I have included statements from affiliation colleagues (APPENDIX 5) about my role in and contribution to the Soft Systems for Soft Projects collaboration and the ensuing practice and research in Table 9.3.

FOCUS	AIMS	CONTRIBUTION
Research Methodology / Method Development	<ul style="list-style-type: none"> • Establish a collaborative process of inquiry and explanation building that incorporates: <ol style="list-style-type: none"> 1. Systemic / systematic review of practice. 2. A theoretical foundation in Appreciative Systems (Vickers) and the POM Model (Checkland and Holwell). 3. An interpretive research approach (Action Research / Action Learning / hermeneutics). 	<ul style="list-style-type: none"> • Provided the intellectual framework for a successful research collaboration that found SSM a relevant and useful approach to complex PM issues in the context of change management / organisational development initiatives in NSW Public Sector agencies. • In particular, made out the case for using the POM model as a sense-making framework for developing contextual awareness when applied to PM practice in public sector agencies. • Sustained interest by the practitioner-researcher affiliation members in on-going engagement in this field. • Collaborative development of a model for distinguishing “hard” and “soft” projects. This interpretation would represent a major challenge to views about “hard” and “soft” in PM. • Carried forward an Action Research approach developed by affiliation members, albeit that the shift in study focus within HPRB would require a change to an emergent Action Learning approach. • Successfully implemented a collaboratively developed PMIS that differed substantially from the dominant PM view in a way that promoted internal development of organisational PM capability.

¹¹⁷ For example, Heeks (2003) estimated from survey data that about one fifth to one quarter of government ICT projects in industrialised countries are total failures and one third to three fifths are partial failures. This was generally consistent with project outcomes for a range of industries, including PA (White and Fortune, 2002) where 41 per cent were rated as successful.

FOCUS	AIMS	CONTRIBUTION
<p>Co-located Project Management practice and research</p>	<ul style="list-style-type: none"> • Align better practice Project Management approach(es) with public sector agency policies and practices. • Capture lessons learned from successive project engagements by practitioner-researchers in the NSW public sector context 	<ul style="list-style-type: none"> • Development of a viable dispersed affiliation of practitioner – researchers working collaboratively in NSW public sector agencies that endured for eight years and beyond as evidenced by their publications. • Successful transfer of the initial learning elicited from participation in the Soft Systems for Soft Projects collaboration into new PM practice-research areas within NSW Public Sector agencies. • Referenced in systems literature as a SSM-informed PM appreciation that differed from the PM mainstream (Winter and Checkland, 2003; Mingers and White, 2010) and in the PM literature. • Demonstrated positive results (acknowledged in public documents) in the application of PM practitioner-researcher expertise in real-work change management contexts. • Contributed to a PM award for the RFS engagement (Costello et al., 2002a) that acknowledged that PM “best practice” criteria had been met.
<p>Personal</p>	<ul style="list-style-type: none"> • Contribute to development of community of practice. • Contribute to transfer of PM lessons learned to new practice / research sites. • Meet performance and ethical requirements of position in NSW public sector. 	<ul style="list-style-type: none"> • Letters of support from participants in the practice / research (Appendix 5) • A foundational member of the affiliation with management responsibilities under the Soft Systems for Soft Projects collaboration. • Made an acknowledged significant individual contribution to the affiliation’s research based-practice and an original theoretical contribution to the management of projects in organisations. • Credited with providing the intellectual framework to support and guide affiliation members applying soft systems approaches as an extension of the work originating with the Soft Systems for Soft Projects research. • Co authored published papers and conference presentations. Acknowledged in other practitioner-researcher theses. • Achievement of requirements of employment position in HPRB, with a successful assessed result in the CAPS agreement (Appendix 15).

TABLE 9.3: Overview of contribution from my engagement as a practitioner-researcher across the period of my inquiry (1998-2006) structured according to my intended contribution as mapped in Figure 1.18.

9.6.1 Conceptual models

As SSM novices, we had set out in 1998 during the Soft Systems for Soft Projects collaboration to explore the potential of SSM for addressing limitations we had found with the prevailing quantitative positivist approach in PM. SSM and PM are both applied disciplines directed towards practical action; however, while SSM had made an acknowledged contribution to the development of the systems field (Figure 1.9 and Figure 1.10), there was a range of views about what constitutes the PM discipline, albeit that Morris (2002, p. 82) reported reasonable agreement on most of the formal tools used for managing projects.

We had initially engaged with the Mode 1 SSM (Table 1.1) systems modelling process. As the collaboration proceeded we began to engage with the POM model as it might apply to make sense of the complex situations we were encountering and the organisational learning processes we were participating in (Crawford and Costello, 2000, Costello et al., 2002a and 2002b), as subsequently recounted in Pollack et al. (2006). Apparently, from the few examples of the POM model in practice that I located in my literature search, we were early adopters. While I had found a consistent, although fragmented, engagement with SSM in PM reported in the *IJPM* over two decades (Table 2.2 and Table 2.3), until 2009 there was only one other consideration of the POM model besides ours in Crawford et al. (2003). This was by Yeo (2002) who considered POM to be an important conceptual reference model for sense-making in PM in the highly complex field of IS study in general and in systems failure in particular.

At first, we had worked through the POM model (Figure 1.15) on an element by element basis (APPENDIX 11). Reflecting on our experience, we found that while we had not been able to apply the POM to the management of individual projects, engaging with it helped us create a sense-making focus (through the PMIS) for developing an organisational learning capability that was supporting strategic management of multiple, interdependent projects (Table 6.4).

As indicated in a draft of our IRNOP VII paper (Pollack et al, 2006), a contested view emerged within the affiliation that “the intellectual framework against which lessons have been learned in this research [deploying the PMIS] has been the Processes for Organization Meanings (POM) model”. This was edited out of the final version (Costello *Personal Research Papers* 2006) where we refer to testing our experiences against the POM model to gain insights into the processes of meaning creation across

the various organisations where the PMIS was implemented. Our collective view was that engaging with the POM model helped with what was needed to build and maintain relationships with people working on organisational change projects. Further, it provided “a constant reminder that purposeful action and continual change create new data that must be actively examined and filtered for relevance to the programs and projects being managed and that this is important in the knowledge capture, transfer and learning within and across organisations” (Pollack et al., 2006, p. 9).

In their theses, Lesley Bentley (2001a, pp. 31-32) and Julien Pollack (2005) had both referred to the POM model, Lesley Bentley saying that it had informed her organisational “big picture” view. For her inquiry, however, she applied traditional PM and SSM methodologies / methods. Reporting on the HPRB IS/IT Platform Project (Figure 5.3), Julien Pollack said the POM model provided “the conception of an organisation” (2005, p. 88), however, his focus was on SSM as a methodology and its associated tools and techniques. He attempted to provide “some insight into the influence of the prejudices and emphases” that he brought into “the hermeneutic circle of interpretation, and how these prejudices may have influenced actions taken on the research project, and their subsequent analysis” (Pollack, 2005 p103).

Likewise, I carried into my HPRB engagement the knowledge and prejudices acquired during our earlier engagements. In accordance with my agreed focus, I was working through how to build the PMIS to provide a virtual project organisation that would support learning at the agency level. Here, the POM model “appreciative setting” would be HPRB as a whole as an agency of NSW Health whereas during the Soft Systems for Soft Projects collaboration we had perceived our “appreciative setting” (Figure 6.10) to be the Project Planning / Support Office (Crawford and Costello, 2000). Affiliation members had hereto conceptualised “hard’ PM and “soft” SSM as incommensurable at the paradigm level albeit that at the lower levels of our hierarchical view (of paradigm, methodology, method, tools and techniques), the influence of one paradigm to the exclusion of others became less clear (Pollack, 2005, pp. 43-44). Rather than further exploring the “hard” versus “soft” issue, for my inquiry I would adopt Winter and Checkland’s (2003, p. 191) contrasting images of PM practice (Figure 5.8) that conceptualised “hard” as a “management process” and “soft” as “a process of managing”. They had argued that “hard” and “soft” were not alternatives; rather the “hard” image was a special case of the “soft”.

Furthermore, I had developed an “appreciation” informed by PA literature (as in Matheson, 2000) that positioned “hard” PM on a vertical axis representing hierarchical relationships that enable an agency to take and enforce technically rational decisions in pursuit of consistent goals. I positioned “soft” SSM on a horizontal axis representing relationships of bargaining, negotiation and persuasion that enable an agency to make broadly based decisions which have group / agency/ government assent / support. At some point they would intersect, however, I perceived this to continually be in a process of adjustment, although this was more pronounced during the HPRB engagement than in NSW Police and the RFS. To be effective in the *HPRB Online Services Development* context, the PMIS would need to provide more opportunities for horizontal than vertical PM relationships as they may support organisational learning according to the NSW Health policy model (Figure 3.5).

When viewed according to my model for “reading” my contextual material, the HPRB documents demonstrated fundamental differences to those for the other two case studies in terms of distance between the local situational context and the shaping discourses at the macro-level and also in their close-range and long-range relatedness. In the PM literature, while the need to align project delivery capability with corporate strategy (Crawford et al., 2006a) and the interaction between the project and its institutional framework (as for example in Miller and Hobbs, 2005) was well recognised, the “traditional” PM view was of an organisation as a structure (as indicated in Table 1.6) rather than a dynamic process. Accordingly, in the HPRB context, I applied the POM model in a novel way, viewing it as a mid-level “theory in practice”. This offered an alternative framework for relating the discourses embodied in the documents that were setting the scope of PM action according to the HPRB organisational change / learning processes to Alvesson and Karreman’s (2000) hierarchical conceptualisation of a “ladder of discourse”.

Therefore, to my first question, about *whether the POM model could provide an effective framework to capture knowledge about “lessons learned” from previous research about engaging with soft projects*, my response is that ongoing engagement with it provided affiliation members with a framework for generating new meanings that helped us ascertain the scope, and hence the options open to us, for PM action as being supported by the PMIS within our particular agency contexts. Houghton and Metcalfe (2009, p. 3, citing Vickers) refer to people shaping, defining and “appreciating” problems from their own mental constructions of the world. Citing Checkland (2005),

they refer to Vickers being of the view that the world may only be understood according to the way we structure our interpretation of it.

Successfully transferring our experience to other sites depended on the PM practice context being amenable to sustaining an ongoing, iterative engagement process. In this respect, public sector agencies appear to offer greater opportunities than private firms for a practitioner-researcher to access public domain material for appreciating the organisational context. This may be the result of external public sector drivers or the management culture of the agency itself which would be reflected in views about the role PM and played out in the opportunities for alignment individual and organisational learning.

Miller and Hobbs (2005, p. 43) refer to the learning dilemma that can arise from an insufficient stream of projects to support learning at the organisational (portfolio) level and the time required, in their case for large-scale public and private infrastructure projects. This, however, was not the experience of affiliation members in a sustained engagement over an eight year period, and indeed beyond. Further, my experience confirmed the possibility suggested by Houghton and Ledington (2004) of engagement as an alternative theoretical framework to systems modelling as a process for real-world problem solving. They had argued that engagement provides an approach to gaining outcomes from problem solving activity and also to presenting a coherent approach and referred (2004, p. 503) to Checkland (1981) suggesting that discourse could be used instead of models, albeit noting that this was not carried forward into his later works.

9.6.2 Lessons transfer

During the Soft Systems for Soft Projects collaboration, an agency that had no corporate-wide history of PM aimed to develop the PM capability of its people, systems and organisational environment simultaneously and interactively. This was also the case at the RFS and HPRB, albeit that the latter would also not have a formal Project Planning / Support Office to provide PM expertise. Further, HPRB had exhibited more of the attributes of an open organisational reference paradigm (Table 6.3) than NSW Police and RFS, which had implications for how opportunities for individual and organisational learning might align. As noted in Pollack et al. (2006), our affiliation came to increasingly appreciate the important contribution the PMIS could make to communicating strategic PM information and learning within our agencies. Generally,

these were not project oriented organisations and, for many of the people involved, the PMIS was their first experience engaging with PM concepts. As developed, the characteristics of the PMIS would be different from those prevailing in the PM literature across the study period and subsequently¹¹⁸. Fully realising the benefits of the PMIS depended on a PM practitioner with the required knowledge to support the process. As the PMIS was made available during research collaborations, its direct use “wound down” when the collaborations ended. However, there was evidence that the “know how” developed from engaging in the process became embedded in varying degrees in the agency’s strategic business management processes.

I had framed two related questions against my second theme concerning how the outcome of applying the POM framework compared with standard PM lessons learned frameworks and what recovered knowledge was transferable to other NSW public sector contexts. For conceptualising the process of learning, PM has needed to adopt theoretical frames from other disciplines. Moreover, on my “reading”, the NSW public sector *PIR Guideline* accorded with the observation by Morris (2004) that work in project-based organisations largely concentrates on process good practices. Therefore, while I would be observing the *PIR Guideline* at HPRB, on my interpretation they did not provide a framework for developing an organisational learning capability that I could incorporate into my practice there.

Accordingly, my response is that as generally represented by the NSW Public Sector lessons learned frameworks, as exemplified by the *PIR* process (Figure 3.7), and many of the PM “best practices for learning” (Table 6.5), the results were indeed different. I found that neither the *PIR Guideline* nor PM “best practices” readily connected with organisational processes. As Williams (2007, p. 6) would later observe, the “move from the individual to the organisation is not simple”. The reason is suggested by Bresnen’s (2006, p. 84) view that differences in organisational change / learning and PM discourses (APPENDIX 9) represent differences in epistemic cultures and hence in the machinery of knowing. Ongoing engagement by affiliation members with both discourses would be essential for developing the PMIS. Successful development during the Soft Systems for Soft Projects collaboration had, on my assessment, required flexible arrangements to bring people with PM and IT expertise and users together in a less bureaucratic and more intensive way of working. As later noted by

¹¹⁸ For example, Raymond and Bergeron (2008) refer to PMIS use contributing to project success through improving budget control, meeting project deadlines and fulfilling technical specifications. They also note that a PMIS is usually acquired by an organisation as a software package. Caniels and Bakens (2012) likewise refer to the PMIS as providing support for planning, organising and controlling projects.

affiliation members in Pollack et al. (2006, p. 8), the benefits of the PMIS included a demonstrable assurance of PM professionalism as well as a non-expert facility easily modified for user needs.

9.6.3 Practical guidance

In Checkland's (2000b, p. 799) view, the most cogent comments about SSM-in-use come from reflective practitioners, their experience suggesting that engaging with SSM can engender "a process of ongoing (cyclic) structured learning which feels natural, and which can surface previously unexamined assumptions, thus creating an arena in which accommodations can emerge which enable and motivate 'action to improve' to be taken". In particular, reflective practitioners can (Checkland, 2000b, pp. 800-01) "recognise and engage that which is shifting and turbulent in their practice". Nevertheless, as he observed, "experienced use of SSM is both flexible and user-dependent, and this makes it difficult to generalise about the learning".

