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Abstract.

This study identifies the <u>impacts</u> to the internal Information Technology (IT) department's <u>policies and procedures</u> caused by outsourcing selective IT functions and assesses the <u>threats and opportunities</u> to an internal IT group, presented by outsourcing selective IT functions.

The trend to selectively outsource IT functions implies that this can be done with minimal disruption and risk to the IT departments policies and processes. This research investigates whether this assertion is valid and develops a model for internal IT departments to respond to the challenges presented by selective outsourcing.

Existing models of outsourcing currently in use and available to organizations are reviewed to assess their suitability or adaptability for 'selective outsourcing' and from this identifies which areas of internal IT policy and procedures are most impacted. An analysis of the threats and opportunities presented to the internal IT department is also provided.

Research was conducted into one organization's experience with selective outsourcing to investigate how internal IT departments could approach selective outsourcing of internal IT functions and how internal IT departments could develop strategies for responding to the challenges posed by selective outsourcing.

A case study was conducted of a recent selective outsourcing arrangement within the IT group of the target organization. The personal interview method was adopted to survey a cross section of management and staff from the work groups involved in the selective outsourcing arrangement.

The results obtained revolved around the major themes of:

- 1. Planning (identified as time constraints, resource constraints and work load).
- 2. Management control (which encompasses the structuring of the outsourcing relationship, human resource concerns, level of ownership, communication, structure of the internal IT group and inter-departmental concerns).
- 3. Process (which applies to the quality of the procedures, inherent internal knowledge required, the informality of the procedures and concerns over adherence to procedures).

For an IT group to develop strategies to respond to the challenges of selective outsourcing it was identified that the IT group needs to remove internal barriers to process and strive to achieve single ownership of processes within functional work groups; nurture a shift in internal groups thinking to more planning rather than doing; improve the quality of internal IT procedures and implement appropriate project team structures for task specific selective outsourcing engagements and for ongoing vendor relationship management.

1. Introduction.

Organizations are increasingly acknowledging the strategic value of keeping some information technology functions in house. Traditional outsourcing of the 'whole of the IT function' is now tempered with the outsourcing of selective IT functions such as data centre management, network services management, help desk and desktop installations or network deployment.

It is argued that the 'operational functions' of an internal IT department are not core business and can be conducted more efficiently by outsourcing companies specializing in that function. It is these operational functions that can be either permanently or temporarily 'unplugged' from the internal IT department's responsibilities and handed over to an external service provider or outsourcer.

Where there is this selective and intermittent approach to outsourcing there is the need for the internal IT department to ensure that all their existing policies and procedures related to the outsourced function are adhered to. This model of outsourcing requires the IT department to retain investment in the other cross departmental resources that are also involved in maintaining and actioning the policies and procedures of the outsourced function. As such there is a need to:

- 1. Identify and agree what functions the external service provider will perform.
- 2. What the associated impacts to internal IT process and procedures are, and
- 3. Implement policy, procedures and guidelines for quickly adapting and working in the new paradigm.
- 4. Monitor the effect on service delivery to the customer.

The goal of this research is to review the existing models of outsourcing currently in use and available to organizations. To assess how suitable or adaptable they are for 'selective outsourcing' and to identify from this, which areas of internal IT policy and procedure are most impacted. An analysis of the threats and opportunities presented to the internal IT department will be conducted.

Research will be conducted into one organization's experience with selective outsourcing and based on the findings, recommendations will be made as to how internal IT departments could approach selective outsourcing of internal IT functions and how internal IT departments could develop strategies for responding to the challenges posed by selective outsourcing.

1.1. Definition of Outsourcing.

White provides a definition of outsourcing as 'a contractual relationship between an external vendor and an enterprise in which the vendor assumes responsibility for one or more business functions of an enterprise' (White 1996: xiv).

Some of the generic issues with outsourcing are the relationship with the supplier, stability of supplier, service level agreements, security and privacy, staff issues, and dependency and disengagement issues. Outsourcing describes how information technology services are obtained, namely through the market rather than internally. Outsourcing can involve handing over ownership or managerial control.

Operations that are of low complexity and are stable are best suited to outsourcing. Operations with tangible outputs and ease of monitoring are suited to outsourcing as they are much easier to write a contract that specifies service output. This is because of the nature of contracts and the difficulties of monitoring them (Houghton 1992:31).

Rather than handing over responsibility for the entire IT function, many companies outsource specific IT operations, or management functions to an outsourcing service provider. This approach is less disruptive to daily business operations than a full-blown outsourcing deal because it eliminates the wholesale transfer of assets and personnel to an outside vendor (Muller 1996:448).

Some of the other advantages of selective outsourcing are:

- It is less risky than turning over responsibility for the entire IT function to an outsourcer.
- It can become the basis for establishing a partnership with a vendor that develops over time or is terminated as needed.
- It can result in greater control over the IT functions as only non strategic tasks are parceled out (Muller 1996:448).

Short term outsourcing is becoming more popular than long-term arrangements. More companies are willing to give up a selective function in the short term, either because they want to focus inwardly on re-skilling or retooling themselves or outwardly on adding value to business processes. The desire to achieve short term objectives is driving them to seek flexible outsourcing arrangements (Muller 1996:448).

One possible down side of selective outsourcing, from an organizational (or departmental) perspective is that the outsourced function must be closely allied to organizational changes and activities. This requires a close working appreciation and understanding between in house staff and contracted outsourcing staff (Houghton 1992:32).

1.2. Evolution/Trends of Outsourcing.

Within IT, outsourcing of IT services has occurred in some form since the early sixties. The common term for these IT service providers were Facilities Management Bureaus. Computing power was expensive and organizations were yet to automate their functions and demand greater access to computing facilities. As organizations progressed in their use of computing within the business process they grew internal IT groups to manage the provision of the computing services.

As the cost of running the internal IT groups and computing infrastructure grew, both Chief Information Officers (CIO's) and Chief Executive Officers (CEO's) began to look for ways to reduce this internal IT cost. Management theory on organizational 'core competencies' and catch phrases such as 'stick to the knitting' started organizations questioning the validity of maintaining large internal IT groups. Within the IT industry vendors were positioning themselves to take on the management and running of an organization's IT services and staff. Outsourcing on a large scale gained momentum in the 1989 with Eastman Kodak outsourcing its whole of IT function to IBM and DEC. Through the early 1990's 'whole of function' outsourcing continued with varying measures of success. Outsourcing today is evolving along the lines whereby there is greater choice for the customer with both the customer and vendor learning from some of the outsourcing mistakes of the past.

Muller cites some of the reasons for outsourcing which include (Muller 1996:459):

- Difficulty in using technical personnel efficiently or upgrading their level of expertise.
- Insulating management from day-to-day system problems and decisions so they can focus more attention on core business issues.
- Concern about buying expensive technology that could become obsolete shortly after purchase or before it is fully depreciated.
- Greater flexibility to deal with fast-changing worldwide markets, government regulations and differing standards.

Outsourcing is evolving to more shared risk propositions, making the stakes higher for vendors and accurate measures of penalty and reward more crucial (META 1995:498). Outsourcers are trending towards partnerships (Clarke-Dickson 1998:89) where an outsourcing organization takes a percentage stake in the outsourcer like Commonwealth Bank's 35% in Electronic Data Systems (EDS), or transfer of IT staff to outsourcer (e.g. more than 90% of the 1,400 Commonwealth Bank personnel accepted positions with EDS).

META Group predict that after five years, that large outsourcing contracts will be displaced by both contracts based on the delivery of business results and by smaller contracts focused on selective outsourcing of IT services (META 1997:680).

The outsourcing market continues to grow with smaller deals of more granular focus and shorter duration (e.g. less than three years). Internal IT groups are now turning outsourcing into co-sourcing (also referred to as selective outsourcing or out-tasking), by demanding more control in outsourcing agreements, increasing internal IT group's participation, and using the outsourcer as a supplement - particularly within selective or strategic projects or functions (META 1995: 498). A combination of less threatening vendor 'productized' offerings and receptive internal IT attitudes to selective outsourcing is accelerating this growth.

Areas of low IT skill and high strategic value will continue to be outsourced as specific task project engagements (e.g. Client Server application development). The long term engagements predominantly persist in low strategic value tasks like hardware maintenance (META 1995: 480).

The use of third party IT services is evolving from a pure balance sheet decision involving total outsourcing and facilities management to a fulfilment vehicle for strategic business and IT needs involving selective and functional outsourcing (META 1997: 599). META predicts that the 1997 outsourcing market of \$70 billion will grow 25% annually through to 2001.

