Project pluralism:
combining the hard and soft paradigms in
IS / IT strategy development in the NSW public sector

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

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Julien Pollack

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List of abbreviations

AR	Action Research
BoK	Body of Knowledge
C/SCSC	Cost/Scheduling Control System Criteria
CST	Critical Systems Thinking
CT	Communications Technology
DFD	Data Flow Diagram
FMA	Framework, Methodology, Area of application
HPRB	Health Professionals Registration Boards
ICT	Information / Communication Technology
IS	Information Systems
IT	Information Technology
KCI	Knowledge Constitutive Interests
PEArL	Participants, Engagement, Authority, Relationships, Learning
PERT	Program Evaluation and Review Technique
PM	Project Management
PMI	Project Management Institute
SOSM	System of Systems Methodologies
SSM	Soft Systems Methodology
TSI	Total Systems Intervention
UTS	University of Technology, Sydney
WBS	Work Breakdown Structure

Abstract

This research examines pluralist practice, the combination of methodologies based in different paradigms. Two paradigms are discussed throughout this research, referred to as the hard and soft paradigms. The hard paradigm is commonly associated with positivism and quantitative data, while the soft paradigm is commonly associated with interpretivism and qualitative data. These two paradigms present considerably different perspectives on the world, and methodologies based on these paradigms tend to place different emphases on research and practice.

The combination of methodologies from different paradigms presents a number of problems for practice. These include the problem of paradigmatic incommensurability and issues related to practitioner skill diversity, and difficulties in reconciling the different perspectives that are brought to a situation by different methodologies.

This research explores pluralist practice through the combination of Project Management and Soft Systems Methodology, methodologies which are based on the hard and soft paradigms respectively. The combination of these methodologies is informed by aspects of the Critical Systems Thinking literature, and based on the Embedding model for pluralism.

The combination of these methodologies is explored in the context of an IS / IT strategy development project, in the NSW public sector. This project was set within an environment typified by changing stakeholder relationships, abstractly defined and changing goals, and a variety of external influences which altered throughout the course of the project. A combination of Project Management and Soft Systems Methodology, based on the Embedding model for pluralism, was used in the management of this project, and resulted in a project which is demonstrated to have provided lasting benefit to the organisation.

This is participative, practice based research, and Action Research has been used as the research methodology for this thesis. Action Research has been chosen as a way of linking theory and practice, allowing for the simultaneous development of theory and

practice, through cycles of active reflection. The interpretation of research findings has been informed by hermeneutic philosophies.

Learning outcomes resulting from this research predominantly relate to the combination of Project Management and Soft Systems Methodology, based on the Embedding model. Findings relate to how the problem of paradigmatic incommensurability affects pluralist practice, issues related to the use of tools and techniques governed by paradigms other than that for which they were designed, and specific adaptations that were made in suiting Project Management and Soft Systems Methodology to the needs of the project environment.