Over my study period, I found that it was the NSW public sector organisations that were often more dynamic as they are reconfigured to meet Government policy objectives than the programs / projects within the agencies. Moreover, any PM lessons being learned did not appear to be feeding back into the NSW public sector guidelines at an across-public sector level, albeit that there were many PM "discursive spaces" within individual agencies. The generic NSW guideline for managing projects (NSW OICT, 2002c) remained essentially as published by NSW DPWS (1997b). They did not reflect continuing developments in thinking reported in the UK where, for example, research identifying good practice in the use of program / project management at the strategic organisational (policy-making) level had identified key lessons (Office of Public Sector Reform, UK, 2002). These lessons substantially accorded with my experience with the "thread" of practice and research beginning with the Soft Systems for Soft Projects collaboration, in particular that PM in a PA context:

- is not about applying a prescribed set of structures and techniques, but about the intelligent application of principles;
- is not a linear and discrete set of stages, but an iterative and organic process;
- must be accompanied by a substantive organisational contextual knowledge;
- cannot be pasted onto traditional line management departmental structures;
- is, under NPM initiatives, likely to be associated with cultural and organisational change; and

- offers a shared set of skills and language for building a team ethos and empowers people to make things happen in a clear structure of accountability.

Therefore, to the third question about *how the model from the first two case study sites could be transferred to HPRB* my response is that “reading” the Table 8.3 texts from a POM model perspective enhances “appreciation” of the PMIS organisational context and hence how the PMIS may be adapted to meet the particular agency requirements. Problems with public sector ICT projects are often considered failures of “control” rather than “appreciation”. As indicated from experience within the Canadian Public Service¹¹⁹, the latter requires the building of new competencies that are fostered by meaningful dialogue “which helps understanding issues from several points of view and see the interconnections” (Stoyko, 2001, p. 7). As noted, a learning organisation is built through relationships (Stoyko, 2001, p. 10) and this requires working “horizontally” (Rounce and Beaudry, 2002)¹²⁰.

In the NSW Public Sector, this would later be reflected in the *NSW Capability Framework* (Figure 8.3) where PM is included under “capacity to deliver” along with: communication; analytical thinking and problem solving; technology; technical leadership; policy development; commercial acumen and client engagement (NSW Department of Premier and Cabinet, 2008, p. 5). Under this model, a project manager is expected to draw lessons from projects for continuous improvement. As demonstrated from the lessons learned during the “thread” of PM practice and research that began with the Soft Systems for Soft Projects collaboration, this requires a broadening of the conceptual and practical PM models to those currently considered PM “best practice” and applying the POM model as extended in this thesis offers both a theoretical approach and a methodology for supporting this process.

9.7 Future Research

Since 2006, when I completed the formal inquiry reported in this thesis, various affiliation members have continued to develop themes that emerged from the Soft

¹¹⁹ The Canadian Public Service was an influential “voice” in Australian PA Johnston, 2000).

¹²⁰ In reviewing lessons learned from leading horizontal projects in the Canadian Public Service, Hopkins et al. (2001) had identified the key drivers key dimensions as: 1. Mobilising teams and networks, during which dialogue and persuasion are key methods for identifying opportunities and resolving conflicts and shared mental models and vocabularies help give an initiative a working culture; 2. Developing shared frameworks which need to evolve to adapt to changing circumstances and new opportunities; 3. Building support structures that facilitate longer-term relationship building; and 4. Maintaining momentum, for example, through building on small successes, continuous learning through reflecting on experiences and remaining flexible in response to changes in the environment and emerging opportunities.

Systems for Soft Projects collaboration and to publish the results. There are still many “threads” from this line of research to follow as well as picking up “threads” of other research frameworks I was considering at the time, particularly activity theory, and comparing this with SSM when applied to our practitioner-researcher PM experience.

Also, I had noted the large body of literature emerging on systematic review in the public sector from research funded by the UK Economic and Social Research Council (Mays et al., 2005b) during the time of my inquiry and the range of review approaches being considered, including meta-ethnography. Following up where, and indeed if, these have subsequently been applied in practice and how they might have developed at the theoretical level may provide alternative frames for “appreciating” PM capability at the organisational level in complex public sector contexts. This could then be tested against alignment with the NSW Public Sector Capability Framework.

Finally, my “reading” of documentary material in the public domain has provided a source of material for contextualising local PM engagements in the wider, shaping discourses in which they are located. As Crawford (2006, p. 76) observes extension of the focus of PM “to encompass multiple projects, programs, portfolios and enterprise wide approaches has changed the context, the actors, and the nature of conversations between them”. In her study, she used the principles of discourse analysis as a framework for studying the extent to which practice within an organisation reflected “the espoused theories of organisational project management capability development” (Crawford, 2006, p. 83), comparing the discourse representing the espoused theories of the PM practitioners with that representing the reality of practice. My “reading” model has provided an exploratory “appreciation” that extends beyond the boundary of the relationship of the PM practitioner and the organisation to the dynamic contextual factors shaping the scope of PM action at the organisational level. Testing this model in other public sector agency contexts would confirm its potential to provide a richer approach to organisational sense-making than that currently prevailing in the PM field.

APPENDICES

APPENDIX 1: PRACTITIONER– RESEARCHER OUTPUTS 1998 - 2006

Journal articles, refereed research conference papers and presentations and theses

Date	Author/s	Title	Details
[1] 1998	Crawford, Lynn	Management of interdependent soft projects	In Hartman, F; Jergeas, G; Thomas, J (eds) Proceedings IRNOP III - The Nature and Role of Projects in the Next 20 Years: Research Issues and Problems University of Calgary, Canada.
[2] 1998	Stretton, Alan	An Exploration of Methodological Frameworks for Managing Organisational Change as Projects	Internal Monograph, Project Management Program, University of Technology, Sydney.
[3] 1999	Crawford, Lynn; Simpson, Stephen; Koll, Walter	Managing by Projects: A Public Sector Approach	In: Proceedings for NORDNET'99: Managing Business by Projects : Project Management Association, Finland and NORDNET
[4] 2000	Crawford, Lynn; Costello, Kerry	Towards a transferable methodology for managing strategic change by projects	In: Crawford, L H and Clarke, C F (eds) Paradoxes of Project Collaboration in the Global Economy: Interdependence, Complexity and Ambiguity IRNOP IV Conference University of Technology, Sydney.
[5] 2000	Stretton, Alan	An investigation of connections between organisational change processes and project management	In: Crawford, L H and Clarke, C F (eds) - Paradoxes of Project Collaboration in the Global Economy: Interdependence, Complexity and Ambiguity IRNOP IV Conference University of Technology, Sydney.
[6] 2001a	Bentley, Lesley	The Use of Soft Systems Methodology and Project Management Practice for Organisational Change	Master of Project Management Thesis, University of Technology, Sydney.
[7] 2001b	Bentley, Lesley	Project Management and the Community	In: Project Management in Society Proceedings, AIPM Sydney 14-17 October 2001.
[8] 2002a	Bentley, Lesley	Project Management and the Community	Australian Project Manager 22(1),11-14
[9] 2002b	Bentley, Lesley	A Soft Systems Approach to Managing Rapid Change Projects	Projects and Discontinuities in Project-oriented Societies, PM-Days Research Conference Vienna IX, 27-28 November 2002, Vienna.
[10] 2002	Bentley, Lesley; Costello, Kerry; Crawford, Lynn	Portfolios, Programs and Projects	16 th IPMA World Congress, Berlin, Germany. 4-6 June, 2002
[11] 2002a	Costello, Kerry; Crawford, Lynn; Bentley, Lesley; Pollack, Julien	Connecting Soft Systems Thinking with Project Management Practice: an Organizational Change Case Study	In: Ragsdell, Gillian; West, Duane; Wilby, Jennifer (eds) Systems Theory and Practice in the Knowledge Age Kluwer / Plenum, New York.

Date	Author/s	Title	Details
[12] 2002b	Costello, Kerry; Crawford, Lynn; Pollack, Julien; Bentley, Lesley	Soft Systems Project Management for Organisational Change	In: Turner, J Rodney (ed) International Research Network of Organizing by Projects (IRNOP) V Conference Zeeland The Netherlands 28-31 May 2002 EuroProjex Ltd Surrey, UK.
[13] 2002	Crawford, Lynn; Costello, Kerry	Approaches to Development of Strategic Project Management Capability	Presentation to Conference of International Federation of Operational Research Societies IFORS 2002 Edinburgh (12 July).
[14] 2002	Howard, Robert	Managing by Projects: Case Study of MbP Implementation in a Functional Hierarchical Organisation	Master of Project Management Thesis, University of Technology, Sydney.
[15] 2002	Remington, Kaye; Pollack, Julien; Bentley, Lesley	Collaboration for Project Management Competence	Project Management World Conference, Berlin, June 2002.
[16] 2003	Crawford, Lynn; Costello, Kerry; Pollack, Julien; Bentley, Lesley	Managing soft change projects in the public sector	International Journal of Project Management 21(6), 443-448.
[17] 2004	Costello, Mayet; Blyth, Caroline	Applying Project Management to Social Work: a successful partnership controlling sexual assault	Australian Social Work 57(3), 247-259.
[18] 2004	Crawford, Lynn; England, David	Mapping the Links between Project Management and Systems	IRNOP VI conference August 25-27, 2004 Turku, Finland (hosted by Åbo Akademi University & Helsinki University of Technology).
[19] 2004a	Crawford, Lynn; Pollack, Julien	Hard and soft projects: a framework for analysis	International Journal of Project Management 22(8):645-653
[20] 2004b	Crawford, Lynn; Pollack, Julien	Action Research as a Framework for Project Management	IRNOP VI conference August 25-27, 2004 Turku, Finland (hosted by Åbo Akademi University & Helsinki University of Technology).
[21] 2004	Remington, Kaye; Crawford, Lynn	Illusions of Control: philosophies influencing project management	IRNOP VI conference August 25-27, 2004 Turku, Finland (hosted by Åbo Akademi University & Helsinki University of Technology).
[22] 2005	Crawford, Lynn; Pollack, Julien; Costello, Kerry	Hard and soft projects in the NSW public sector	In Richardson, K., Gregory, W. & Midgley, G. (eds.) Proceedings of the 11th Annual ANZSYS Conference / Managing the Complex V, Christchurch, New Zealand, 5-7 December, 2005, ISBN 0976681447.
[23] 2005	Crawford, Lynn; Pollack, Julien; England, David	Uncovering the trends in project management: Journal emphases over the last 10 years	International Journal of Project Management 24(2), 175-184

Date	Author/s	Title	Details
[24] 2005	Pollack, Julien Bjarne Francis	Project pluralism: combining the hard and soft paradigms in IS / IT strategy development in the NSW public sector	PhD Thesis, University of Technology, Sydney.
[25] 2006	Pollack, Julien; Costello, Kerry; Crawford, Lynn Bentley, Lesley	Systems of Information and the Development of Organisational Project Management Competence	Presented at IRNOP VII Project Management Conference, Northwestern Polytechnical University, Xi'an, China, 11-13 October, 2006.
[26] 2006a	Pollack, Julien	Pyramids or Silos: Alternative Representations of the Systems Thinking Paradigms	Systemic Practice and Action Research 19(4), 383-398
[27] 2006b	Pollack, Julien	The changing paradigms of project management	International Journal of Project Management published "In Press" in 2006; in 2007 Vol. 25(3), 266-274

**APPENDIX 2: JOURNALS IN THE AUTHOR'S CENTRAL ELECTRONIC REFERENCE
MANAGER LIST (with 5+ articles)**

Journal	No. Articles	Date Range
Academy of Management Review	5	1989 - 2005
Accounting, Auditing and Accountability Journal	6	2007
Action Learning Research and Practice	13	2004 - 2008
Action Research	8	2004 - 2007
Administrative Theory & Praxis	17	2000 - 2007
Australian Journal of Public Administration	73	1997 - 2010
British Journal of Management	39	1995 - 2005
British Medical Journal	14	1995 - 2004
Emergence	5	1999
European Journal of Information Systems	43	1995 - 2008
European Journal of Marketing	5	1998 - 2004
European Journal of Operational Research	9	1998 - 2010
Evaluation	9	1995 - 2008
Health Services Management Research	22	2001 - 2004
Human Relations	18	1988 - 2005
Human Resource Management	22	1999 - 2004
Information Systems Journal	34	1997 - 2008
Information Technology and People	6	1995 - 2002
International Journal of Information Management	29	1994 - 2005
International Journal of Managing Projects in Business	11	2008 - 2009
International Journal of Network Management	9	1999 - 2002
International Journal of Project Management	253	1988 - 2010
International Journal of Public Sector Management	6	2001 - 2007
International Journal of Qualitative Methods	12	2002 - 2004
Journal of Advanced Nursing	17	2003 - 2006
Journal of Evaluation in Clinical Practice	7	2003
Journal of Management Development	6	1994 - 2005
Journal of Management Studies	25	2002 - 2009
Journal of Nursing Management	21	2002 - 2004
Journal of Organizational Change Management	35	2000 - 2006
Journal of Public Administration Research and Theory	6	2002 - 2007
Journal of Strategic Information Systems	52	1998 - 2004
Journal of the Operational Research Society	70	1985 - 2009
Journal of Workplace Learning	13	1999 - 2007
Knowledge and Process Management	6	2000 - 2005
Learning in Health and Social Care	5	2003 - 2004
Management Learning	42	1994 - 2009
MIS Quarterly	8	1993 - 2006
New Directions for Adult and Continuing Education	6	2001 - 2005
Organization	36	2000 - 2007
Organization Research Methods	8	2002 - 2007
Organization Science	7	1991 - 2005
Organization Studies	36	2001 - 2009
Policing: An International Journal of Police Strategies & Management	18	1997 - 2003

Journal	No. Articles	Date Range
Project Management Journal	26	1994 - 2009
Public Administration	29	2002 - 2009
Public Administration Review	8	2003 - 2004
Qualitative Health Research	25	1998 - 2008
Qualitative Inquiry	7	2004 - 2006
Strategic Change	11	1999 - 2005
System Dynamics Review	26	1994 - 2004
Systemic Practice and Action Research	130	1998 - 2009
Systemist	19	2000 - 2003
Systems Research and Behavioral Science	74	1997 - 2009
The Learning Organization	10	2002 - 2007