1.2.1. Theoretical models of outsourcing.

Whether it is called systems integration, facilities management, bureau services, outsourcing, prime contractor or contracting in, outsourcing models have a common generic methodology that includes the simple steps of assessment, planning, and execution of a set of decisions as outlined below.

Phase	Steps
Phase 0	Initiation
Phase 1	Assessment
Phase 2	Planning
Phase 3	Contract
Phase 4	Transition
Phase 5	Management

Figure 1. Steps in generic outsourcing methodology.

Source: (Rothery 1995:214).

1.2.1.1.Full outsourcing.

Traditionally this has involved very inflexible agreements over a long duration (of five to ten years) where the whole of IT function and equipment is outsourced to a third party. Typically, only user liaison and contract-management functions remain in-house. In this model there is the requirement for the vendor to maintain and provide a high level of skill in a broad range of services and functions. Accordingly pricing is stringently fixed to the tasks that have been identified to be performed and variations in task invariably incur higher service charges.

Total outsourcing models can include shared services where customers pay monthly fees for certain transactions or services. These are provided for, or run on the service provider or vendors systems, alongside transactions of other customers. Or remote computing where a specific part of the vendor's installation is reserved for a particular customer (Bryson 1997:392).

1.2.1.2. Selective outsourcing.

Large outsourcing deals represent considerable complexity to both the IT departments and vendors. As such there is suspicion and resistance to take this approach with the resulting growth in selective outsourcing. Selective outsourcing provides the opportunity for internal IT groups to evaluate the make-versus-buy decision for granular support functions. Selective outsourcing is most predominant where the work or projects have definable demarcated phases with vendor technology transfer and ultimate disengagement.

Selective outsourcing presents itself as a more attractive option to an internal IT department as it is less threatening in that it is confined to specific functions rather than 'whole of function'. Accelerating change in technology and supported businesses is making accurate prediction of the future (five to ten years) impossible and shorter duration's (of one to three) years are more favourable and present a more acceptable risk profile.

Vendors are now specializing in services offered and as such can claim to specific level of competency and predictable pricing for a set range of selective services.

1.2.1.3. Transitional outsourcing.

This refers to situations where a company outsources aging or obsolete systems and/or technology platforms in order to focus its attention and limited resources on the creation of new systems and infrastructure.

1.2.1.4. Transformational outsourcing.

This is the reverse of transitional outsourcing, where a vendor is hired to move a company to a new technology platform and/or applications portfolio, and to build new skills and capabilities.

1.2.2. Core competencies.

A number of companies outsource to focus on core competencies as they see little value in trying to develop expertise in areas which are not core competencies (Clarke-Dickson 1998:87).

IT organizations are moving from internally focused management information systems (MIS) to service-led MIS. This change means that they are focusing on the performance of the services they are delivering to users as opposed to the traditional data centre operations (Rothery 1995:106).

An Input Corporation study (Rothery 1995:123) suggests that there are few core activities which cannot be outsourced at the administrative and operational levels. There is a proviso which is "provided that the client retains the means of establishing policy and direction, together with the means to monitor service delivery and manage the vendor".

There is more caution being demonstrated, fragmenting the operations into more manageable pieces so that they can be evaluated separately and independently as candidates for outsourcing. For example, it may be beneficial to outsource the help desk part of operations, rather than employ the wide range of skills needed to support all the installed applications and PC's (Rothery 1995:106).

The definition of strategic competencies within the scope of an outsourcing contract is a strong correlation for success (Clarke-Dickson 1998:94). Outsourcing is a threat to IT only if IT sees its role as service delivery rather than obtaining benefit for the organization.

In 1993 PA consulting Group, UK conducted a survey of business and information technology directors' experiences and views on IT outsourcing and found that the use of it was chiefly tactical, with short term contracts covering only a few aspects of an organization's IT rather than large, long term, strategic contracts for IT service provision (Rothery 1995:105).

Although outsourcing represents an opportunity for companies to lower costs and enhance core business activities, before outsourcing it should be determined how well internal staff, vendors, consultants and contract programmers are currently managed (Muller 1996:462).

1.2.2.1. What to Outsource.

In undertaking the identification of services or functions that could be candidates for outsourcing, potential opportunities exist where the following circumstances apply (BLEC Williamson 1994:34).

- Inability to hire and retain technically competent staff in the functions area; Rapid technology changes making it difficult to get access to current technology for key functions; and
- The work flows are variable and it is necessary to maintain a flexible work force to meet peaks and troughs.

Outsourcing should also be considered for these activities:

- Functions or processes that take a disproportionate amount of management time.
- Tasks that are discrete from other work functions.
- Where a competitive market exists for the function being considered for outsourcing.

Figure 2 presents Muller's model for determining a task's suitability for outsourcing based on a organization's ability to perform the task cost effectively and the task's importance to the organization. The more mission critical a task and the greater the ability that the organization has to perform this task effectively, the less suitable a task is for outsourcing. The less mission critical and less cost effective it is to perform a task in house the more suited a task is for outsourcing.

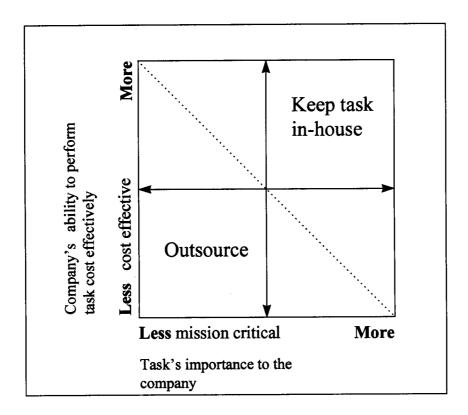


Figure 2. Identifying what to outsource.

Source: Muller N. J. <u>Network Planning, Procurement and Management</u>. McGraw-Hill Companies Inc. USA. 1996. Pg. 449.

1.2.2.2.Outsourcing for strategic advantage.

Figure 3 presents Townsend's model for identifying a task's suitability for outsourcing based on the task's level of importance to organizational competitiveness and level of value add to the organization. The greater the importance to competitive advantage and the higher the value add of a task, the more the task should remain in-house.

Townsend implies that organizations outsourcing tasks with a low importance to competitiveness and value add can gain strategic advantage in how and to where the organization applies it attention and resources.

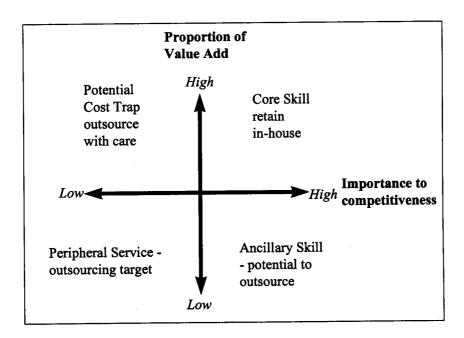


Figure 3. Identifying function types which could be outsourced.

Source: Robert Townsend '<u>To Contract our or not?</u>' BLEC Conference July 1993. pg. 13.

1.2.2.3.SWOT analysis.

The type of and number of interfaces (whether IT internal or third party) for the outsourced function can greatly impact the completion of the task or process. Consideration also needs to be given to what the impact is to the tasks that remain internal and are not outsourced. Where possible the sharing of responsibility for network management processes, functions and instruments should be avoided. A single point of responsibility in network management is extremely important to avoid finger pointing when network faults need to be detected, determined and eliminated. Responsibilities should not be shared between individual persons or work groups (Terplan 1995:321). Great care needs to be given to the interdependencies of IT functions that make up the completion of one process.

With the expanded scope of outsourcing the farming out of multiple IT functions is relatively new and contract periods are long, therefore it is difficult to assess the long term impacts of outsourcing. In addition since most outsourcing contracts are cloaked in secrecy, the short term impacts are also difficult to assess (Hirschhem 1993:19).

According to Muller a common complaint of corporate executives is that the outsourcing firms do not know their company's business (Muller 1996:460).

Figure 4 provides a snap-shot 'Strengths, Weakness, Opportunities, Threats' (SWOT) analysis, comparing Full outsourcing and Selective outsourcing against the strengths and weaknesses involved in an outsourcing relationship.

Weaknesses and Threats of outsourcing	Full Outsourcing	Selective Outsourcing	Comments
Inadequate human resources.	<i>-</i>	<u> </u>	Internal staff can supplement selective outsourcing.
Inadequate change management.	1		Change management should be in-house with selective outsourcing.
An inability to take advantage of new and emerging technologies and lower than expected cost savings.	1		Internal staff can supplement selective outsourcing.
Lost money either directly as a result of not achieving anticipated cost savings or indirectly through having to resume expenditure on IT.	1	1	
Reduced customer service levels or increased inefficiency.	1		Internal staff can supplement selective outsourcing.
Additional management time to balance different units, need to allow different management and organizational cultures if the businesses are vastly different.			
Damage to staff morale.	1		Less of a threat with selective outsourcing.
Cultural mismatch.	1	1	
Service provider dependency.	1		Exacerbated by long term commitment.
Lack of flexibility.	1		Exacerbated by long term commitment.
Requirement for long term commitment.	1		
Possible breaches of privacy.	1	√	
Lack of control of information.	1		Control should remain in-house with selective outsourcing.
Deficient performance during the transition period.			With the selective outsourcing this can be compacted many times over unless clear process for the transition if defined and followed.
(Re) internalizing an outsourced operation can be extremely difficult		1	Corporate memory is lost, it will be very difficult to rebuild outsourced architecture at reasonable cost. This is less of a threat with selective outsourcing.
High risk involved in hidden costs, potential cost escalation. Charging of excessive fees for services that the company assumes the contract covers.	1	7	
The threat of opportunism where vendors take control of the client's IT function and may take advantage of the clients.	1		Particularly during contract renewal. After the organization has eliminated dedicated people and has to start at ground zero (Hirschhem 1993:19).
The investment of the organization in equipment infrastructure, as well as the skills, expertise and knowledge of their staff regarding that equipment infrastructure and the data itself is all lost when the IT function is outsourced (Clarke-Dickson 1998:94).			

Strengths and Opportunities of outsourcing	Full Outsourcing	Selective Outsourcing	Comments
Access to skills.		1	
Improved quality of service, achieve guaranteed service levels.	1	1	
Defined service levels.	1	1	
Focus on core business.	1	1	Staff released from operational roles.
Additional Flexibility.		1	
Access to technology.		7	Not guaranteed with full outsourcing.
Improved performance parameters.	1	7	
Cost savings.	1	1	
Change fixed asset base.	1		
Improved balance sheet by removal of fixed assets.	1		
Increasing range of supply alternatives.		1	Limited by fixed cost in full outsourcing.
Changing emphasis of IT activities to integration rather than creation.	1	1	
Increased control through contract for results.		1	
⇒ To provide single point of contact and responsibility for all communications management. Specific to network functions (Muller 1996:450):			
⇒ To improve the management of communications problems and reduce their incidence	1		May be difficult with multiple interfaces in selective outsourcing.
⇒ To simplify operations through standardization of facilities, network architectures and procedures.	1	1	This potential exists but may not always be achieved.
⇒ To reduce the number of personnel involved in day-to-day operations & redeploy these resources to core business concerns.	1	1	This potential exists but may not always be achieved.
⇒ To effectively manage equipment inventories, vendor warranties, licence agreements and maintenance schedules.	1	1	
⇒ To do all of the above more efficiently and more economically, while providing higher quality services to end users.	1	1	This potential exists but may not always be achieved.
Eliminates delays caused by vendor and carrier etc. (e.g. finger pointing).	1		May be difficult for selective outsourcing when managing multiple interfaces.
Expedites ordering processing.	1	1	
Reduces time spent on invoice reconciliation.	1	1	
The company is buffered from the effects of technical staff turnover.	1	1	
The outsourcers experience is drawn from a broad customer base, and interactions	1	1	The outsourcer may much to contribute to clients internal
with hardware vendors and carriers.		1	process and procedure (improvement).

Figure 4. Comparative SWOT analysis of Full and Selective outsourcing.

1.2.3. General principles in managing the outsourcer.

1.2.3.1. Contracts.

Contract law applies to IT in the same manner as it does to any other manifestation of a contractual situation, that the process of striking a legal contract occurs whenever an arrangement is made to provide goods or services in return for payment (Robson 1994:542). A contract must include an exchange of some value and is defined by a two stage process:

- 1. The offer of goods or services for specific, remuneration; this statement of willingness to deal will expire after a certain time.
- 2. The acceptance of the offered arrangements; agreement to the offered goods or service under specific terms.

The only unique aspect of contracts for elements of information systems is the complex interaction of those elements and therefore the problem in contracts for computer services is mainly one of defining the expectations in unambiguous terms (Robson 1994:543).

Contracts are typically used to manage most business transactions and outsourcing is no exception. Customer skill in negotiating and managing outsourcing contracts has progressed considerably from the inflexible vendor driven long term outsourcing contracts of the late nineteen eighties.

Outsourcing customers should build in flexibility through listing a series of scenarios under which the scope of the contract could change and carefully defining business requirements. IT requirements (or scope of work) need to be defined in outcome terms to provide for clear, measurable service level definition.

The contract must be flexible to allow for change. Consideration needs to be given to what would happen if business volumes doubled or halved. Both partners should make sure that they are not locked into inordinately high costs by building in a 'value for money' test.

Provisions need to be built within the contract for modifying the agreement. The provisions should allow for either the outsourcer or the customer to reopen negotiations and for management approval if the priority of the work is to be changed (Terplan 1995:279). Therefore contracts should be re-negotiable, include break points and contract for business results.

In today's IT market and with increasing growth in outsourcing services regular reviews are necessary for considering any impacts of the dynamically changing environment (Terplan 1995:279).

1.2.3.2. Service Level Agreements.

Service Level Agreements (SLAs) document IT services to be provided, business objectives, and processes for measuring, tracking, reporting, and then revisiting the objectives (see Figure 5). SLAs provide a meaningful method of documenting exactly what outsourcing service providers will be providing, how success will be gauged, how it will impact business objectives (if possible), and how IT groups and outsourcing service providers can realign the service to accommodate new or changing business requirements (META 1997:638).

	Service Level Agreement - Content
1.	Business Objectives and Scope
2.	Policies
3.	Updating the SLA Document
4.	Systems Summary
5.	Performance and Systems Metrics
6.	Security Management
7.	Problem Management
8.	Setting Priority or Severity Levels
9.	Service-Level Penalties
10.	Performance Reports on SLA

Figure 5. Recommended SLA Content Outline.

Source: Gartner Group. Developing Service-Level Agreements, Part 2. 25/11/96

The SLA becomes part of the contract and performance against service levels becomes a legally enforceable issue. Metrics must be carefully evaluated and negotiated as services outside the contract will incur incremental charges. SLA metrics reflect the nature of the service being provided. Vendors dedicate staff to track and report on SLA metrics, and IT organizations should dedicate staff to vendor management/relationship activities, including review of SLA metrics as vendors incur financial penalties or receive financial rewards based on metric results. It is critical that both vendor and customer agree on results, understand reasons for underlying performance problems, and develop a mutually agreeable plan for problem resolution. The problem resolution plans should be included in the SLA up front. When terms cannot be reached by relationship managers, having a pre-established escalation matrix saves valuable time and reduces management frustration (META 1997:621).

Service-level agreements (SLAs) are a keystone for effective relationship management. Well-defined service levels, which evolve with changing business objectives and technologies, provide a common ground for both vendor and client to discuss existing services, areas of satisfaction and dissatisfaction, and changes required to accommodate business needs. SLA metrics should be the trigger for rewards and penalties for the vendor (META 1997:638).

1.2.3.3. Penalties.

Some IT managers view penalties as a mechanism to compensate their company for performance failure by the outsourcer. Penalties should resolve the problem rather than repair its damages. In resolving difficult issues, the challenge often is motivating the vendor to prioritize the problem higher. Penalties should provide that motivation and, therefore, should be sized relative to many variables, including the relative size of the customer to the vendor (i.e., small client/large vendor means larger penalty) (META 1997:638).

To avoid the need to resort to legal means to manage vendor's poor performance customers can ensure that the contract includes incentives that induce vendors to perform, such as withholding fees for services delivered poorly or not at all or agreed reduced payment of fees for not achieving target.

If a vendor repeatedly misses performance targets, penalties become a "necessary evil". Penalties should be in the magnitude of 20%-25% of recurring payments. This eliminates the vendor profit margin, which quickly gets vendor management attention. Penalties are seen as a necessary evil as they rarely recoup an organization's business value loss, and distracts customers from doing what is right which is working with the vendor to ensure the problem does not occur again. To decrease the administrative and, more importantly, the contractual headache, penalty clauses should only be tied to SLAs deemed most important (META 1997:644).

1.2.3.4.Rewards.

Outsourcing vendors quite often demand rewards for exceeding targets when customers attach penalties to substandard vendor performance. The outsourcing vendor strategy is to either indirectly increase their fees (by over performing) or encourage the customer to abandon penalties. Though the business value of extra performance needs to be assessed (e.g. if a four second response time is sufficient, why pay more for the extra second of improvement) (META 1998:678).