APPENDIX 3: INTERNATIONAL JOURNAL OF PROJECT MANAGEMENT – ARTICLES REFERENCING CHECKLAND AND COLLEAGUES’ SSM

Author(s)	Date	Vol & pages	Title	Keywords	Reference
1. Davies, R M G and Saunders, R G	1988	6(1) 19-26	Applying systems theory to project management problems	management techniques; project management; problem analysis	Checkland 1981
2. Robinson, Philip	1989	7(1) 25-28	Role of the expert system in project management	expert systems; project management; knowledge acquisition; shell	Checkland 1981
3. Daniel, David W	1990	8(2) 79-83	Hard problems in a soft world	project management; defence procurement; systems engineering; systems analysis; operational research	Checkland 1981; 1983: 1985
4. Yeo, K T	1990	8(4) 205-212	Systemic CSF analysis for strategic IT planning	critical success factors; IT planning; strategic analysis; planning methodologies	Checkland 1988
5. Saunders, R G	1992	10(3) 153-159	Project management: a systems perspective	soft systems approach; paradigms; conceptual model	Checkland 1981
6. Yeo, K T	1992	10(4) 231-238	Management of computing: from content analysis to trend study	information technology; trends; surveys	Checkland 1981; 1988; Checkland & Scholes 1990
7. Yeo, K T	1993	11(2) 111-117	Systems thinking and project management – time to reunite	systems thinking; soft systems methodology	Checkland 1981; 1988 Checkland & Scholes 1990
8. Green, Stuart D	1994	12(1) 49-56	Beyond value engineering: SMART value management for building projects	value engineering; value management; building design; systems engineering; soft systems thinking; problem structuring	Checkland 1981; 1989
9. Neal, R A	1995	13(1) 5-9	Project definition: the soft-systems approach	statement of requirements; controlled requirement evaluation; soft systems; changes in requirement; proactive tracking	Checkland & Scholes 1990
10. Russell-Hodge, John	1995	13(1) 11-17	Total project management: the customer-led organisation	customisation; value chains; learning organisations; operating envelopes; organisational change	Checkland 1981
11. Yeo, K T	1995a	13(4) 219-224	Strategy for risk management through problem framing in technology acquisition	risk management; problem framing; technology planning	Checkland & Scholes 1990

Author(s)	Date	Vol & pages	Title	Keywords	Reference
12. Yeo, K T	1995b	13(5) 287-293	Planning and learning in major infrastructure development: systems perspectives	infrastructure development; systems thinking; planning; learning	Checkland 1981
13. Stewart, Roger W and Fortune, Joyce	1995	13(5) 279-286	Application of systems thinking to the identification, avoidance and prevention of risk	systemic analysis; risk evaluation; risk management	Checkland 1981
14. Partington David	1996	14(1) 13-21	The project management of organizational change	project management; organizational change; organizational structure; bureaucracy	Checkland 1981
15. Sherman, D G; Cole, A J and Boardman, J T	1996	14(1) 23-30	Assisting cultural reform in a projects-based company using Systemigrams	project management; soft systems methodologies; process modelling; culture	Checkland 1981
16. Ramsay, David A; Boardman, John T and Cole, Alison J	1996	14(1) 31-36	Reinforcing learning, using soft systemic frameworks	soft systems methodology (SSM); project management culture; systems thinking; training; project management principles; risk management; framework; Systemigram	Checkland 1981
17. Hsu, J P and Yeo, K T	1996	14(6) 387-393	A systemic approach to re-engineer a Public Research Institute (PRI) for commercialization	business process re-engineering; soft systems methodology; technology transfer; R&D management; commercialization	Checkland & Scholes 1990; Checkland 1985
18. Lai, Linda S. L.	1997	15(3) 173-179	A synergistic approach to project management in information systems development	synergy; information systems development; project management	Checkland 1981; Checkland & Scholes 1990
19. Remenyi, Dan and Sherwood-Smith, Michael	1998	16(2) 81-98	Business benefits from information systems through an active benefits realisation programme	information systems development; management evaluation; process; feed back loop; project management; stakeholders; systems co-evolution	Checkland 1981
20. Chapman, Robert J	1998	16(4) 235-247	The role of systems dynamics in understanding the impact of changes to key project personnel on design production within construction projects	general systems theory; design process; model	Checkland 1981; 1983; 1987

Author(s)	Date	Vol & pages	Title	Keywords	Reference
21. Strain, John D and Preece, David A	1999	17(5) 283-292	Project management and the integration of human factors in military system procurement	Human Factors Integration; project management; Combined Operational Effectiveness and Investment Appraisal; Integrated Logistic Support	Checkland 1981
22. Yeo, K T and Tiong, Robert L K	2000	18(4) 257-265	Positive management of differences for risk reduction in BOT projects	build-operate-transfer (BOT); negotiation strategy; risk reduction; risk management; soft systems methodology (SSM)	Checkland & Scholes 1990
23. Yeo, K T	2002	20(3) 241-246	Critical failure factors in information systems projects	critical failure factors; information systems; project planning	Checkland & Scholes 1990; Checkland & Holwell 1998
24. Liu, Anita M M and Leung, Mei-yung	2002	20(5) 341-349	Developing a soft value management model	decision-making; goal specificity; conflict; value management	Checkland 1981; 1989
25. Fernie, Scott; Green, Stuart D; Weller, Stephanie J; and Newcombe, Robert	2003	21(3) 177-187	Knowledge sharing: context, confusion and controversy	context; socialization; knowledge sharing; construction; aerospace	Checkland & Holwell 1998; Checkland 1999 (a) (30 year)
26. Crawford, Paul and Bryce, Paul	2003	21(5) 363-373	Project monitoring and evaluation: a method for enhancing the effectiveness of aid project implementation	implementing strategy; managing projects; success and strategy; design and appraisal; international projects	Checkland and Holwell 1998
27. Anderson, David K and Merna, Tony	2003	21(6) 387-393	Project Management Strategy – project management represented as a process based set of management domains and the consequences for project management strategy	implementing strategy; managing projects; business strategy; project management process	Checkland 1981
28. Crawford, Lynn; Costello, Kerry; Pollack, Julien and Bentley, Lesley	2003	21(6) 443-448	Managing soft change projects in the public sector	strategic management; systems approach; hard and soft projects; collaborative research; experiential learning	Checkland & Scholes 1999 reprint; Checkland & Holwell 1998; Checkland 2000 (30 year)
29. Crawford, Lynn and Pollack, Julien	2004	22(8) 645-653	Hard and soft projects: a framework for analysis	hard and soft; systems approach; project analysis; lessons learned	Checkland & Scholes 1990; Checkland 1999 (a) (30 year)

Author(s)	Date	Vol & pages	Title	Keywords	Reference
30. Fortune, Joyce and White, Diana	2006	24(1) 53-65	Framing of project critical success factors by a systems model	critical success factors; formal system model; human and organisational aspects of projects	Checkland 1981
31. Morris, Peter W G; Jamieson, Ashley and Shepherd, Miles M	2006	24(6) 461-473	Research updating the APM Body of Knowledge 4 th edition	bodies of knowledge; professions; trends in project management	Winter & Checkland 2003
32. Winter, Mark; Smith, Charles; Morris, Peter and Cicmil Svetlana	2006	24(8) 638-649	Directions for future research in project management: The main findings of a UK government-funded research network	project management; research; directions; network; theory; practice; complexity	Checkland 1989
33. Winter, Mark; Smith, Charles; Cooke-Davies, Terry and Cicmil, Svetlana	2006	24(8) 650-662	The importance of 'process' in Rethinking Project Management: The story of a UK Government-funded research network	network; rethinking; process; learning system; facilitation; sensemaking; engaged scholarship	Checkland 1985; Checkland & Scholes 1990; Checkland 1999 (a) (30 year); Checkland 2001
34. Winter, Mark; Andersen, Erling S; Elvin, Roger and Levene, Ralph	2006	24(8) 699-709	Focusing on business projects as an area for future research: An exploratory discussion of four different perspectives	business projects; value creation; change processes; intervention processes; service delivery	Checkland & Scholes 1990
35. Male, Steven; Kelly, John; Gronqvist, Marcus and Graham, Drummond	2007	25(2) 107-114	Managing value as a management style for projects	value management; value engineering; project management; benchmarking; construction industry	Checkland 1981
36. Pollack, Julien	2007	25(3) 266-274	The changing paradigms of project management	theoretical basis; systems approach; paradigms	Checkland 1999 (a) (30 year); Checkland 1985; Winter & Checkland 2003
37. Edkins, Andrew J; Kurul, Esra; Maytorena-Sanchez, Eunice and Rintala, Kai	2007	25(8) 762-772	The application of cognitive mapping methodologies in project management research	cognitive mapping; content analysis; complex processes	Checkland 1981
38. Walker, Derek H T	2008	26(3) 316-325	Reflections on developing a project management doctorate	project management education; andragogy; on-line learning	Checkland 1981

Author(s)	Date	Vol & pages	Title	Keywords	Reference
39. Jackson, Paul and Klobas, Jane	2008	26(4) 329-337	Building knowledge in projects: A practical application of social constructivism to information systems development	project management; information systems development; social constructivism; knowledge heuristics; knowledge management; managing teams	Checkland 1999 (b) (in Currie et al)
40. Young, Raymond and Jordan, Ernest	2008	26(7) 713-725	Top management support: Mantra or necessity?	top management support; critical success factor; project success; project failure; benefits realisation; IT-enabled business project; organisational change; project champion	Checkland 1981
41. Joham, Carmen; Metcalfe, Mike and Sastrowardoyo, Saras	2009	27(8) 787-794	Project conceptualization using pragmatic methods	conceptualization; connections; ideas; interrogatives; project management; pragmatism	Checkland 1981; Checkland 2000 (30 year)
42. Howell, David; Windhal, Charlotta; Seidel, Rainer	2010	28(3) 256-264	A project contingency framework based on uncertainty and its consequences	managing projects; processes; procedures; risk; configuration	Winter & Checkland 2003

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APPENDIX 4: SUMMARY OF NINE NSW CASE STUDIES (NSW Office of Information & Communications Technology, 2004)

Case Study	Department/ Agency	Initiative / New Facility	Development Approach	Benefits / Lessons
Community Access to Natural Resources Information (CANRI) (accessed 12/8/2004)	Multi-agency initiative administered by a Program Board under the umbrella of the NSW National Resources Information Management Strategy Steering Group (NRIMS)	Provision of tailored information for community-based local and regional environmental management	Involved collaboration between no less than 13 State natural resource agencies. Innovative technology allowed integrated views of NSW natural resources and environmental information. On reaching its full potential, CANRI would provide easy access and exchange of distributed information between natural resource data custodians within and external to government. Program management approach: <ul style="list-style-type: none"> • Visionary approach to meeting evolving community information needs. • Acknowledgement of each agency contribution. • Adoption of OIT guidelines, especially <i>IM&T Blueprint</i> and <i>connect.nsw</i>. • Careful planning/alignment with Government priorities. • Adoption of PRINCE 2 PM methodology • Pro-active co-ordination, development and implementation of the Business Case • On-going and effective communication between all member agencies. 	Development could not have occurred without a high level of trust and understanding between the partner agencies. Co-ordinating development of the Program, ensuring the interests and priorities of the participating agencies were recognised within a broader Whole-of-Government Program was, and will continue to be, a challenge throughout the life of CANRI Keys to success in this context were:- <ol style="list-style-type: none"> 1. Agreed principles for defining the Program. 2. Ensure a strong institutional framework (e.g. establishment of a Program Board) and put support mechanisms in place to allow for a program review and audit of 'deliverables' against Program objectives. 3. Agree overall scope / objectives of Program. 4. Elect a 'champion' to drive the process. 5. Adopt a strong planning methodology. 6. Seek input from a range of potential users prior to focusing on clear achievable outcomes as aligned with Program principles. 7. 'Staged' deliverables.
Connecting Business NSW Government Licensing Project (GLS) (accessed 7/6/2004)	Department of Commerce	Creating a single integrated licensing solution for business, professional and personal licensing in NSW	Phased implementation approach; to date had assessed some 300 NSW licences, registrations, certificates and permits administered by 32 licensing agencies; of these, 24 agencies administering 2.8 million licences were included in the GLP scope. Phase 1: online renewal of business names and selected business licences. Phase 2: progressive roll-out of the GLP to enable applications via a single streamlined online access point as well as agency web sites (due second half of 2004). Phase 3: online verification of information from databases and introduction of photo licences for appropriate professional and trades. Legislation to support phases 1 and 2 that enabled common provisions across government. Project scope included:	Expected benefits for clients, consumers and the general public – the GLS would deliver choice, convenience, availability, access to an enhanced NSW Business Licence Service (BLIS), time and cost savings and ensured safety and privacy. To provide government agencies with a more efficient licensing 'platform', through:- <ul style="list-style-type: none"> • The ability to manage and 'tailor' the system to meet individual agency licensing needs. • Enhanced security and integrity of licensee details, through automated source checks on suitability and qualifications. • Direct access / responsibility to keep BLIS current, potentially through remote authorship of the licensing information. • Improved licensing processes supporting staff up skilling in new ICT.