1.3. Procedural Consequences of Outsourcing.

1.3.1. Inter-Departmental Issues.

The type of and number of interfaces (whether internal IT or third party) for the outsourced function can greatly impact the completion of the task or process. Consideration also needs to be given to what the impact is to the tasks that remain internal and are not outsourced.

Where possible the sharing of responsibility for processes or functions should be avoided. A single point of responsibility is important to ensure there are clear lines of accountability and responsibility for the management and completion of that function. Great care needs to be given to the interdependencies of IT functions that make up the completion of one process.

When you have multiple internal work groups sharing responsibility for completion of a function this complicates the outsourcing of it and the more interfaces involved increase the risks involved in coordination and responsibility.

When identifying and reviewing a function as a possible candidate for outsourcing Mylott suggests that the following points need to be addressed in regards resolving potential conflicts as a result of a function being shared across a number of internal work groups:

- Identifying departments affected by outsourcing.
- Determining the appropriate level of involvement of each department's top management.
- Coordinating the involvement of each department's top management.
- Investigating the issues within each affected department.
- Contributing specific knowledge of each department's applications (Mylott 1995:66).

1.3.2. Management Control.

META Group believes an IT organization must manage outsourcing in three interrelated areas: user control, vendor control and infrastructure control. User control interposes the IT group between the vendor (as an extension of IT) and end users. With its technical expertise and common purpose with end users, the IT group is ideally suited to this position. Vendor control issues range from setting bounds on activities in which vendor staff seek augmented business opportunities by directly exploiting end-user dissatisfaction with the IT group, to monitoring proposed vendor maintenance or enhancements, utilization charges, etc. Infrastructure control involves maintaining staff to:

- interface with end users regarding system maintenance/enhancement issues,
- handle problem identification/resolution areas like help desk,
- participate with vendors in application development-related issues,
- maintain operational areas like performance/ capacity/charge back,
- maintain expertise, control, and access in major technical areas that determine vendor performance/charge criteria (META 1995:467).

Management of standards that address hardware, communications and software should remain an internal responsibility to ensure the compatibility of information systems across the enterprise. Management control should not be handed over to a third party (Muller 1996:460).

It is important to identify the costs associated with managing outsourcing arrangements. It is necessary to retain knowledgeable people to both manage the outsourcing vendor and to look after the needs of users and IT department (processes) within the organization that is outsourcing (Houghton 1992:27).

There is a fear that the management of the outsourcing vendor, and the extra layer such a vendor represents in the process, would add complexity and could make it more difficult to identify accountability.

An example is where the expertise in regards to what questions to ask are lost to an organization and they have to bring in a consultant in to conduct meetings with vendors (Clarke-Dickson 1998:89).

Internal IT departments should retain skeletal staff expertise in selective outsourcing situations. Keeping internal IT staff on vendor managed teams can present management problems such as reporting issues, compensation issues or team building. An alternative is to keep the internal IT staff member in an observational/advisory role rather than a hands on practitioner. This non productive role can increase overhead costs. The trade-off involves economy versus maintaining sufficient awareness and skills to bring the function back in house (META 1995:467).

A detailed plan for migrating management responsibilities back to the company at a future date should also be developed. Despite the widely held belief that outsourcing is a one-way street, proper planning and management of the outsourcing firm will keep the option of bringing the management function back into corporate mainstream should it become necessary (Muller 1996:463).

There is a real need for a contract management team to mange the provision of service with the outsourcing supplier. (Refer to 'Structuring the Relationship' in this paper for further commentary).

1.3.3. Human Resource issues.

Rothery (1995:47-59) suggests that the biggest danger with an outsourcing project is that the people issue will not be dealt with properly. A Wyatt Company (US consultants) survey of 531 mainly large companies revealed that more than half of the surveyed companies had refilled positions within a year of eliminating them. The problem is not just how to pass staff over to an outsourcer but how to avoid losing the most skilled staff.

There is a need to retain some of the IT staff to oversee the transition to outsourcing or to stay on the areas not outsourced. It is likely that dissent will develop even in these staff as the organization no longer has a strong IT division and provides a poorer career path or access to new technology.

Staff maybe be better off under an outsourcing arrangement, this is because the outsourcing supplier will need to acquire (and keep) staff to deal with the contract. The supplier, being by nature an IT company is more likely to offer a better career path.

The greater the entrenched and established nature of the staff and organizational structures involved, the greater will be the staff problems and associated hidden costs involved with outsourcing (Houghton 1992:27).

If staff do not feel they have an input to the development process (or any process that is outsourced), they will be less motivated and less committed to its success (Houghton 1992:29).

Outsourcing of IT is attributable to obtaining cost savings (largely by redirecting industrial relations issues, that is making IT staff redundant under the guise of outsourcing), to keep on top of technology advances and to focus on core competencies (Clarke-Dickson 1998:88).

Outsourcing creates a different and usually less effective chain of authority and accountability when the IT operations are in-house. (Mylott 1995:45). When there is a problem with in house operations, management can pursue a number of remedies to effect a resolution (e.g. add resources, adjust operations). Whereas in an outsourcing

relationship the contract with the vendor governs the customers response to a problem. Problems that are management related or technical with an in house operation may develop into legal problems in an outsourcing relationship. "Rather than the priorities and style of management, the law of services and the outsourcing contract govern accountability in the outsourcing relationship" (Mylott 1995:46).

There can be a potential conflict of interest in managing the outsourcing relationship interface. Both the vendor and the customer have to recognize and manage the conflict which can come from one side looking to maximize profit margins and the other looking to maximize service (Rothery 1995:48).

When a service is delivered in-house, business units take it for granted. Even where there is a service level in place, that service level is not exposed to all of the commercial realities which exist when outsourced (Rothery 1995:50).

These changes are difficult for both the business and IT staff to adjust to. One day the relationship could be with a colleague, the next a supplier with commercial motives (Rothery 1995:49).

An example is an internal IT department that is sold off as a separate company and contracted back to provide a service to its previous employers. People supplying the service went from colleagues who were 'on tap' to suppliers that had to be sensitive to the cost of the service they had now been contracted to deliver (Rothery 1995:50).

1.3.4. Transfer of Technology and Skills.

Clarke-Dickson asserts that if a company does outsource then it needs to transfer technology and skill but must retain a degree of in-house expertise and skills to supervise people and processes (Clarke-Dickson 1998:89).

Without transfer of skills the organization will always be paying out for someone to do the job and as soon as someone has the information they make themselves indispensable (Clarke-Dickson 1998:89).

One way for a company to take a partial step down the outsourcing path is to give the vendor control of IT functions during weekends or on a 'shift' basis, while keeping control of the more critical prime time. As confidence in the vendor grows, more can be outsourced (Muller 1996:450).

Another way to ease into an outsourcing arrangement is to farm out only one or two discrete activities. Choose those that will provide IT staff with some relief. If these are successful, consideration can be given to adding more functions (Muller 1996:450).

A PA Consulting Group survey (Rothery 1995:111) identified that the skills needed to manage the supplier relationship were frequently underestimated. In the public sector 67% of respondents to the survey had experienced problems in the area of negotiating, implementing and managing IT outsourcing arrangements.

A method to address the transition of technology and skills is to keep technical staff on board, perhaps as advisers. These advisers would serve a double purpose. During the length of the outsourcing agreement, the advisers can work with the vendor(s) to ensure a smooth transition to outsourcing and then a smooth running outsourced operation. If the outsourcing arrangement is terminated, these same advisers would form the nucleus of a newly reconstituted internal technology department (Keyes 1992: 105). Though a concern with this approach is that technology people are attracted to technology and not companies. If no technology department exists in a company, management would find it a hard sell to lure qualified candidates to what these candidates consider a technology desert.

1.4. Structuring the relationship.

Entering a long-term partnership can be risky without proper safeguards. Poor performance on the part of the service provider could jeopardize the client company's competitive position (Muller 1996:465).

It must be determined at the outset which party is responsible for which functions. This includes spelling measures, financial penalties for inadequate performance and what amount of insurance must be maintained to provide adequate protection against losses. The outsourcing relationship must make explicit provisions for maintaining the integrity of critical business operations and the confidentiality or proprietary information.

The relationship must provide for the possibility that the client's needs will grow substantially. Companies entering outsourcing relationships must also establish what rights they have to bring some or all of the management responsibilities back in house without terminating the contract or paying an exorbitant penalty. Contracts should provide an escape clause that allows the IT group to transfer operations to an alternative service provider should the original firm fail to meet performance objectives or other contract stipulation's (Muller 1996:465).

There is a requirement to ensure that the objective of the outsourcing is properly defined. Whether it be to reduce overheads, costs in service delivery, improve service levels, gain access to higher level of skills, shift technologies or focus on core activities. Each objective will require a different outsourcing mix and strategy. An outsourcing strategy based on focusing on core business will require a totally different partnering relationship than one that is focused on a shift in technology (Bryson 1997:394).

The structure of the relationship between vendor and customer depends on the objectives of the outsourcing exercise. Each party should be very clear in relation to the following points (Bryson 1997:394):

- The objective and purpose of the outsourcing exercise.
- Their role in the partnership arrangement.

- The organization's business and corporate culture.
- The distribution of risk between the parties.
- The ownership of assets.
- The required outcomes and outputs.
- The roles of any third parties to the agreement.

META have predicted by the year 2000 that most large corporations engaged in outsourcing will have a permanent executive-level team charged with managing, evolving and evaluating the outsourced service vendor portfolio (META 1996: 517).

In clarifying the role of such a vendor management team there are five dimensions to be considered (META 1996:516-517). These are:

- The central tasks that must be performed.
- Skills Profile.
- Relationship between the outsourced service management team and business units.
- The relationship between the outsourced service management team and the vendors.
- The metrics that the outsourced service management team should employ as it manages the contract.

1.4.1. The central tasks.

The central tasks of the outsourced service management team mirror the two major difficulties that arise during the execution of a contract. These are the vendor's failure to deliver according to negotiated service level agreements and the vendor's attempts to circumvent internal IT departments through independent marketing to the business units.

The outsourced service management team must be committed to monitoring compliance with negotiated service level agreements. Monitoring should be formal with regular benchmarks and evaluations and informally through discussions with the business units.

The outsourced service management team needs to manage vendor contact with the business units by first marketing itself as 'head contractor', the integration and focal point through which outsourced services are made available to the lines of business.

The outsourced service management team must keep abreast of the outsourcing marketplace and be actively engaged in ongoing market research. This allows the outsourced service management team to spot new and more effective outsourcing activities and will make current vendors aware of their need to continue to provide value through the life of the contract (META 1996: 517).

1.4.2. Skills Profile.

Once the above tasks are defined the correct skills can then be determined. First the traditional ability to negotiate needs to be coupled with a deep knowledge of the technology and services outsourced. Beyond these the outsourced service management team needs to have an intimate knowledge of the behaviour and needs of the business unit. This knowledge will ensure that the team anticipates future business unit requirements. Additional skills to these would be market research skills to assist in keeping abreast of the outsourcing marketplace (META 1996: 517).

1.4.3. Relationship with the business units.

The outsourced management team must maintain ongoing contact with the business units. Regular newsletters should be provided in regards background information such as vendors supplying services and contracts, plus the state of the outsourcing service market.

The outsourced management team should regularly review all contracts, presenting a document showing the degree to which the contracted service met stipulated service level agreements. There should be a formal presentation of this information to a business 'council' (made up from the business groups) and vendor representatives should be required to attend. Vendors should be questioned on the current contracts and be encouraged to present future strategies.

The outsourced management team should maintain contacts with the help desk and receive and analyze regular reports on problems/resolutions, both to monitor contract

compliance and anticipate business unit's needs. Other contacts should be maintained through informal intelligence gathering in the business units. It is key that the business see the outsourced management team as 'our' people rather than 'their' people and that they are regarded as 'business unit advocates' (META 1996:516).

1.4.4. The relationship with the vendors.

One of the problems from the growing complexity of outsourcing contracts is the IT group's ability to monitor contract compliance independently of the vendor servicing the contract. The outsourced management team should scrutinize vendor's reports on contract compliance.

Contacts with external vendors should be frequent and public and the outsourced management team needs to be acquainted with the overall market. This ensures that the current vendors understand that the outsourced management team hold sway over their continued engagement (META 1996:516).

1.4.5. The metrics to manage the contract.

Explicit service levels must be articulated along with their means of measurements. This should be benchmarked against current market standards. Measuring of market oriented metrics provides data for input to contract renewal negotiation and encourages the vendor towards continuous improvement initiatives.

Though less quantifiable, metrics should be placed around the degree to which the vendor adds value and proactively seeks solutions to IT or business issues (META 1996:516).

1.5. Overheads in Management of Vendor Performance.

There are additional staff and costs related to ensuring that the vendor is performing up to contractual obligations and that the outsourcing firm is acting in the company's best interests and that problems are not being covered up. Considerable effort is required to establish and maintain a trusting relationship (Muller 1996:460). There is a significant amount of supervisory overhead that consumes resources.

As organizations continue to outsource IT service components the issue of how to manage outsourcing vendors once the contracts have been signed is becoming of increasing concern.

META Group identifies four factors that have driven the need for a more active approach to outsourcing contract management (META 1996:517).

- Board level adoption of Business Process Reengineering (BPR) principles has revived the view that IT is a strategic asset requiring executive direction.
- Adoption of selective outsourcing options has forced a closer cooperation between internal IT groups and outsourcing vendor management.
- A trend towards using multiple outsourcing service providers for different technology domains has meant that remaining internal staff have been forced into a position of managing relationships amongst several outsourcing service providers.
- An increase in the number of outsourcing service providers has led to greater flexibility while contracting terms and conditions.

1.6. Definitions.

1.6.1. Policies.

The policies within an IT group can cover the broad areas of data policy, telecommunications policy, architecture policy, acquisition policy or control policy.

Policies within an IT group can be driven by technology or a business mandate and provides the guidelines for information management. The policies refer to the rules or guidelines that the IT departments adhere to and follow, in carrying out their day-to-day tasks. The procedures are the series of tasks that the IT departments complete to support the policies.

An example of a policy may be "where possible buy applications rather than develop them". A procedure to support this policy may be to first conduct a review of available packaged software once requirements are gathered.

Policies can relate to the way data is managed or stored, the use of passwords, naming standards, inventory control, configuration standards, conformance to software or hardware specifications, documentation requirements, change control, communication or reporting requirements or compliance to standards. In short, policies help ensure that work or tasks are completed to an agreed standard in compliance with a range of other business or technology related initiatives.

1.6.2. Procedures.

Policies are supported by procedures. Procedures are a set series of tasks to achieve the desired outcomes of the policy. Following set-out procedures greatly increases the likelihood of compliance with the policy and therefore compliance with the overall strategies. Procedures can be either formally agreed, controlled and documented steps, or as is quite often the case informal where a series of tasks is historically completed to achieve the desired outcome.

1.6.3. Impacts.

The reference to impacts refers to the specific impediments that hinder the successful completion of the procedures that support the policies. These impacts may take the form of: lack of adherence or compliance to procedures; increased breadth and depth of available knowledge; exposure to different methodologies; requirement for a larger span of control and communication; differing levels of knowledge; poor communication of procedures; poorly defined procedures or lack of procedures.

These impacts in turn may have follow-on affects leading to improved methodologies, increased efficiency, resource constraints, time constraints, breakdown of communication/information exchange, poor relationships or reduced control of the environment.

Where a function that is outsourced requires the input of a number of work groups from the internal IT group, the scope for impact is greater. This is especially the case where there is the need to exchange information or data in regards to a process that spans cross functional work groups or boundaries. To introduce an additional third party outsourcing vendor into this process can often prove a more complex task than initially envisaged.

2. Research Method.

2.1. Aim.

The objective of this study is to identify the <u>impacts</u> to the internal Information Technology (IT) department's <u>policies and procedures</u> as a result of outsourcing selective IT functions and to assess the <u>threats and opportunities</u> to an internal IT group, posed by outsourcing selective IT functions.

The trend to selectively outsource IT functions implies that this can be done with minimal disruption and risk to the IT department's policies and procedures. This research will attempt to validate this assertion and develop a model for internal IT departments to respond to the challenges presented by selective outsourcing.

2.2. Design.

The purpose of the research rather, than the technique, determines whether a study is exploratory, descriptive, or causal (Zikmund 1997:125). Causal Research is identification of cause and effect relationships between variables e.g. using an external service provider and the concomitant effect to an internal IT department policies and processes. Casual research should: 1) Establish the appropriate causal order or sequences of events. 2) Measure the concomitant variation between the presumed cause and the presumed effect. 3) Recognize the presence of absences of alternative plausible explanation or causal factors (Zikmund 1997:41).

This research design is the master plan that specifies the methods and procedures for collecting and analysing the required information. The objectives of the research are to be included in the design ensuring that the information collected is appropriate for solving the problem.