Case Study	Department/ Agency	Initiative / New Facility	Development Approach	Benefits / Lessons
Corporate Services Reform: Department of Land and Water Conservation (accessed 12/8/2004)	Department of Land and Water Conservation (DLWC).	Restructure of dispersed regional corporate services function into consolidated service.	<ul style="list-style-type: none"> Development of standard high quality licensing practices. Development of new single IT system to replace 40+ existing systems Introduction of legislation to underpin the project's three phases in law. Procedures for use by participating licensing agencies. Implementation of training for new system. BPR. Close consultation with Privacy NSW. <p>DLWC took time and care to listen to and reassure staff about the processes the DLWC would follow. Appreciated the challenge of managing perceptions and ongoing financial capacity as a critical factor in maintaining regional jobs: the aim was to redirect resources (and improve business performance) rather than just cut overall costs.</p> <ul style="list-style-type: none"> Analysed business processes. Place a high priority on staff redeployment. Allocated responsibilities under the new structure following extensive consultation. <p>PM approach adopted that had three stages:-</p> <ol style="list-style-type: none"> Information confirmation – project team gathered information that was confirmed at a series of meetings with corporate services and other affected staff. Design – task teams established to focus on specific issues, including: staff matters; service level agreements; data analysis; job design; business protocols/ policy/ procedures; process mapping to detail workflows; change management. Implementation – emphasis on communication, staff support, system support and Senior Executive commitment to bringing about the change in a focused and deliberate way. 	<ul style="list-style-type: none"> A legislated uniform approach to licensing across government. <p>The legislation enables common provisions across government for:-</p> <ul style="list-style-type: none"> Online applications Renewals and restorations Public access to registers and licence information Elimination of prescribed forms. Introduction of common licence periods Fee structures and heavy penalties for false statements <p>While there were very positive components, inevitably in such a major change program, there were periods of slow progress, unforeseen difficulties, some levels of staff uncertainty and disaffection. DLWC tried to respond to those issues as they arose in a positive and constructive way. The project required different responses and different actions occurred at different times at different stages in the life cycle of the project.</p> <p>Key success factors were:</p> <ul style="list-style-type: none"> Planning through a PM approach; project board was set up with clear reporting lines and developed project structures. Collaboration – model included feedback mechanisms / issues log; and involvement of union representatives. Communication – newsletters; staff involvement via logging questions; regular briefings; electronic mailbox; staff information kits and brochures; workshops (change management, career planning etc).
Corporate Services Reform: State Transit	State Transit Authority (STA) of NSW	Centralised payroll, restructuring of rostering /	Change program relied on detailed planning, extensive consultation and phased implementation. STA particularly conscious of:-	<p>Key success factors were:-</p> <ol style="list-style-type: none"> Building on existing strengths to contribute towards the momentum of the projects and facilitate the associated

Case Study	Department/ Agency	Initiative / New Facility	Development Approach	Benefits / Lessons
Authority (accessed 12/8/2004)	(provided bus and ferry services)	scheduling support and electronic self service (ESS) via information kiosk technology. (for 24 hour access by employees) Run as separate but concurrent projects.	<ul style="list-style-type: none"> • Involving the right people in the process to ensure local ownership of reforms. • Designing organisational arrangements to support the reforms and reinforce local ownership of the change. • Pacing change so that technology advances did not overwhelm the user community. <p>Process steps:-</p> <ol style="list-style-type: none"> 1. Negotiation with unions (over payroll centralisation). 2. Established a project steering committee for the information kiosk project to: - determine scope; plan the project phases, assess user requirements and oversee implementation. STA nominated a project sponsor and appointed a project manager. The project steering committee was made up of key stakeholders and consulted widely with unions and users on the potential scope for the project. The steering committee designed the implementation plan. 3. Communication with affected staff was undertaken throughout planning and implementation. 4. Trial at pilot site with feedback being reported to the steering committee and communicated to all staff through an internal staff newsletter. 5. Rollout across depots and Sydney Ferries. 6. Measure results via feedback and monitoring of user satisfaction; weak areas in the system were addressed. 	<p>change management. Aspects included:-good and collaborative working relationship with unions built on a solid foundation of trust; existing technology awareness of staff; open channels of communication across divisions and projects.</p> <ol style="list-style-type: none"> 2. Realistic project planning - STA considered taking a realistic approach to what can and should be delivered in the initial phases was a critical key to their success; it approach was to phase the technology in. STA recognised that it could be easy to get caught up in the 'possibilities' and purposefully kept the project's purpose in perspective. 3. Collaborative approach to build ownership; this was essential in creating commitment to the reforms. While the steering committee oversaw the implementation of the information kiosks, it was local-level commitment to testing and giving feedback that ultimately created the environment for success. Had to be genuine commitment to receiving and acting on feedback. 4. A key lesson was ensuring all aspects of technology, including hardware, actually facilitated and enhanced planned project outcomes. 5. A 'union champion' was also a key to success in the highly industrialised work environment of the bus depots.
Corporate Services Reform: Visitor Services Agencies (accessed 12/8/2004)	Centennial and Moore Park Trust; The Royal Botanic Gardens and Domain Trust; and Tourism NSW	Shared corporate services arrangement between three NSW Government visitor services agencies; they were adding Finance and	<p>A three-step approach was reported as adopted while noting that, at commencement of the project a number of aspects, including project objectives needed to be defined and this was done progressively throughout the early stages of the project:-</p> <ol style="list-style-type: none"> 1. Conduct a feasibility study. 2. Establish operating arrangements, including developing options for the Shared Services Operating Framework, draft Service Level Agreements and undertaking initial BPR. 3. Implementation to physical relocation stage (ongoing at the time of the case study). 	<p>The shared services arrangement was in the early stages of implementation. The process for developing the operating arrangements, supporting documentation and practical engagement of key stakeholders proved more time consuming than initially supposed, because key elements had to be designed from the ground up.</p> <p>Key learning for the consultants included:- (1).Need for early clarification by agency CEOs to how to make the shared arrangement happen. (2).Different perspectives and understanding of what shared services mean so preferred model communicated to all staff early in the project process. (3).Share cost arrangements must be</p>

Case Study	Department/ Agency	Initiative / New Facility	Development Approach	Benefits / Lessons
		HR to an already shared IT facility	Project success was seen as depending on engaging all key staff, senior managers and stakeholders in the process so the approach was designed to: - Engage all staff and their representatives in the process; and Provide strategic change and PM advice to the agency CEOs and Steering Committee. Position staff and managers in the business groups to be receptive to change.	settled early so can be identified and mapped in BPR stage. (4). Engagement of key stakeholders critical; need to provide resources to backfill staff positions. (5). Timing of critical project activities has to avoid clashing with agency major operational demands. (6). Seeing cynicism and negativity in the change process as an opportunity, not a barrier. (7). Engaging people in the process so they become committed and build their capability to drive change. (8) Flexible project approach to accommodate the business needs, requirements and dynamics of three different organisations. (9). Trust is essential for the arrangements to work.
e@gle.i – NSW Police intranet (accessed 12/8/2004)	NSW Police Service	Information management systems for exclusive use of NSW Police that is capable of recording, tracking, analysing and reporting on all forms of information gathered during an investigation.	The new system was to be built on the existing Police Corporate Intranet, which was viewed as essential to ensuring incorporation of infrastructure. It was determined that the NSW Police Service would be better served by undertaking custom development and investing in 'new' technology than remaining tied to older generation systems. This decision was in line with the NSW Police IT strategic direction. Also, the project strongly aligned with OIT Electronic Services Delivery objectives. The contractor located themselves in-house throughout the development process, ensuring close interaction between the development team and end users; this was considered vital to the success of the project. The contractor provided the computing expertise while NSW Police provided the business requirements and knowledge of police investigative practices and systems. A Rapid Application development approach was used to accelerate development of the project; as this was the first Internet based investigation system in the world, interaction with other agencies to obtain benefit from similar experiences was limited.	<ul style="list-style-type: none"> The innovative approach to system development where user representatives sat side by side with programmers proved particularly beneficial; issues that may have taken days or weeks to finalise were resolved quickly. Establishment of a Support Unit early in development to put policy, support and maintenance procedures in place was of great benefits; it offered users guidance throughout the changes to process, greatly easing transition, thereby creating a groundswell of support for the new system. Infrastructure must be in place to support development and roll out of a Statewide system, and recurrent funding for the ongoing associated costs should be forthcoming. Rigorous testing to ensure functionality in line with user expectations must be carried out. One of the project's objectives was to use corporate infrastructure and hence capitalise on investment. However, a number of infrastructure facilities were not available at the time requiring the project team undertake a leading role in their provision.
Rental Bond Internet Service (RBIS) (accessed 7/6/04)	Department of Fair Trading, Renting Services Branch	A new facility enabling property managers to perform a range of rental	The project required integration of the new Internet based solution with existing, critical to core business. Security, performance and the availability of real-time information were major concerns. Long-term success would depend on voluntary, rather than enforced uptake by client (Real Estate Agents).	<ul style="list-style-type: none"> An important principle, reinforced during the life of the project was involving external stakeholders – from development to implementation. They are more likely to support and promote a new system if they have had direct input into its creation. Clearly defined roles allowing staff from all levels to

Case Study	Department/ Agency	Initiative / New Facility	Development Approach	Benefits / Lessons
		bond functions, including authorisation of rental bond refunds via the Internet	<p>Approach taken included:-</p> <ul style="list-style-type: none"> • Quality control and assurance processes. • Ensuring stakeholder input/consultation during planning and development. • Provision of ongoing client support. • Ongoing change management strategies involving communication, consultation, training and development. • Staff involvement in project testing, marketing, review of operational procedures and branch structures. • Use of Project Control Documents developed internally using OIT guidelines. • Using a PM methodology which included assigning 'key' roles to people with appropriate expertise; all involved had clearly defined and documented role and responsibilities. • Managing the project from a business process rather than an IT angle. 	<p>contribute to the project; ensured smooth transition and ongoing support at sponsorship level.</p> <ul style="list-style-type: none"> • Having a good methodology, using both strategic and detailed plans allowed for quick corrective action when things did not go according to plan. A structured approach helped deal with issues that may have undermined the project, including tight deadlines that could not be met by the contractor. • The importance of having well drawn out contracts with specified 'deliverables' and penalties for not delivering on time. • Being able to provide a highly secure close channel became crucial; choosing a system that would meet the specific needs of use (rather than one which would establish an infrastructure for future eCommerce transactions) overrode all other considerations. • Maintaining flexibility; adopting the latest technology is unpredictable and it is vital that resources can be shifted when needed; sacrifice deadlines rather than delivering a faulty system costing more to 'fix' later.
Police Complaints Case Management (PCCM) (accessed 10/6/05)	NSW Premiers Department	Suite of systems as a key component of management of Police complaints, misconduct and corruption in NSW	<p>PCCM was initiated by Cabinet in 1997 as a result of recommendations made by the Royal Commission into the NSW Police Service Key stakeholders in PCCM were:</p> <ul style="list-style-type: none"> • The NSW Police Service • The NSW Police (Special Crime and Internal Affairs) • The Police Integrity Commission • The NSW Ombudsman • The Premier's Department which provided program management through the PCCM Program Office <p>Under the program management umbrella, each component project was sponsored by a lead agency, which provided the component project management. It was a "high-high" risk project; the agencies had no history of joint development and the system needed to implement complex workflows that were not as yet defined or agreed. Agencies effectively acted as suppliers of each project with other agencies under a fixed price development contract. On-going service</p>	<p>Use of the novel PCCM Program Office delivered more functionality than required at the bottom half of the range of costs originally estimated, despite the inherent political, technical and operational complexities; this was attributed to:</p> <ul style="list-style-type: none"> - Sponsorship of the Premier's Department; the decision to use the program governance structure; and unrelenting focus on scope, time, money and deliverables by the program office. Success of the PCCM was largely attributed to the program governance structure. Program Office objectives were:- (1). Establishment of transparent project management frameworks, standards and acquisition procedures. (2). Establishment of appropriate inter- and intra-agency committees and working parties responsible for business, technical and financial management. (3). Establishment of relationship management to ensure the active involvement of senior personnel and in particular, project sponsors. (4). Effective and tight control of budgets and timeframes. (5). Management of risks and their mitigation and contingency planning. (6). Scope control; ensuring the final system was well integrated and would deliver the business improvements

Case Study	Department/ Agency	Initiative / New Facility	Development Approach	Benefits / Lessons
Tracking the Benefits of ICT Studies	Combines three case studies:- > NSW Health >Attorney-Generals > Department of Commerce	Application of Benefits Management Plan (BMP) milestone reporting tool	<p>provision would be made through interlocking Service Level Agreements which made agencies responsible and accountable for access to shared systems.</p> <p>As outlined, a BMP is one of the milestone reporting tools (together with project plan, budget summary, risk management plan etc.) that Project Managers use to provide valid and detailed reporting on their project. A BMP shows the benefits of a project anywhere along the project life cycle; it ensures all relevant tasks or actions are identified, completed and result in the benefit being achieved. And is comprised of six parts: 1. Project Description. 2. Project Benefits. 3. Governance Approach. 4. Benefits Framework. 5. Management of Base Line measures. 6. The Benefits Realisation Register schedules.</p> <p>Each of the three case studies reported is indicative of BMP to ICT programs in government agencies. Each has developed a BMP process to suit their own agency and project management methodology. Each has covered the six parts of the BMP process to varying degrees. Their different approaches demonstrate that the BMP framework is flexible and can be customised to suit agencies' particular circumstances.</p>	<p>to each agency. (7).Provision of professional advice to project teams and sponsors – there were many occasions where individual projects had effectively stalled and were in danger of cost and time overruns resulting from staffing issues, breakdown in vendor / customer relationships, breakdown in communication between agencies and for other reasons; in each case the Program Office was able to assist.</p> <p>NSW Health – <i>Point of Care Clinical Information System</i> – PoCCS is an interactive information system that provides hospital-based clinicians with information necessary for day-to-day-management of patients. NSW Health focussed on two aspects: - the <i>governance approach</i>, to assign specific tasks and accountabilities for management of the benefits realisation process; and focus on <i>documenting the tasks and initiatives that have to be undertaken</i> to achieve the desired outcomes and benefits. Methodology used provided for: (1).Rigorous basis for identifying outcomes and the path for reaching them via initiatives and intermediate outcomes. (2).Ability to identify and document risks, assumptions and conditions. (3) -Ability to evaluate different paths and select one. (4).Establishing common understanding between all participants and stakeholders. (5).Continuous management of the program from a benefits and risk perspective, including impacts of environmental changes and assumptions. <i>Attorney Generals and NSW Police – Electronic Exchange of Court Outcomes Project</i> – designed to improve processes and systems for updating and maintaining criminal histories between the two agencies. The BPR was used as a monitoring tool; the agencies wanted to demonstrate progressive benefits as implementation proceeded. <i>Department of Commerce - NSW Government Licensing Project</i> - objective of the BMP was to attribute benefits achieved either to participating agencies or the Project Team. The Steering Committee decided that the main effort would go into establishing and monitoring base line measures and a dedicated resource was engaged to do this. Participating agency business processes would be meticulously documented before any work commenced. Each agency would then be able to implement business process reforms that have already been identified in preparation of replacement of existing systems by the GLS.</p>

APPENDIX 5 – CONTRIBUTION LETTERS / STATEMENTS



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STATEMENT FOR KERRY COSTELLO

Kerry Costello assisted me in development of the successful ARC Linkage Research Grant application, Soft Systems for Soft Projects, conducted in partnership with the NSW Police Service. When the grant was awarded, Kerry was seconded from the NSW Department of Health to UTS, where she was appointed Research Associate for conduct of the research project, for which I was a Chief Investigator, commencing in 1998.

As required under the accountabilities of her Research Associate position, Kerry was the primary day-to-day liaison between the UTS research team and the NSW Police Service. This was essentially an action research project so Kerry was responsible for leading this research. Her research skills and public sector background were crucial to the success of the project.