The case study technique method has been chosen and involves intensive investigation into one particular situation that is similar to the problem under investigation.

Conducting this case study requires the cooperation of the target organization and/or persons whose history is being studied. Intensive interviews or long discussions can provide an understanding of complex situations. There is a need to be flexible and an

attempt made to glean insights wherever they may be found. The success of a case study is highly dependent on the alertness, creativity, intelligence and motivation of the individual performing the case analysis (Zikmund 1997: 108).

Obtaining information from competitors may be very difficult as organizations like to keep their methods for success to themselves. Best practice procedures can be viewed as a competitive advantage, thus researchers may have limited access to information from other organizations.

Figure 6 presents a summary of the steps taken in the design of this research. The hypothesis in regards to selective outsourcing was defined and causal research was selected as the research technique. The Case Study was the research method chosen and the design technique chosen was survey interview.

The next step in the research process is to plan the sample that will be used. The sample for this research was drawn be drawn from a target IT group within a larger organization that has had a recent experience with selective outsourcing.

In itself the sample can not be defined as a subset of internal IT groups within organizations. As such the case study method was chosen so as to obtain information on one situation that is similar to the research problem situation. In choosing the case study method the research will be able to concentrate on identifying the relationships among functions and processes.

Generalizing from a case study can be dangerous as most situations are atypical in some sense. An organization in one situation may not be comparable to another, though a number of insights can be gained and recommendations made pertaining to the case study organization that may apply equally to any internal IT group.

The basic research method chosen is the personal interview. The personal interview allows for a face-to-face situation where the interviewer can ask the respondent questions. It can be a versatile and flexible two-way conversation which provides the opportunity for feedback to the respondent.

The length of the interview and the need to probe complex answers and seek clarification on unstructured information meant personal interviews were best suited to this task.

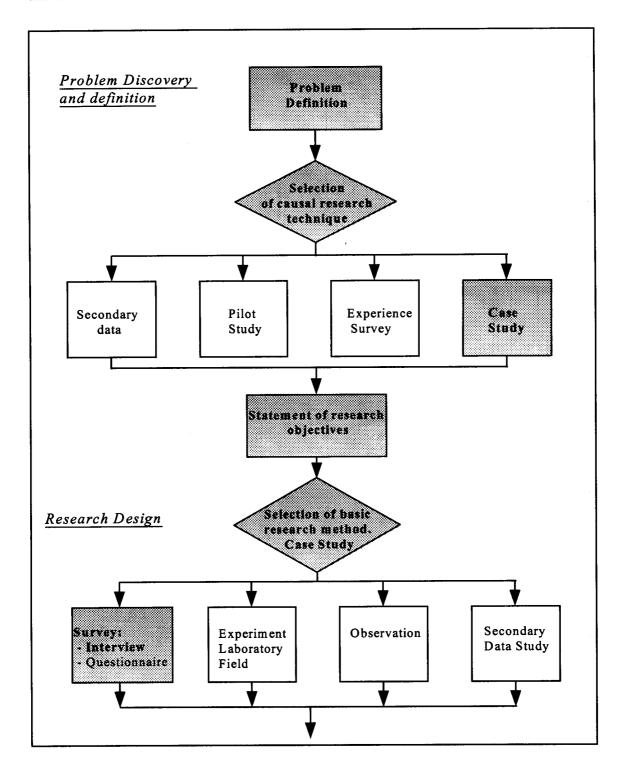


Figure 6. Flow chart of the chosen research process.

Note: Shading indicates choices made in the design process.

Source: Zikmund W.G. Business Research Methods. The Dryden Press. 1997. p 44

2.2.1. Limitations of the Study.

Limitations of this study are that the outcomes are only representative of one organization's circumstances. The outcomes may serve as a benchmark for other organizations.

The policies and procedures discussed relate only to the target organization. The policies refer to the rules or guidelines that the IT department adheres to and follows, in carrying out the day-to-day tasks. The procedures are the series of tasks that the IT department completes to support the policies.

The reference to impacts refers to the specific impediments that hinder the successful completion of the procedures that support the policies.

The unique circumstance surrounding the outsourcing experience that was researched is that the project was time dependent with successive projects dependent upon its completion. The primary tasks were to deploy personal computers, servers and network infrastructure across all of the organization's retail locations and to migrate the existing computing functionality onto this platform. The deployment consisted of ninety three locations, three states and approximately two thousands pieces of equipment. The installation of the equipment was performed after hours with all work being completed in an overnight window to ensure there was no business impact the following day of trading. Internal IT groups were rostered on to provide on-call after hours support for the installations. The vendor was engaged late October 1997 and the installation roll out commenced at the beginning of January 1998 and completed end of March 1998. This time frame was greatly reduced due to the Christmas break when a number of equipment suppliers and trades close down.

Delimitation's of the research that this study would specifically exclude are investigations of any of the following areas:

- legal implications of selective outsourcing.
- financial considerations of selective outsourcing.

2.2.2. Sample Design.

The target population for the sample is the internal IT group of a medium sized organization. The group has historically performed the majority of the IT function for the organization with the exception of examples such as hardware maintenance and third party software maintenance.

The typical functions carried out by this group are:

- Applications development and support.
- IT strategy planning.
- Operational Services:
- Mainframe operations, scheduling and maintenance.
- Work group Computing.
- Network management.
- Information Security.
- Customer Services:
- Help Desk support.
- Acquisition and inventory.
- Installation and deployment services.
- Desktop Electronic/Messaging.

The sampling units are the staff employed from a cross section of these groups and whose cooperation and input were required for a recent project involving selective outsourcing. Non-probability sampling was chosen as the selection of the sampling units can be selected on the basis of personal judgment. The type of non probability sampling chosen is 'judgment or purposive' sampling. The appropriate characteristics of the sample members is their participation in a recent selective outsourcing experience

within the target organization. With this sampling method it is acknowledged there is the risk that the sample is less than fully representative. The choice of sampling method was influenced by the sampling criteria of available resources, time and high advance knowledge of the target sample population.

2.2.3. Stratification of Sample.

The sample population was drawn from the work groups within the Operational Services and Customer Services departments. The strata chosen for the sample population was on the basis of classification of role. Staff from both the Manager role and general Consultant role were selected (see Figure 7). Stratification was required to attempt to overcome any perceived bias in the responses to the interviews.

Classification of	Operational S	ervices	Customer Services		
	Work group Computing	Information Security	Help Desk	Installations	Desktop Messaging
Manager	1	1	1	1	1
General Staff	1	1	1	1	1

Figure 7. Stratification of sample population.

The five departments which fall under Operational services and Customer Services where heavily involved in the outsourcing exercise. Their involvement commenced with the engagement phase of the project and continued through planning, deployment and post installation support. Staff from these groups attended weekly meetings with the vendor and were intimately involved in communicating with the vendor in regards to the procedures and policies to follow whilst conducting work for the target organization. The duration of this outsourcing agreement was a total of five months which culminated in a thirteen week period of hardware and software deployment by the outsourcing vendor.

2.3. Method.

The method deals with the process of gathering information from the respondents. For this research the personal interview method was chosen for the speed of data collection, excellent respondent cooperation, versatility of questioning, low item non response and low possibility of respondent misunderstanding.

Interviews were up to one hour in length and conducted in a neutral location away from the respondents direct place of work. Tape recordings of the interviews were made for transcribing at a later stage. During the interviews hand written notes were taken to correlate with the transcript of the recorded interviews. Respondents were interviewed with a set number of open and closed questions. Both ordinate and inordinate data was collected.

Prior to data collection the open ended questions had their alternative responses classified into standardized groupings. Standardizing the alternative responses to the questions provides compatibility of answers, which facilitated coding tabulating and ultimately interpreting the data (Zikmund 1997:381). The responses to questions were classified into a scheme and all answers then reviewed and coded according to the classification scheme.

Problem definition and clear objectives indicated which type of information must be collected to answer the research question. The choice of personal interviews influenced the structure and content of the questionnaire. Respondents tend to be most cooperative when the subject of the research is interesting, if questions are not lengthy, difficult to answer or ego threatening (Zikmund 1997:379).

2.3.1. Personal Interview questions.

	Interview Number:
	Interview Date:
	Start time:
	Finish time:
	Warm up questions.
1.	Have you been involved in a recent outsourcing arrangement that involved the selective outsourcing of some of the IT function? Yes □ No □
2.	Were the policies and procedures of your work group function impacted through this selective outsourcing arrangement? Yes \(\Backsim \) No \(\Backsim \)
3.	What was the level of involvement that your work group had with the tasks that the
	outsourcing vendor was performing?
	Very High ☐ High ☐ Little ☐ None ☐
4.	What policies and procedures that are the responsibility of your work group were
	involved with this most recent selective outsourcing experience?

Impacts.

5.	To what extent would you say that your work group function was impacted, through involvement in the selective outsourcing arrangement?						
	To a great extent \square To some extent \square Neutral \square To a little extent \square Not at all \square . Please comment on the impact?						
6.	Was the impact: Negative □ Positive □ or Neutral □? Please elaborate. Please give examples?						
7.	Please identify the areas of your work function that were most impacted as a result of dealing with an external outsourcing vendor? (e.g. resource constraints, time constraints, adequate communication/information exchange, management of the environment, control of the environment, documentation, change control,						
	understanding of your work function and competing priorities, level of knowledge, on-site support and hand over, inventory management, configuration and version management, system table generation).						

Threats and Opportunities.

8.	In your own words what are the threats (or risks) from using an outsourcing vendor to: (1) Your work group function and; (2) The IT function in general?					
	(e.g. compliance, adherence, level of care, lack of responsibility, lack of ownership, poor relationships due to changing staff).					
9.	In your own words what are the opportunities to be gained from using an outsourcing vendor to: (1) Your work group function and;					
	(2) The IT function in general?					
	(e.g. knowledge or skills transfer)					
10	P.From this most recent experience do you feel that your work group's internal IT policies and procedures are suitable to work and interact with an external outsourcing vendor? Yes No Why/Why not? (e.g. Are they formal or informal procedures)? Please give examples?					
11	.What are (or would be) the immediate policy and procedural impacts to your work group function if the most recent selective outsourcing engagement was to operate on a permanent basis? (probe for more detail by suggesting a totally different outsourcing vendor).					

	What steps can your work group take now to ensure smooth inter-operation of your policies and procedures with an external service provider? Why/Why not?					
	A Homestive Americal					
	Alternative Approach.					
13	.Can you comment on the process within the internal IT group for addressing any impacts caused by the outsourcing vendor? Was there one? Yes □ No □. Did you feel that it worked? Yes □ No □. Why/Why not? Please comment.					
14	Did you feel the engagement (or initiation) process with the outsourcing vendor was appropriate? Yes □ No □. (e.g. duration, detail, education, knowledge transfer, build rapport or relationship). Why / Why not?					
15	In regards the engagement (or initiation) phase what could you suggest what might be done differently?					
16	.What suggestions could you make for changes to the management structure of an internal IT group when dealing with an outsourcing vendor that would better facilitate selective outsourcing arrangements? (e.g. vendor management group mirroring of technical function in vendor team, vendor working on-site, close collaboration).					

2.3.2. Analysis Method.

Ordinate data was analyzed by coding the responses into a spreadsheet and graphing the results. Comparisons were drawn between the overall responses to the questions and the differing responses of the Consultants to those of the Managers. Ordinate data was gathered from questions 2, 3, 5, 6, 10, 13 and 14.

The interpretivists (or qualitative) approach was taken when analysing the interview transcripts. Through continued readings of the source material and awareness of the risks of researcher presumption, attempts were made to identify features and themes that recurred during the analysis to reach the 'essence' of the data (Huberman 1994: 8).

The analytical method chosen is derived from Huberman. The set of analytical steps followed were:

- Affix codes to a the transcribed interviews.
- Note reflections or other remarks in the margins.
- Sorting and sifting through these material to identify similar phrases, relationships between variables, patterns, themes, distinct differences between subgroups, and common sequences.
- Isolating these patterns and processes, commonalties and differences, and reviewing them in subsequent waves of analysis.
- Gradually elaborating a small set of generalizations that cover the consistencies discerned in the database.
- Confronting those generalizations with a formalized body of knowledge in the form of constructs or theories (Huberman 1994: 9).

The data refers to the essences of people and situations where the experience is converted into words. The tape recordings needed to be transcribed and corrected. The analysis consists of three concurrent flows of activity: data reduction, data display and conclusion drawing.

Data Reduction.

Reviewing the transcripts and trying to focus, simplify, abstract and transform the data. The writing out of summaries, coding, teasing out themes, making clusters, making partitions.

Data reduction is a form of analysis that sharpens, sorts, focuses, discards and organizes data in such a way that final conclusions can be drawn and verified (Huberman 1994: 11).

Data Display.

The data display is an organized, compressed assembly of information that permits conclusion drawing and action. Data can be displayed in matrices, graphs, charts and networks to make the data immediately accessible to be better able to draw conclusions.

Conclusion Drawing.

This actually commences at the start of the research and by this stage the researcher is identifying irregularities, patterns, causal flows, possible configurations. The meanings emerging from the data are tested for their plausibility, robustness and their validity.

3. Analysis of Results.

3.1. Inordinate Data.

The analysis of the interviews conducted is provided below. Interviews were reviewed to identify recurring themes. Within each theme are sub-themes. Phrases and quotations that are indicative of the themes identified have been quoted beneath each theme.

Text in *italics* indicates that the quote pertains to the question asked. Text that appears in square brackets '[]' is text added by the researcher to either link responses to enhance clarity of the quote or to remove direct reference to individuals, groups or companies. Omissions, whether at the beginning, within or at the end of a sentence, are indicated by the use of ellipses '.....'.

Some of the responses to the questions were given from a theoretical perspective. These quotes have been removed from the results data and only data that relates to practical experience has been retained for analysis.

A summary of the themes and the sub-themes that have been identified is provided below.

Planning.

- Detail of Planning.
- Time constraints.
- Resource constraints.
- Work load.

Management Control.

- Control (of process).
- Level of ownership.
- Inter-departmental issues.
- Opportunities.
- Threats.
- Job Obsolescence.
- Possible Solutions or Recommendations.

Process.

- Informality of Procedures.
- Quality of Processes.
- Adherence to Procedure.
- Level of Comfort / Care.
- Impact on process.

Structuring the Relationship.

- Communication.
- Relationship issues.
- Vendor access to internal support staff.
- Staff readiness to work with Outsourcer.

Knowledge.

- Internal Knowledge.
- Vendor Knowledge.
- Knowledge Transfer.

3.1.1. Planning.

3.1.1.1. Detail of Planning.

- "..the level of planning was not sufficient enough to allow it to work the first time." (Interview 3 line 29-30).
- "...first requirements had to be defined. They weren't clear so it was a matter of... Well, just whack it in and see if it works, forget the policy just do your best..." (Interview 3 line 41-43).
- "...when all of a sudden its like 'Oh! It's happening tomorrow night and we are nowhere near ready for it'. Maybe it was just too fast but we didn't, I think we squandered our time, we didn't use it effectively, we didn't plan to use it effectively. We failed to plan. I think we didn't understand the size of what we were trying to do." (Interview 3 line 566-569).
- "We waited till we went out there and said, OK this is what the implication is..... there was not enough thought put into it by the IT areas." (Interview 6 line 376-380).
- "..if it was to happen again a little bit more planning needs to be done on what do our internal people do now, our Installers people and how can that be more proceduralized [sic] or more automated or at least have some form of checking unit or more checking in it." (Interview 9 line 165-168).
- "I think we had about 2 weeks to prepare between it was realized 'Oh! Hey! We haven't done any planning'." (Interview 9 line 241-242).

3.1.1.2. Time constraints.

- "..the point that I will make with that though is sufficient time wasn't allowed to make the policies and procedures better." (Interview 1 line 29-30).
- "...I go back to my original statement that there was not enough time.... to provide automated and detailed procedures, we had to intervene and help in a lot of instances with the deployment." (Interview 1 line 77-78).

- "But I think that could have been resolved with more time at the beginning." (Interview 1 line 84).
- "... there was a time period allocated albeit not long enough." (Interview 1 line 403-404).
- "...I have harped on a lot about it, but you have got to set time aside. I know time is critical for business but I think that its absolutely important at the end of the day." (Interview 1 line 435-436).
- "..in working with the vendor the pace of the work or the speed in which the work was done was a lot faster so that would have impacted the work group function that you performed....." (Interview 2 line 140-145).
- "...I think there was sufficient enough time to be able to work up a rapport." (Interview 2 line 430-431).
- "...we have to spend a lot more time than I would have anticipated in doing support. That's basically cleaning up some mistakes, some not mistakes, some mistakes on our part that is not all entirely theirs." (Interview 1 line 140-142).
- "If we had enough time it would have been picked up". (Interview 1 line 289).
- "Time frame's an issue. It had to be done today and we didn't have time to get it right. 100% perfect. Dot the 'i's, cross the 't's. It was 80-20, cover the majority but fudge the rest." (Interview 3 line 93-95)
- "...if we'd had a month beforehand to develop procedures and policies correctly and throughout the department the workload would've been evenly distributed." (Interview 3 line 105-106).
- "For 3 months it was constant reaction mode and not being able to spend time on any other projects I've had running......We weren't able to develop the ongoing procedures to support the installed systems..." (Interview 3 line 164-169).