From 1998 to 2001, while at UTS, Kerry managed a team of research assistants and practitioner researchers located both at NSW Police and at UTS. She was fully responsible for the conduct and direction of the research and took a leadership role in publications arising from the work. The work conducted for the NSW Police Service was well regarded and, under Kerry's guidance, requests were received and approved for application in other government agencies including during a major organizational change program at NSW Rural Fire Service.

Kerry provided the intellectual framework to support and guide a team of practitioner researchers applying soft systems approaches, as an extension of the work originated in the Soft Systems for Soft Projects research. This was done in various ways including in a number of Masters and PhD theses. When Kerry returned to the NSW Health Professionals Registration Boards in 2001, she continued to motivate and provide guidance to the team of practitioner researchers she had nurtured into being.

Kerry has made a significant individual contribution to research based practice, based on soft systems thinking. In particular, her identification, application and development of Checkland and Holwell's Processes for Organisation Meaning (POM) model as a sense-making framework during complex public sector change programs is an original and important theoretical contribution to the management of projects in organizations.

As Chief Investigator for the Soft Systems for Soft Projects research grant, and as Kerry Costello's doctoral supervisor until I left UTS in 2007, I can testify to the originality and independence of her research, as well as her significant strengths in research leadership.

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STATEMENT ABOUT KERRY COSTELLO

I first met Kerry Costello in 1998 when she was undertaking research in and around the fields of Program Management, Project Management and Change Management. Kerry was employed by UTS and seconded to the NSW Police Service Project Management Program, my employing agency at the time, in the position of Research Associate for the Soft Systems for Soft Projects collaboration. This was the result of an award under the Australian Research Council's Strategic Partnership with Industry Research and Training Scheme (ARC/SPIRT).

Kerry formed the collaborative link between the two agencies for the three year duration of the program. She performed her role according to the conditions of the ARC/SPIRT Award and the Research Agreement between UTS and the NSW Police Service.

During this time Kerry worked side by side with me, collaboratively undertaking the research, writing and publishing papers based on research outcomes and guiding me as the practitioner. In accordance with the aims of the collaboration, Kerry viewed her role as a facilitator and mentor focussing on the development of research expertise to enhance practice in a real work situation. She contributed original ideas and research materials as well as considerable expertise to writing and editing our joint papers.

At the conclusion of the Soft Systems for Soft Projects collaboration, Kerry resumed a position with the NSW Department of Health on a part time basis. During this time, Kerry continued through her research role with UTS to support an Organisational Change Program commencing at the NSW Rural Fire Service (RFS) where I had been seconded from the NSW Police Service. Again Kerry supported my work, assisting me to apply the research approach we had collaboratively developed to practice in the new context and co-authoring papers on our experience.

After the RFS work completed in 2001 we both continued to contribute to writing joint papers with members of our research community that had grown out of the Soft Systems for Soft Projects partnership.

For any further information, please feel free to contact me.

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9 November 2011

STATEMENT ABOUT KERRY COSTELLO

The purpose of this statement is to detail Kerry Costello's foundational contribution to the stream of research, of which I was a part.

I worked with Kerry from 2000 – 2006 at the University of Technology, Sydney (UTS). At the start of this period, Kerry Costello and Lynn Crawford were managing the lessons learned stage of the Soft Systems for Soft Projects ARC Linkage Grant with NSW Police, and subsequent interventions with the NSW Rural Fire Service. I also worked with Kerry at the NSW Health Professionals Registration Boards (HPRB) from 2002 – 2006.

During these periods at UTS and HPRB Kerry made vital, independent and central contributions to the research being conducted. Without Kerry's involvement, much of the research conducted within this stream would not have occurred.

Kerry and I worked in the same contexts, and the research we conducted was often complementary. However, our research interests, and the methods we employed to conduct research, were distinctly different.

I understand Kerry's main areas of research focus to have been the following:

- The primacy of practice;
- Checkland and Holwell's (1998) Processes for Organisation Meanings (POM) model as a framework for sense-making;
- Meta-narratives, particularly within the context of New Public Management; and
- Textual analysis as a way of understanding organisations.

By contrast, the themes of my research during this period were:

- Soft Systems Methodology (Checkland, 1981; Checkland & Scholes, 1990);
- Project Management at a methodological level;
- Ways of combining methodologies;
- Action Research

Kerry also made a significant contribution to the ongoing viability of the research stream. Kerry focused on the strategic positioning of participants within the research team. Without this, it is likely that the research stream would not have survived, or maintained cohesion, as long it did. This focus on strategic positioning and contextual narratives is also apparent in her research.

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✓ Dr. Julien Pollack
Senior Lecturer
Course Director – Project Management Program
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APPENDIX 6: 'Hard' v 'soft' research dichotomies (Fitzgerald and Howcroft, 1998, p. 319)

SOFT	HARD
ONTOLOGICAL LEVEL	
<p>Relativist Belief that multiple realities exist as subjective constructions of the mind. Socially-transmitted terms direct how reality is perceived and this will vary across different languages and cultures.</p>	<p>Realist Belief that external world consists of pre-existing hard, tangible structures which exist independently of an individual's cognition.</p>
EPISTEMOLOGICAL LEVEL	
<p>Interpretivist No universal truth. Understand & interpret from researcher's own frame of reference. Uncommitted neutrality impossible. Realism of context important.</p>	<p>Positivist Belief that world conforms to fixed laws of causation. Complexity can be tackled by reductionism. Emphasis on objectivity, measurement and repeatability.</p>
<p>Subjectivist Distinction between the researcher and research situation is collapsed. Research findings emerge from the interaction between researcher and research situation, and the values and beliefs of the researcher are central mediators.</p>	<p>Objectivist Both possible and essential that the researcher remain detached from the research situation. Neutral observation of reality must take place in the absence of any contaminating values or biases on the part of the researcher.</p>
<p>Emic/Insider/Subjective Origins in anthropology. Research orientation centred on native/insider's view, with the latter viewed as an appropriate judge of adequacy of research.</p>	<p>Etic/Outsider/Objective Origins in anthropology. Research orientation of outside researcher who is seen as objective and the appropriate analyst of research.</p>
METHODOLOGICAL LEVEL	
<p>Qualitative Determining what things exist rather than how many there are. Thick description. Less structured & more responsive to needs & nature of research situation</p>	<p>Quantitative Use of mathematical & statistical techniques to identify facts and causal relationships. Samples can be larger & more representative. Results can be generalised to larger populations within known limits of error</p>
<p>Exploratory Concerned with discovering patterns in research data, & to explain/understand them. Lays basic descriptive foundation. May lead to <i>generation</i> of hypotheses</p>	<p>Confirmatory Concerned with hypothesis testing & theory verification. Tends to follow positivist, quantitative modes of research</p>
<p>Induction Begins with specific instances which are used to arrive at overall generalisations which can be expected on the balance of probability. New evidence may cause conclusions to be revised. Criticised by many philosophers of science, but plays an important role in theory/hypothesis conception.</p>	<p>Deduction Uses general results to ascribe properties to specific instances. An argument is valid if it is impossible for the conclusions to be false if the premises are true. Associated with theory verification/falsification & hypothesis testing</p>
<p>Field Emphasis on realism of context in natural situation, but precision in control of variables & behaviour measurement cannot be achieved</p>	<p>Laboratory Precise measurement & control of variables, but at expense of naturalness of situation, since real-world intensity & variation may not be achievable</p>
<p>Idiographic Individual-centred perspective which uses naturalistic contexts & qualitative methods to recognise unique experience of the subject</p>	<p>Nomothetic Group-centred perspective using controlled environments & quantitative methods to establish general laws</p>
AXIOLOGICAL LEVEL	
<p>Relevance External validity of actual research question & its relevance to practice is emphasised, rather than constraining the focus to that researchable by 'rigorous' methods</p>	<p>Rigour Research characterised by hypothetico-deductive testing according to the positivist paradigm, with emphasis on internal validity through tight experimental control and quantitative techniques</p>

APPENDIX 7: MODE 2 RESEARCH – COMPARATIVE ATTRIBUTES¹

MODE 2 Feature ²	MODE 1 Comparison	Action Research Comparison	Co-operative Inquiry Comparison
<i>Knowledge is produced in the context of the application</i>	Knowledge is framed, driven and produced in a predominantly theoretical context.	Sympathetic to the need for knowledge to be produced in the context of the application which necessarily involves a matter of 'genuine concern' to the organisation.	Knowledge, by the definition of co-operative inquiry (as a form of action research concerned with revisioning understanding of the world and reforming practice within it) is produced in the application context.
<i>Transdisciplinarity</i>	Disciplinary	Not typically a key feature of discussions of the methodology. Transdisciplinarity is possible but not a prerequisite condition for most AR.	Collaborative dimension (from a group of people coming together to explore ideas) may increase likelihood of crossing disciplinary boundaries), but may be performed within the confines of a single discipline.
<i>Heterogeneous teams populated from a range of organisations</i>	Problems are usually tackled by homogeneous teams from a single (academic) organization	A team may be heterogeneous, in the sense that it comprises practitioners and at least one academic, and span at least one organisational boundary. More diversity is possible (in terms of team membership or organizational location) but not necessary.	Team heterogeneity / homogeneity and organizational diversity is a matter of design choice by the participants in the process.
<i>Social accountability and reflexivity</i>	Less likely to produce true social accountability due to prevalence of theoretical and organizational homogeneity. Preference for positivist approaches reduces likelihood of reflexivity as a key feature of the knowledge production process or an acknowledged feature of the research.	May claim increased level of accountability over traditional approaches due to level of interaction with the user community. Reflexive in that it should generate 'emergent theory' and requires a high degree orderliness to reflect upon / hold onto the emerging research content of each episode.	Explicitly participative process with everyone having a say in questions to be addressed, concepts used and conclusions so provides greater accountability than many methods (arguably including AR) where the issues are the domain of the academic expert. Features intentional interplay between reflection / sensemaking and experience / action.
<i>Diverse range of quality controls</i>	Typified by a comparatively uniform approach to quality control. Outputs are generally evaluated from a disciplinary standpoint and driven by senior academic peers.	Long history of use in the social sciences. Operates within and can survive the peer-based evaluation process. However, the intervention's history and context must be taken as critical to interpretation of the likely range of validity and applicability of results.	Proponents argue the outcome of good research is "not just books and academic papers...but also the creative action of people to address matters that are important to them" (Reason, 1999 p208)

1. Extracted from Maclean et al., (2002, pp. 205-206) who refer to management having a long tradition of “mode 2” research. They argue (2002, p. 193) that while the contrast with more traditional mode 1 forms of knowledge production is marked, it is less clear with other research methodologies such as Action Research (Eden and Huxham) and Co-operative Inquiry (Reason) which could be regarded as producing knowledge “in mode 2”.

2. They report research undertaken with all five “mode 2” features as simultaneous aspects of the process, referring to Gibbons et al., (1994, p. 8)* who said that when these appear together they “have a coherence which gives recognisable cognitive and organisational stability to the mode of production”.

* Gibbons, M., Limoges, C., Nowotony, H., Schwartzman, S., Scott, P. & Trow, M. (1994). *The New Production of Knowledge: the dynamics of science and research in contemporary societies*. Sage Publications, London.

APPENDIX 8: APPRAISAL QUESTIONS FOR ASSESSING QUALITATIVE POLICY RESEARCH EVALUATIONS

Category	Question
Findings	<ol style="list-style-type: none"> 1. How credible are the findings? 2. How has the knowledge / understanding been extended by the research? 3. How well does the evaluation address the original aims and purpose? 4. Scope for drawing wider inference – how well is this explained? 5. How clear is the basis of the evaluative proposal?
Design	<ol style="list-style-type: none"> 6. How defensible is the research design?
Sample	<ol style="list-style-type: none"> 7. How well defended is the sample design / target selection of cases / documents? 8. How clear is the basis of evaluative proposal?
Data Collection	<ol style="list-style-type: none"> 9. How well was the data collection carried out?
Analysis	<ol style="list-style-type: none"> 10. How well has the approach to, and formulation of, the analysis been conveyed? 11. Contexts of data sources – how well are they retained and portrayed? 12. How well has the diversity of perspective and content been explored? 13. How well has detail, depth and complexity (i.e. richness) of the data been conveyed?
Reporting	<ol style="list-style-type: none"> 14. How clear are the links between data, interpretation and conclusions i.e. how well can the route to any conclusions be seen? 15. How clear and coherent is the reporting?
Reflexivity and Neutrality	<ol style="list-style-type: none"> 16. How clear are the assumptions / theoretical perspectives / values that have shaped the form and output of the evaluation?
Ethics	<ol style="list-style-type: none"> 17. How clear and coherent is the reporting?
Auditability	<ol style="list-style-type: none"> 18. How adequately has the research process been documented?

SOURCE: Spencer, Liz; Ritchie, Jane; Lewis, Jane; and Dillon, Lucy (2003), Quality in Qualitative Evaluation: A framework for assessing research evidence – A Quality Framework, Government Chief Social Researcher's Office, United Kingdom Cabinet Office, London.

APPENDIX 9: Summary of Key Differences between Project Management and Organisational Change / Organisational Learning Discourses (extracted from Bresnen, 2006, p. 84).

Factors	Project Management	Organisational change / learning
Project task characteristics	<ul style="list-style-type: none"> • Precise task objectives • Finite duration, milestones and deadlines • Clear progression from planning to implementation • Difficulty in routinising processes 	<ul style="list-style-type: none"> • Retain flexibility and adaptability • Extended duration and time to consult and embed changes • Feedback and iteration between planning and implementation • Emphasis on routinising processes
Project team characteristics	<ul style="list-style-type: none"> • Discontinuities in staffing and team relationships • Project-focused team building • Minimising of slack resources, idle time; reliance on 'swift trust' 	<ul style="list-style-type: none"> • Continuity of staff and relationships • Development of organisation-wide communities of practice • Importance of social interaction, training, 'resilient trust'.
Wider organisational context	<ul style="list-style-type: none"> • Project-based management systems • Clearly defined processes and standards for projects • Decentralisation of control for project performance • Limited wider intra-organisational communication and interaction 	<ul style="list-style-type: none"> • Organisation-wide management systems • Organisation-wide processes and standards • Centralised implementation of new management practices • Extensive intra-organisational communication and interaction
Wider network characteristics	<ul style="list-style-type: none"> • Extensive inter-professional relations across organisations • Inter-organisational contractual relations • Shaping practices via external referents (contracts, standards) 	<ul style="list-style-type: none"> • Extensive intra-organisational communication and interaction • Intra-organisational authority relations • Shaping of practices by internal policies
Nature of the change	<ul style="list-style-type: none"> • Incremental change within fixed project parameters • Specific changes made to improve short-term project performance • Clarity and precision in nature of change required 	<ul style="list-style-type: none"> • Wider change in broader organisational arena • Generic changes made to improve long-term performance • Ambiguity allowable to assist diffusion of change

**APPENDIX 10: ARC / SPIRT Grant Application Assessment Criteria
(Source: ARC / DEETYA 1998-1999)*.**

Assessment category (% contribution)	ARC / SPIRT Assessment Criteria
Significance and innovation (20%)	<ul style="list-style-type: none"> • Does the project address an important problem? • If the aims of the project are achieved, how will scientific knowledge be advanced? • What will be the effect of the project on the concepts or methods that drive the field? • If the project involves one or more APAI(s), will it have relevance for research training in the field? (Not applicable). • Does the project employ novel concepts, approaches or methods? • Are the aims original and innovative? • Does the project challenge existing paradigms or develop new methodologies or technologies?
Approach and methodology (20%)	<ul style="list-style-type: none"> • Are conceptual framework, design, methods and analyses adequately developed, well integrated and appropriate to the aims of the project? • Does the application acknowledge potential problem areas and consider alternative tactics/ • If the project involves one or more APAI(s), is it suitable for research training for a research career in industry and/or a higher education institution? (Not applicable). • Is the intellectual content and scale of the work proposed for the APAI(s) appropriate to research a higher degree? (Not applicable).
Researchers(s) (20%)	<ul style="list-style-type: none"> • Is the applicant(s) appropriately trained and well suited to carry out and/or (especially in the case of projects involving APAI(s) supervise this work? • Is the work proposed appropriate to the career path and experience level of the applicant(s) taking into account the quality of past achievements, including their academic record, any awards and prizes, their research performance and evidence of refereed publications, and their track record on ARC funded projects?
Industry Partner(s) commitment and collaboration (30%)	<ul style="list-style-type: none"> • Is there evidence that the Industry Partner(s) is genuinely committed to, and prepared to collaborate on, the research project e.g. joint development of the application by the Chief Investigator(s) and the Industry Partner(s) and joint management and conduct of the research project by the Chief Investigator(s), the higher education institution and the Industry partner(s). • Is the project likely to lead to further collaboration between the Industry Partner(s) and the higher education institution, and have potential for long term alliances?
Economic and/or social benefits for Australia (10%)	<ul style="list-style-type: none"> • Expected results of the project to Industry Partner(s) within Australia. • Benefits of the Research to the Industry sector. • Expected returns to the broader Australian community.

* provided for Australian Research Council (ARC) / Strategic Partnership with Industry Research and Training (SPIRT) Scheme applications by the ARC / Department of Employment, Education, Training and Youth Affairs.

APPENDIX 11: POM Model Elements in Checkland and Holwell (1998b) and as Interpreted by the Practitioner-Researcher Affiliation

POM Element (Checkland and Holwell ¹)	NSW Police Service Application ² [Figure 5.10]	Department of Public Works and Services Application ³ [Figure 6.9]
<p>Element 1 – Individuals and Groups: people as individuals and group members acting as cognitive filters in perceiving the world (Element 2) and the term may also be attributed to organizations. There will never be complete congruence between individual, the (attributed) group settings and the organizational as a whole despite the ‘conventional wisdom’ model of organization that assumes all members share the same settings which lead them to unambiguously collaborate together in pursuit of organizational (corporate) goals.</p>	<p>Element 1 – Individuals and Groups: expressly identified in published material were the Project Planning / Support Office (the ‘Soft Systems for Soft Projects’ partnership); teams / individuals within the partner Agency with specific accountability for / role in managing projects; individuals / groups in the (formal) Agency organisational culture.</p>	<p>Element 1 – Individuals and Groups: distinguished in published accounts were the Chief Executive Officer, Senior Executive and personnel in the Project Management Centre of Excellence and teams and individuals within the agency with specific accountability for or a role in projects who were required to respond to and support to agency’s change to Management by Projects (MbP). In the <i>extended POM model</i>, the university research team is depicted as separate from the agency groups</p>
<p>Element 2- Perceived world: is the data-rich world people / groups perceive selectively through their various taken-as-given assumptions. Through perceiving the world, individuals and groups acquire capta-rich (<i>Chapter 3: Figure 3.13</i>) perceptions. These may be affected by shifts in both thinking and action (external changes) that in turn change the perceptions of the appreciative settings and then (again) the perceptions they acquire.</p>	<p>Element 2- Perceived world: there were various perceptions according to different appreciative settings; “an incredibly complex flux in which many appreciative settings, both individual and group were operating simultaneously and interactively” (Checkland and Holwell, 1998b p107) :</p> <ul style="list-style-type: none"> • Royal Commission. • Police Integrity Commission / QSARP Audit • Project Planning / Support Office • Project teams • Practitioner-researchers • Academic commentators <p>In the <i>extended POM model</i>, external changes were identified as Government strategic direction and reform agenda. The appreciative setting was taken to be the agency as a whole.</p>	<p>Element 2- Perceived world: different experiences and perspectives of individuals and groups (over 2500 people) meant that many and complex perceptions would need to be dealt with during the MbP process. MbP was being promoted as a means of breaking down artificial barriers between functional and business units. Over the previous decade, the agency had acquired a range of cultures and disciplines, each with their own history and patterns of service delivery and hence frames of reference for perceiving the world. External changes were creating pressures for reform based on Government promotion of ‘whole-of-government’ concepts that encouraged breaking down of communication barriers within and between agencies to provide improved / integrated services.</p>
<p>Element 3 – Discourse: organizational discourse is the arena in which meaning is created inter-subjectively, leading to the attribution of meanings which yield information and knowledge (Element 4). In this element, perceptions (the result of previous individual and group) experience will be exchanged, shared, challenged and argued over.</p>	<p>Element 3 – Discourse: within the “Soft Systems for Soft Projects” partnership was structured within the framework of the developing role of the Project Planning / Support Office and a prototype PMIS. As understood by the practitioner-researchers, prototyping takes an experimental approach to systems design, working with user feedback to refine a preliminary system until user needs are met.</p>	<p>Element 3 – Discourse: discourse was structured through introduction of MbP in 1997 to focus the whole organisation on collaborative working to facilitate increased resource and cost effectiveness, increased accountability and higher service quality to clients including increased responsiveness and integrated service delivery. An external focus for development of an internal community of project management practice was provided by the agency’s membership of an international project management benchmarking network.</p>
<p>Element 4 – Created meanings (data, capta, information, knowledge): a very complex social process in which persuasion and / or coercion is attempted, battles are fought</p>	<p>Element 4 – Created meanings (data, capta, information, knowledge): the prototype PMIS provided the means for applying a standard practice to achieve</p>	<p>Element 4 – Created meanings (data, capta, information, knowledge): the MbP and its supporting documentation (on the agency intranet) and activities</p>

POM Element (Checkland and Holwell ¹)	NSW Police Service Application ² [Figure 5.10]	Department of Public Works and Services Application ³ [Figure 6.9]
and scores settled – the whole process embodying politics as well as, perhaps, rational instrumental decision-making.	consistency across projects in such aspects as:- project initiation (startup); communication; control points; performance measures; documentation standards; quality management; risk management; project reporting; and archiving. Continual enhancement as users defined their needs and expectations and shared their learning assisted in developing a capability suitable for agency-wide application of key operations and corporate strategic projects.	(assessment and development of individual and organisational project management competence) provided a shared language / project management approach. Nevertheless, by 1998 a range of inhibitors to its adoption were being reported, particularly concerning behavioural and system issues.
<p>Element 5 – Assemblies of related intentions, accommodations: organizations have to be able to encourage the Element 4 processes but at the same time contain such a process to survive.</p>	<p>Element 5 – Assemblies of related intentions, accommodations: under SSM, system improvements rely on processes of learning and accommodation rather than the optimized outcomes of the 'hard' systems means –ends paradigm. Under this element, organisations enable assemblies of related meanings, intentions and accommodations between conflicting interests to emerge.</p> <p><i>In the extended POM model</i> this was linked to development of PM competence focused on achievement of strategic initiatives. In this case, an agency that had no corporate-wide history of project management either in its organisation or in the practice of its core business was endeavouring to develop the project management capability of the people, the systems and the organisational environment simultaneously and interactively.</p>	<p>Element 5 – Assemblies of related intentions, accommodations: in mid-1998, the agency Executive formally reaffirmed its commitment and ownership to MbP, while recognising that its success would be dependent upon cultural change across the agency. A plan was developed for finalisation and handover of MbP to Directors and General Managers were to be responsible for continuing implementation through their performance agreements. A Project Management Centre of Excellence was established to provide a focal point and an MbP Champions Network was providing leadership and encouragement, mentoring and support at various levels across the organisation. Through training in project management, individuals were being provided with a shared language, tools and techniques for MbP and being encouraged to use this in their workplace.</p>
<p>Element 6 – Purposeful action: organizations have to enable assemblies of related meanings, intentions and accommodations between conflicting interests to emerge (Element 5) so that purposeful action (best thought of and expressed as managing relationships) can be taken.</p>	<p>Element 6 – Purposeful action: to be able to undertake purposeful action, project managers within the agency required appropriate information support. This required bringing together technical capability with the users of the system within the framework of the culture of the organisation. Commercially available project management information systems were not suited to meet the needs of the research partnership so an 'in-house' solution was built.</p>	<p>Element 6 – Purposeful action: as desired, would be for the agency's work to be organized into projects, delivered by cross-functional and cross-disciplinary project teams that focused on results and having the flexibility to deliver change. Communication of this action within the MbP discourse had been effective largely due to strong management support. However, developing and recognising the project management capability of a large and diverse workforce (some 2500) would require considerable time and resources as would changing and unifying diverse and well-established cultures within the agency.</p>

POM Element (Checkland and Holwell ¹)	NSW Police Service Application ² [Figure 5.10]	Department of Public Works and Services Application ³ [Figure 6.9]
<p>Element 7- formally organized information systems (a) based on IT and telecommunications (b) requiring the availability of professional knowledge of the technology and its possibilities so that suitable configurations can be proposed (c): support organizational members in conceptualizing their world, finding accommodations, forming intentions and taking actions (Elements 5 and 6). While the very existence a formally organized 'information systems' will affect both the information and knowledge created in the organization (Element 4) and the image of the perceived world of organization members (Element 2), its main role is support; such systems do not exist for their own sake. Professional know-how will also include the knowledge needed to operate, maintain and, if necessary, modify the technology.</p> <p>Sometimes the 'support' the technology offers may include, or comprise, automation. The more subtle aspects of support are likely to reside in the provision of processed capta which enable the users to modify the way they think about their world – to help both to sustain and change the perceived world (Element 2). Any and every information system can be thought of as entailing a pair of systems: one which is served (the people taking action: the other which does the serving (the processing of selected data (capta) relevant to the people undertaking purposeful action). It is a basic principle of systems thinking that the necessary features of a system that serves can be worked out only on the basis of a <i>prior</i> account of the system served.</p>	<p>Element 7- formally organized information systems: the research partners' strategy was to develop the prototype PMIS as an application on existing / developing agency platforms. As initially developed, the PMIS was user friendly and flexible, supporting easy communication and capable of integrating fully with other applications. From its earliest iteration it was functional as a decision support system and the participating project managers / team members were able to generate workable outputs.</p> <p>As the PMIS iterations progressed, users of the system developed the capability to administer it and undertake new design. Ultimately, it was converted by the agency partner into an agency-wide intranet application. Successful development of the PMIS required flexible arrangements to bring people with IT expertise and users together in a less bureaucratic and more intensive way of working to facilitate sharing of learning. Throughout the research partnership, the PMIS was being continually challenged by issues requiring development of shared interpretations / understandings as it extended to dispersed locations and became available to increasing numbers of agency users through the corporate intranet.</p>	<p>Element 7- formally organized information systems: primary systems for information support were its intranet and electronic mail system. Its support was delivered through IS /IT specialists within the agency, and their approach was primarily through a systems-structural perspective rather than one focusing upon the needs of users as modified by the introduction of MbP. The only version of the MbP guide and other templates, tools and assistance for staff managing by projects was on the agency intranet. However, this was not available to all members of staff throughout the various sites occupied by the agency.</p> <p>Some groups within the agency with a history of project-based work had developed systems to assist in managing projects. However, these systems had not been rolled out to the rest of the agency and, in any case, could not at that time integrate smoothly into the corporate information systems.</p> <p>Undertaking the SSM analysis highlighted strategic information support as a key issue in the agency's MbP organisational change process.</p>
<p>1. Checkland and Holwell (1998b, pp. 103-111) 2. Crawford and Costello (2000, pp. 6-8); Organisational texts (Royal Commission and QSARP; NSW Treasury <i>Budget Papers</i> – Section 5.3); Police Service publications (<i>Section 5.4</i>); Costello ("<i>Soft Systems for Soft Projects</i>" <i>partnership Research Papers</i> and <i>Personal Journals</i>); Practitioner-researcher papers in addition to Crawford and Costello (APPENDIX 1). 3. Crawford and Costello (2000, pp. 9-12); Crawford et al., 1999.</p>		

APPENDIX 12: NSW Rural Fire Service budget estimates by program and staffing (NSW Treasury Budget Paper No. 3 - Budget Estimates for 2000-2001 and 2001-2002)

Program Name	Program Objectives	Program Description	Average Staffing (full-time equivalent) 2000-01 / 2001- 02	Employee Related Operating Expenses 2000-01 / 2001- 02	Other Operating Expenses 2000-01 / 2001- 02
Funding and administration of rural firefighting services	To promote effective rural firefighting services within the State including coordination of bush firefighting and prevention activities	Assistance to local government councils in the formation, equipping and maintenance of bush fire brigades. The State contributes 14 per cent, councils contribute 12.3 per cent and insurance companies contribute 73.7 per cent.	116 / 400	\$8.567M / \$27.781M	\$3.746M / \$4.330M
Training of volunteer bush fire fighters	To facilitate and promote the training of bush fire fighters	Co-ordination and development of training courses, design of standards and evaluation of training for volunteer bush fire fighters throughout NSW.	8 / 8	\$0.455M / \$0.465M	\$0.585M / \$0.420M
Public education and information services	To promote community awareness of bush fire issues and generally educate the community in bush fire prevention, protection and safety.	Public education and information services for the residents of NSW in bush fire preventions, protection and safety.	6 / 6	\$0.323M / \$0.350M	\$1.300M / \$1.200M
Planning and co-ordination of rescue services and emergency management	To ensure the provision of comprehensive, balanced and co-ordinated rescue services and emergency management throughout NSW.	The preparation of plans, co-ordination of operations and, and provision of effective training for emergency management and rescue operations. Advice to the Minister for Emergency Services on policies, resource allocation and specific issues. Support to the Minister in the performance of Ministerial functions. Co-ordination of advice from, and action by, emergency service agencies on policies and specific issues.	14 / 14	\$0.883M / \$0.913M	\$0.569M / \$0.590M

APPENDIX 13: Rural Fire Service change management program teams as reported on the RFS web site
<http://www.bushfire.nsw.gov.au/strategicweb/.../htm> accessed 16/11/2001)

Program Team	Responsibility	Team Profile (from list of areas represented)
Communications / Change Management	Developing appropriate systems, strategies and other initiatives to ensure that all information, issues, decisions and outcomes of the RFS intention to employ Fire Control Staff by 1 July 2001 are effectively communicated to all levels of the service and to all other stakeholders.	<ul style="list-style-type: none"> • Program Team Manager • Chaplain • District Staff Representatives (8) • Regional Office Representative • Head Office Representatives (2) • Senior Media Officer • Public Affairs Officer • Project Office Representative • RFSA Volunteer Representative • Industrial Representatives (2) • LGSA Representative • Council Representative <p><i>[Total 21 representatives]</i></p>
Service Accommodation	Developing a preferred strategy which aligns the Head Office accommodation of the RFS with its current and future Service Delivery demands.	Details not published on the RFS Strategic Change web site when accessed on 16/11/2001
Industrial Review	Undertaking a review of the industrial issues associated with the RFS intention to employ Fire Control Staff by 1 July 2001. The review will include entitlements, Award identification and conditions, liaison with the relevant Industrial Body or Union and other associated matters.	<ul style="list-style-type: none"> • Program Team Manager • Director Corporate Services • Assistant Commissioner, Operations Support • Regional Office Representative • District Staff Representatives (10) • Industrial Representatives (3) • LGSA Representative • Program Team Member <p><i>[Total 19 representatives]</i></p>
Workforce Planning and Organisational Structure Review	Overseeing development and design of appropriate position descriptions and other workforce planning issues and undertaking a critical review of organisational structure in light of the increased workforce resulting from the transfer.	<ul style="list-style-type: none"> • Program Team Manager • Assistant Commissioner Regional Management and Planning • District Staff Representatives (8) • Regional Office Representative • Head Office Representative • Training Services Representative • RFSA Volunteer Representative • Volunteer Representative • Program Team Member • Industrial Representatives (2) • LGSA Representative <p><i>[Total 20 representatives]</i></p>
Financial Program Review	Developing comprehensive policies, procedures and processes for effectively managing a decentralised financial system that meets the needs of both Local Government and the RFS. In particular, to develop and implement effective and efficient financial reporting, accounting, auditing and purchasing mechanisms which	<ul style="list-style-type: none"> • Program Manager / Manager Financial Services • Head Office Representative • District Staff Representatives (7) • Industrial Representatives (2) • Council Representative • RFSA Volunteer Representative

Program Team	Responsibility	Team Profile (from list of areas represented)
	meet the needs of both Districts/Zones as well as State Government accountability requirements. The systems developed will form part of the RFS Standards and Policy and Procedures. Also, to review existing regional and Head Office financial systems to align the revised estimate / allocation process being developed by the Strategic / Business Planning Review Program Team.	<ul style="list-style-type: none"> • LGSA Representative <p><i>[Total 15 representatives]</i></p>
Legislation, Service Standards and Policy Review	Ensuring all legislative change associated with the employment of Fire Control Staff and related matters are identified and analysed. Preparing proposed legislative changes for consideration by the Minister as well as undertaking any other tasks associated with the changes required by the Commissioner, Office of Emergency Services or the Minister.	<ul style="list-style-type: none"> • Program Team Manager • District Staff Representatives (6) • Regional Office Representative • Head Office Representatives (4) • RFSA Volunteer Representative • Industrial Representatives (2) • LGSA Representative <p><i>[Total 16 representatives]</i></p>
Information Management	Details not published on the RFS Strategic Change web site when accessed on 16/11/2001	Details not published on the RFS Strategic Change web site when accessed on 16/11/2001
Strategic Business Planning Review	Overseeing development and implementation of the Service Delivery Model including development of district / zoning business planning. Undertaking a review of key organisational processes to identify areas which will require change due to transfer of District Staff and to provide improved efficiencies in a range of key areas.	<ul style="list-style-type: none"> • Program Team Manager • Finance Manager • Operations Representative • District Staff Representatives (9) • Director, Corporate Services • Regional Office Representative • Head Office Representative • Planning Services Representative • RFSA Representative • Industrial Representatives (2) • LGSA Representative • Local Government Association Representative • Shires Association Representative <p><i>[Total 22 representatives]</i></p>
Zoning	Developing appropriate systems, strategies and other initiatives to ensure that all information, issues, decisions and outcomes related to the RFS zoning program are collected, analysed and communicated to local government and RFS members. Implementing zoning working parties and consultation processes across the State in accordance with zoning principles.	<ul style="list-style-type: none"> • Head Office Representative • Regional Representative • District Staff Representatives (8) • Industrial Representatives (2) • Council Representative • Local Government Association Representative <p><i>[Total 14 representatives; the RFS web site listed seven members identified as the Program Team Manager and six facilitators]</i></p>

LGSA – Local Government and Shires Association

RFSA – Rural Fire Service Association (an organisation representing RFS members, both volunteers and salaried staff with objectives that include: - to provide a forum to consolidate and represent the views of all members of the RFS; to ensure that the views of all members are taken into account in the decision making process of the RFS; and to be the focal point, one voice in assisting the Government and the Senior Management Team in the development of the RFS).

APPENDIX 14 : Collaboration Project Management Information System (PMIS) – Sample Formats (2000)

Faculty Research Strength Test Demonstration 2

Project Number: 00630105223K.Costall

Main Information

Project Title: TEST PROJECT (UTS PROJECT MANAGEMENT DRAFT)

Sub Project Title: Test Demonstration 2

Vision/Mission: Integration and communication of project work

Overall Objective: To check linkages

Faculty: DAB

Program Responsible: Project Management

Start Date: 30/06/2000

Expected Completion Date: 30/06/2000

Actual Completion Date:

Project Alignment

Development Theme: Research, Work Based Learning

Strategic Focus: Knowledge. (Management; Emerging Areas), Learning; (Practice Based), Research;(Culture; Focus)

Is this a Faculty Research Strength Issue?: Yes

Research Strength Issue: Development of theory and practice, ARC SPIRT Collaboration

Project Focus

Change Management. Collaboration - Management. Project Management Applications. Project Management Competence. Project Implementation/Process. Technical Support/Environment. Theory/Model Development.

Strategic Focus, Research and Related Topics

Management

Project Manager(s):

Project Co-ordinator:

Project Sponsor(s):

Document Last Updated 30/06/2000 10:46 AM by Kerry Costall
Document Created: 30/06/2000 10:46 AM by Kerry Costall

UTS PROJECT BRIEF

Project Title: TEST PROJECT (UTS PROJECT MANAGEMENT DRAFT)

Sub Project Title: Test Demonstration 2

Project Manager: [Redacted]

Team Members: [Redacted]

Project Sponsor: Lynn Crawford/UTS

Vision/Mission: Integration and communication of project work

Project Background Information: [Redacted]

Project Purpose: [Redacted]

Project Justification: [Redacted]

You have identified that this project links to Research; Work Based Learning, Knowledge; (Management; Emerging Areas); Learning; (Practice Based); Research;(Culture; Focus) and Development of theory and practice; ARC SPIRT Collaboration

How are they linked? [Redacted]

Project Focus

Change Management (Projects). Collaboration - Management. Project Management Applications. Project Management Competence. Project Implementation/Process. Technical Support/Environment. Theory/Model Development.


Strategic Focus, Research and Related Topics

Project Objectives:

Overall Objective: To check linkages

Specific Objectives: [Redacted]

30/06/2000 Copyright: UTS Project Management Program

- Deliverables (outputs):
- Measures:
- Key Stakeholders:**
 - Internal Stakeholders:
 - External Stakeholders:
 - Key Assumptions:
- Risk Assessment:**
 - Risk to the project:
 -  UTS Project Issues & Risks V2.0
 - Links to record in Issues and Risks Register
 - Corporate Risk:
 - Linkages:

Links to other projects can be:

1. **Document link**
- Clicking on this icon immediately opens Test Demonstration 1 brief
2. View link
3. To other data bases, or to other applications

MS PROJECT

A

ID	Task Name	Duration	9 Jul '00	10 Jul '00	17 Jul '00
			F S M T W T F S S	M T W T F S S	M T W T F S S
1	Step 1	2 days			
2	Step 2	3 days			
3	Step 3	4 days			
4	Step 4	5 days			
5	Project 1 Test	1 day			

Cost Centre:

Budget Breakdown: (current financial year)



Worksheet

Project Manager's Signature:

Comments:

Project Manager's Signature:

Line Manager's Comments:

Comments:

Line Manager's Signature:

Project Co-ordinator's Approval:

Comments:

Project Co-ordinator's Signature:

Sponsor's Approval:

Comments:

Sponsor's Signature:

Document Last updated 2006/06/17 09:15 by Kerry Corbett
Document Created 2002/06/11 09:15 by Kerry Corbett

Issues & Risks REGISTER

Unclassified

Submitted by Kerry Costello on 30/06 at 15:03

Response to Test Demonstration 1

Category

Response to Test Demonstration 1

1. [Link to Project Register](#)



UTS Project Register V1.3A

[Direct link to Project View - Test Demonstration 1\(List\)](#)

[Direct link to Test Demonstration 1 Project Brief](#)

2. [Link to Risk Management Active Data Base](#)



Risk Handbook.doc

[Link to Active Data Base](#)

[Previous Document](#)

[Return to View](#)

[Next Document](#)

Project Title: TEST PROJECT (UTS PROJECT MANAGEMENT DRAFT)

Sub Project Title: Test Demonstration 2
 Deliverable / Milestone Title: [info](#)
[Link to MS Project](#)

Deliverable / Milestone Description	Anticipated Start Date	Anticipated Completion Date	Actual Completion Date	% Contribution
Link formats	30/06/2000	30/06/2000		info

Acceptance Requirements:

[Link to MS Project](#)

- Step 1 2 days Fri 30/06/00 Mon 3/07/00
- Step 2 3 days Fri 30/06/00 Tue 4/07/00
- Step 3 4 days Fri 30/06/00 Wed 5/07/00
- Step 4 5 days Fri 30/06/00 Thu 6/07/00
- Project 1 Test 1 day Fri 30/06/00 Fri 30/06/00
- Step 1 112 hrs 4 days Tue 27/06/00 Fri 30/06/00
- Step 2 0 hrs 3 days Fri 30/06/00 Tue 4/07/00
- Step 3 0 hrs 4 days Fri 30/06/00 Wed 5/07/00
- Step 4 0 hrs 5 days Fri 30/06/00 Thu 6/07/00
- Project 1 Test 0 hrs 1 day Fri 30/06/00 Fri 30/06/00

Progress Report for [period to be entered]:

Project Manager's Review

Comment: **Completion Date:**

Any Corrective Action Required:

Project Manager's Approval:

Project Sponsor's Review

Comments:

Project Sponsor's Approval:

Document Last updated 30/06/2000 11:52:07 by Kerry Costello.
 Document Created: 30/06/2000 11:46:54 by Kerry Costello.

APPENDIX 15 : EXTRACT FROM PERSONAL COACHING AND PERFORMANCE (CAPS) AGREEMENT FOR 2003 / 2004 (used with permission)

**COACHING AND PERFORMANCE AGREEMENT
2003/2004**

NAME: Kerry Costello
UNIT: Special Projects

MANAGER'S NAME: Jim Tzannes
BRANCH: HPRB

WORKPLAN

1. GENERIC SKILLS

The skills listed below are generic and should apply to all staff to varying degrees. Tick the skills you would like to develop further throughout the year.

	Teamwork	Planning and Organisation	Customer Focus
Knowledge of NSW Public sector and NSW DOH			
Interpersonal Skills	Use of Technology	Manage Own Performance	Participate In and Adapt to Change
Research and Problem Solving	Management and Leadership		

2. GOALS

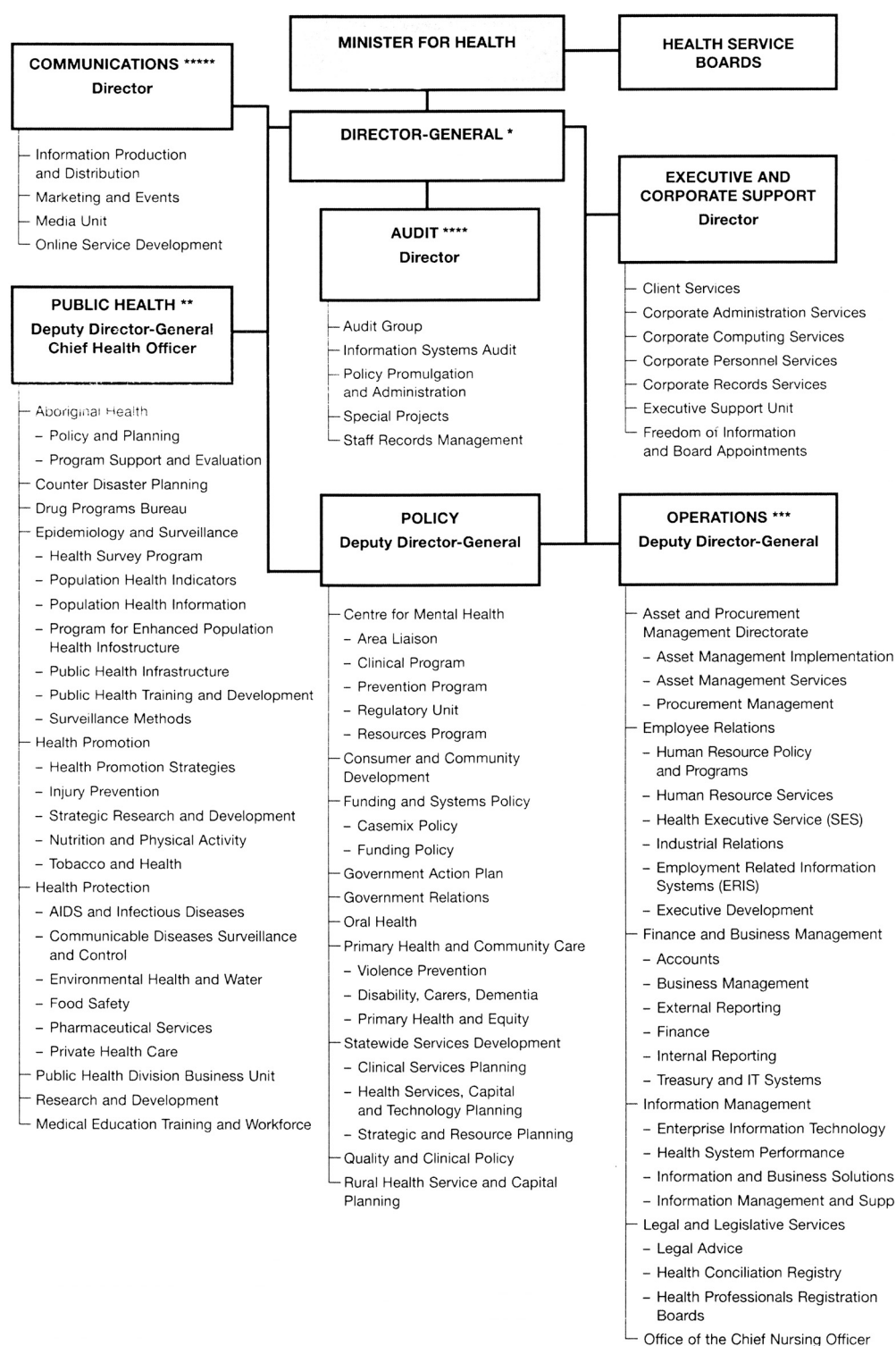
List 3 to 5 key goals you will focus on over the next twelve months taken from your position description, branch plan, work responsibilities and assigned projects.

GOAL	AGREED KEY TARGETS	TARGET DATES
Further development of change management strategies for key HPRB IS processes and underpinning IT.	Supporting negotiation of a viable framework for 'buy in' to the GLS of HPRB supported Boards.	Ongoing
Supporting development of individual and team skills by mentoring.	Continuing support for HPRB officers implementing new service capabilities.	Ongoing
Promoting the capability of HPRB to sustain change processes, with a particular focus on e-government, through growing project management maturity.	Growing capability of HPRB online project management system in line with 'better practice' developments.	Ongoing

Comments:

Goals are relevant to the core objectives of The HPRB Strategic Directions. MS Costello's contribution is pivotal to a successful outcome and her performance to date is outstanding.

APPENDIX 16 : NEW SOUTH WALES DEPARTMENT OF HEALTH ORGANISATION CHART 2001-2002



Source: NSW Department of Health¹ *Annual Report* (2001-02, p. 6).

1. Key roles were:- developing policies for improving and maintaining health; allocating resources; developing and managing the health regulatory framework; monitoring and evaluating; working with other agencies to ensure policies meet health needs and are managed intersectorally; developing and implementing human resource management and quality improvement policies and protocols; and supporting the Minister.

APPENDIX 17 – EXTRACT FROM BETTER PRACTICE PRINCIPLES FOR E-GOVERNMENT IMPLEMENTATION IN NSW
 (SOURCE: *E-readiness assessment guide for government agencies*, NSW Audit Office (2001b, pp. 18-19)

Performing
 Progressing
 Potential

Checklist

Technology and Information Management

BETTER PRACTICE PRINCIPLES

- § Systems are flexible and can be upgraded and expanded to allow them to evolve with e-government developments
- § Systems readily integrate and share information within the agency and with third parties
- § A formal and robust process is used to select or develop technical solutions
- § Standard products and solutions are used where feasible
- § Consultation with related agencies and organisations promotes the introduction of compatible systems and information
- § Care is taken to avoid becoming 'locked in' to particular solutions or suppliers
- § Data is accurate, current, complete and processed appropriately
- § Data is in a form which can be readily shared with other relevant organisations (to the extent allowable)

A formal system/application development methodology, designed for e-government, is used for all information and communications technology (ICT) projects.

Government-wide procedures for the procurement of technology resources are followed.

Government-wide standards and guidelines for exchanging and using information in a straightforward way (interoperability) are adopted.

Standard applications are used wherever possible.

System components are selected to ensure the agency does not become 'locked in' to a particular technology or supplier (ie open systems are adopted).

Systems are designed to:

§ integrate with important internal and external databases and applications

§ change as needs change.

Sector wide benefits are considered in determining whether and how information in existing systems should be accessed.

There is ongoing communication with other relevant agencies to:

§ identify and explore opportunities for sharing technology resources

§ develop compatibility across IT systems

§ define and put data into a form which can be readily shared.

Database management and monitoring techniques are employed to ensure that data is consistent, accurate, current, complete and processed appropriately.

System performance and reliability standards are:

§ defined

§ monitored to ensure compliance.

System changes are properly authorised and tested sufficiently.

Ongoing monitoring is performed to ensure that unauthorised system changes have not occurred

SYSTEMS SHOULD BE DEVELOPED WITH THE FLEXIBILITY TO ACCOMMODATE

CHANGES IN TECHNOLOGY AND PROVIDE A CONTINUED ABILITY

RISKS TO BE MANAGED

- § Technologies not designed or implemented properly
- § Unproven technologies used causing system failure
- § Technologies not adequate for current and projected requirements resulting in poor performance, availability and reliability
- § Systems not interacting effectively resulting in inefficient processes
- § Information held in existing systems not accessed or too much is spent on accessing such information
- § Opportunities for enhanced sharing of information and technology between agencies not taken

HELP

- § ANAO, Internet delivery decisions - A Government Program Manager's Guide, components 1, 2, 3 and 5
- § NSW Office of Information Technology: memoranda, guidelines; case studies (various)
- § connect.nsw, an Internet strategy for NSW and connect.nsw implementation framework
- § National Electronic Commerce Coordinating Council (US): E-government strategic planning - A White Paper; Risk assessment guidebook for e-government/e-commerce; Critical business issues in the transformation to electronic government
- § Office for Government On-line (Cwith), On-line action plan guidelines
- § NSW Department of Public Works and Services, NSW Government eProcurement Implementation Strategy

APPENDIX 18:

HEALTH PROFESSIONALS REGISTRATION BOARDS PMIS PROJECT BRIEF FORMAT

Project Number: 0261134257JPollack

HPRB Systems Relocation Strategy Sub-Project

Main Information

Portfolio (Program) Title: IS/IT Strategic Development Portfolio
 Project Title: IT/CT Platform Project
 Sub-Project Title: HPRB Systems Relocation Strategy Sub-Project

Vision/Mission: Collaborative partnerships/opportunities to strengthen links, Technology and research best practice

Overall Objective: To develop a strategy/operational plan for moving HPRB systems to new accommodation

Start Date: 01/01/2002
 Expected Completion Date: 31/12/2002
 Actual Completion Date:

Project Alignment

NSW Health Strategic Direction: Goal D: Better value, Attribute 5: Informed decision making, Attribute 6: Embracing innovation

Regulation Better Practice Area: E: Informed decision making, F: Embracing innovation

Is this a NSW ICT Plan Strategy?: No
 ICT Priority:

Project Focus

HPRB Key Business Activity: Budget, Management framework (including project / performance / risk management), Systems improvement

File No:

Management

Sub-Project Manager(s): Julien Pollack;
 Project Manager(s): Kerry Costello
 Portfolio Co-ordinator(s): Demonstration version
 Portfolio Sponsor(s):

Document Last Updated: 13/06/2002 01:28:02 PM by: Julien Pollack
 Document Control: 11062002 01:42:57 PM by: Julien Pollack

Project Number: 0261134257JPollack

HPRB PROJECT BRIEF

File Number: 0261134257JPollack

Portfolio Title: IS/IT Strategic Development Portfolio

Program Title: IT/CT Platform Project

Project Title: HPRB Systems Relocation Strategy Sub-Project

Project Manager: Julien Pollack;

Sub-Project Manager:

Team Members:

Project Sponsor: Demonstration version

Vision/Mission: Collaborative partnerships/opportunities to strengthen links; Technology and research best practice

Project Background Information:

Project Purpose:

Project Justification:

You have identified that this project links to Government policy and best practice documents as follows: Goal D: Better value; Attribute 5: Informed decision making; Attribute 6: Embracing innovation ; E: Informed decision making; F: Embracing innovation and

- List the particular strategy and item(s) under 'what needs to happen' and 'role' from the New South Wales Department of Health " Future Directions for Health in NSW - Towards 2025" document.
 [attachment "DoH Strategic Directions 2000.pdf" deleted by administrator/HPRB]

NSW Health future_directions July 2007.pdf NSW state_health_plan July 2007.pdf

- Identify any aspects of the NSW Treasury Gateway Review Process that might apply to the program / project stage :-



(1) Program / project stage

(2) Gate (from the Treasury list) reached

(3) Success criteria applied

 Gateway Review Toolkit.pdf  Gateway workbooks strategic.pdf  Gateway workbooks business case.pdf

3. From the NSW Government Strategic Plan, July 2006 ("People First - A new direction for ICT in NSW") identify any applicable ICT Strategy and Work Program.

 NSW/ICT_Strat_Plan.pdf  NSW/ICT_Strat_Plan_A3.pdf

4. Identify relevant practice(s) / area(s) for improvement from ANAO "Administering Regulation Better Practice Guide"


 ANAO Administering_Regulation_.pdf


Project Focus


HPRB Key Business Activity Budget Management framework (including project / performance / risk management) Systems improvement

1. Briefly describe how the portfolio / project will contribute to the HPRB Key Business Activity(ies) listed above.
2. List any relevant legislation relating to this activity.
3. List any applicable policy circular / memorandum relating to this activity.

Project Objectives:


 Overall Objective:
To develop a strategy/operational plan for moving HPRB systems to new accommodation


 Specific Objectives:


 Deliverables (outputs):


 Measures:

 Key Stakeholders:
Internal Stakeholders:

 External Stakeholders:


 Key Assumptions:


 Risk Assessment:
Risk to the project:

 Corporate Risk:

 Risk Profile:  risk profiler.xls  risk profiler usernotes.doc

 Linkages:

 1. Identify any projects / sub-projects that this links with:
HPRB Systems Relocation Strategy Sub-Project/ CT Systems Management Sub-project


 2. Identify the shared resources, deliverables and / or stakeholders:

 Sub-Project / Project Manager's Signature:
Sub-Project Manager's Comments:

 Sub-Project Manager's Signature:
Project Manager's Comments:

 Project Manager's Signature:
Portfolio Co-ordinator's Approval:
Comments:

 Portfolio Co-ordinator's Signature:
Sponsor's Approval:
Comments:

 Sponsor's Signature:

Document Last updated: 14/06/2002 12:17:08 PM by Kerry Conabick
Document Created: 14/06/2002 12:17:07 PM by Kerry Conabick

APPENDIX 19: EXAMPLES OF PUBLIC SECTOR LESSONS LEARNED GUIDES – OGC AND NSW HEALTH

Policy to Successful Delivery

The Prime Ministers OFFICE OF PUBLIC SERVICES REFORM

LESSONS LEARNED

Although it is important for organisations to learn throughout the life of a project or programme, it is particularly important that Follow On Action includes formal summary of Lessons Learned. These lessons should be disseminated as appropriate throughout and beyond the organisation to those who might benefit from them to enable continuous improvement. One of the outputs of programme closure highlighted in Follow on Actions is a Lessons learned and programme assessment. Articulating and documenting lessons learned is not an exercise that should be undertaken at the end of a project / programme. As part of the completion of a project / programme these lessons need to be drawn together and disseminated widely.

What the report should cover

The report should summarise findings from interim reviews as well as the final review. To make a difference to future practice, it must be a frank document, reflecting insights in the round from the internal team, policy, technical and user representatives, those involved in steering the programme and external stakeholders.

It should summarise what was done well, how it was done, and the impact it had, and what could be done better, how, and the impact identified. Lessons learned in a format that will be relevant to and useable by those who you hope will benefit from them.

One of the many functions and services provided by the Programme Office is that of carrying out health checks and advising on solutions during the lifetime of the programme and individual projects, for example, facilitating workshops to ensure that the programme delivers its benefits and lessons learned are disseminated.

Evidence statements

The following table provides examples of evidence statements and alongside a headline lesson learnt.

Evidence statement	Headline lesson learnt
A major project involving a number of public sector organisations did not establish a single, consolidated business case until late into development. Although benefits had been identified, they had not been validated against a joint agreement of the total change envisaged. When problems arose, therefore, their impact on the projected benefits could not be tracked against the original change planned and these benefits were quickly eroded.	Think about ALL the implications and impact of the proposed change
An insurance company in the US conducted a 30-person project that took three years to complete against an original estimate of one year. When it was finished, they found that the company had stopped selling the product more than a year before.	Keep checking back to policy/strategic objectives
A number of private sector companies who have experienced unsuccessful projects believe they failed because: - It was not clear where accountability lay at senior levels - Owners were not active or did not understand their role, and - Ownership lay with more than one person or a committee.	Clear, strong leadership is critical for successful delivery
One department appointed someone with no experience of project work to manage a very challenging project with a team of over 200 people. As this manager was unfamiliar with project issues, valuable time was lost when decisions were being made.	Appoint people with high skills and experience

Introduction
Getting Started
Delivery Planning
Delivering
Completing
Closure and Evaluation
Lessons Learned
Follow on Actions

Project and Programme Management Techniques
Further Information

Accessed at http://www.ogc.gov.uk/sdtoolkit/keyissues/getting_content/...on_27/10/2003 and at http://www.ogc.gov.uk/sdtoolkit/reference/documentation/p33_lessons.html on 15/4/2005.
(Note the screen dump is Crown copyright and is used in accordance with OGC's waiver policy.)

NSW GOVERNMENT
**ACTION PLAN
FOR HEALTH**

**POST IMPLEMENTATION
REVIEW**

(LESSONS LEARNED)

DOCUMENT PREPARATION INFORMATION	DATE PREPARED
PROJECT NAME	
PREPARED BY	
SIGNATURE	

NSW Health PIR Guideline dated 18/7/2003 accessed at <http://www.nsw.health.gov.au> on 25/7/2005). Fields were:

Executive Summary- Project Background; Learning Highlights; Recommendations; Summary.

Technical Performance - Project Experience; Recommended Process Improvement; Proposed Tools Updates.

Administrative Performance - Project Experience; Recommended Process Improvements; Proposed Tools Updates.

Contract Management- Project Experience; Recommended Improvements; Proposed Tools Update.

Risk Management - Project Experience; Recommended Process Improvements; Proposed Tools Updates

Financial Management - Project Experience; Recommended Process Improvements; Proposed Tools Updates.

Relationship Management- Project Experience; Recommended Process Improvements; Proposed Tools Updates

Supplier Management - Suppliers Used; Performance / Customer Satisfaction; Feedback to Update Preferred Suppliers List.

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