"...using the external vendor with their lack of knowledge caused us to spend - it's just a time thing again, if we had more resources we could've spent time hand holding them to get it together." (Interview 3 line 211-214).

"..there we would have done a lot better if we had had a few weeks before hand [over] to get our fellows lined up to agree on naming standards on version control on stuff like that." (Interview 3 line 537-538).

"..problems you had in the second or third pilot sites also appeared in the 4th and 5th production sites because we hadn't had enough time to fix it.." (Interview 3 line 585-586).

"The initial two weeks was a bit fast. If we'd taken it a bit slower to get the corrections in place – what to do now to fix the problems." (Interview 3 line 631-632).

"So being involved much earlier in the process rather than being handed a - 'this is the solution and this is the organization that is going to deliver it, please now try and try and work within that boundary'." (Interview 5 line 222-225).

"We would expect the same kind of pressure even if an internal group had done these actions. So whilst, yes, obviously, there was additional burden and restricted time frames placed on we would have expected that anyway." (Interview 7 line 69-72).

"Probably, time constraints were impacted....in a positive way because we were able to get someone out there in front of the customer a lot quicker to do the work." (Interview 8 line 62-64).

"I think we had about 2 weeks to prepare between it was realized 'Oh! Hey we haven't done any planning'." (Interview 9 line 241-242)

3.1.1.3. Resource constraints.

"...we had to intervene and help in a lot of instances with the deployment. And that took our time away from our core activities." (Interview 1 line 78-79).

- "...from a work group function [outsourcing] takes a load off us we get to work [on] what we are meant to work on, as opposed to doing things, which don't really relate to the business." (Interview 1 line 206-210).
- "..there was probably a lack of planning in the sense of allocating the right amount of resources for this project to interact with [the vendor]. I think that too many responsibilities were shared with few peoplewe were fortunate that the main people involved ... didn't get sick or they didn't get hit by a truck." (Interview 2 line 274-278).
- "...there was a lot of extra work and extra effort that I had to put in as an individual to make sure that the work that I asked these people to do was carried out on a daily basis..." (Interview 2 line 378-380).
- "...allocate more people to do specific tasks to be able to make sure that [the vendor] has all the right information and equipment from the very start rather than at times bumbling our way through it.." (Interview 2 line 442-444).
- "You felt that there was a single point sensitivity? I think so, absolutely. Like I said thankfully for us we didn't have any people that were knocked over by any buses.." (Interview 2 line 461-462).
- "But given the right amount of people for this project we probably would have done an even better...job" (Interview 2 line 463-464).
- "..we need to hire more resources if we were to do this on a full time basis.." (Interview 3 line 431).
- "The increase in the volume of calls meant that a resource was dedicated to solving some of the problems...a resource aimed at dealing solely with some of the issues ... each consultant having a higher volume of calls and therefore impacting other customers." (Interview 6 line 160-163).
- "..it took away resources from the day to day business of the work unit. We have a number of other tasks that had to be delayed as a result of resources looking at these issues for a number of weeks." (Interview 10 line 67-69).

3.1.1.4. Workload.

"...the issue is not so much because it was an outsource vendor but one of the reasons you got them in was we had a workload – it's the flow on effect of the fact that we are doing more sites [or work] than we normally would – that was really the key problem not just that it was an external vendor. The conditions of why you got the external outsourcer in." (Interview 9 line 220-224).

"But we weren't able to just outsource tasks and then not worry about them. We were always supervising them. It was almost more work involved in outsourcing than it was in doing it ourselves." (Interview 8 line 42-44).

"Specific people within the work group like myself and a few others spent 60 hours a week for 3 months working on just getting the thing to hang together..." (Interview 3 line 103-104).

3.1.2. Management Control.

3.1.2.1.Control (of process).

"..although there is not as much pressure when you're dealing internal [than when dealing with a vendor]." (Interview 1 line 253-254).

"The problem I guess was...we had that boundary that our maintenance provider for the network was different to the roll out provider... I don't think we handled that very well in terms of [the vendor] rolled out and somebody else is [another vendor] going to support and we're in the middle" (Interview 5 line 110-117).

"We did lose control through [the] roll out of what was happening with the network to a certain extent and we're playing catch-up now." (Interview 5 line 85-86).

"Control of the environment - we had to have quite a few planning meetings that we didn't plan for to analyze the impact of giving extra access to the vendor." (Interview 3 line 194-195).

"...but our requirements for controlling assets and our – it may be paranoid but our concerns for security regarding the company is a lot higher than other companies out there.... fairly strict and as such we could have made people think we have made more work for ourselves by being stricter or vigilant." (Interview 3 line 293-297).

"But once we had a problem when the thing was live they [internal staff] weren't too sure whether to talk to [this vendor]..or to [that vendor] to pursue a problem." (Interview 5 line 133-136).

"..different vendor doing the roll out to the one doing the support. Then we need to get talking and agreeing on acceptance procedures. We didn't actually have a handshake or acceptance between [roll out vendor] and [incumbent support vendor]." (Interview 5 line 283-285).

"It did require us to change some of the process that we followed in terms of the fact that most of our processes were built around internal employees performing the tasks and for the first time some of those process were challenged in terms of things like confidentiality, disclosure of information, adherence to policies, liability to the organization." (Interview 4 line 14-18).

"I don't feel that the internal groups felt that they had much control over what was being delivered. And I think that overall would impact on the quality of what gets rolled out. So let's try and foster that ownership from the internal groups - it is an important part." (Interview 4 line 290-293).

"But we weren't able to just outsource tasks and then not worry about them. We were always supervising them. It was almost more work involved in outsourcing than it was in doing it ourselves." (Interview 8 line 42-44).

"..the threat or the risk is that you do let go of the control over the conduct of that person in dealing with the customers... basically maintaining control over how that person does the work, to what level of professionalism they conduct themselves, how they present your group to the rest of the business. to your customers." (Interview 8 line 82-85).

3.1.2.2.Level of Ownership.

"..as they [the vendor] were quite quick to sort of brush off any complaints and redirect it back to us.." (Interview 2 line 200-201).

"Lack of ownership which is only normal I suppose when you consider that these people don't actually work for our organization." (Interview 2 line 208-209).

"..lack of ownership could present a problem and that's basically because they don't seem to have that responsibility, they don't have that [organizational] tag on them, so they're here one day and gone the next in some cases." (Interview 2 line 219-222).

"So I think that familiarity, the introduction, and again back to that thing about ownership, if some of that had been pushed back onto the internal groups I think they would have made it a much more solid and effective process. It was very much an 'us and them'." (Interview 4 line 324-327).

"As long as you maintain ownership of those tasks and the outsourcer is working under a strict set of guidelines, the scope of work is very clear then I think that that risk is a lot less." (Interview 8 line 95-97).

3.1.2.3.Inter-departmental issues.

- "....the main thing is and this is a bit hard to qualify, its more a "walls" attitude and by that if you have certain departments in your IT group which perceive there are walls between them, outsourcing a particular group is still going to have the walls there. You have to break them down internally before you outsource a particular operation otherwise the problem always is this" (Interview 1 line 447-451).
- "...there was a lot of extra work and extra effort that I had to put in as an individual to make sure that the work that I asked these people [i.e. the internal IT groups] to do was carried out on a daily basis..." (Interview 2 line 378-380).
- "..there are a few minor areas that need to be clarified and that's the clarification within the internal groups of the [organization]....we would all need to get together and basically agree on certain conditions that would allow us to deal effectively with [outsourcing vendors]." (Interview 2 line 321-324)
- "...we just need to sit amongst ourselves to be able to ascertain the pros and cons of how we deal with an external vendor.." (Interview 2 line 338-340).
- "...we all need to get together and clearly define what it means working with the vendor and how it is going to impact us not only today, but also in the future. Once those guidelines are drawn then I don't see a problem dealing with any vendors." (Interview 2 line 344-347)
- "Some [internal] groups they don't have ownership and therefore they treat the relations with the vendor as a second choice..." (Interview 2 line 361-362)
- "They [the internal groups] didn't seem to want any sort of commitment to this project..." (Interview 2 line 380-381).

"...but there was a lot of to-ing and fro-ing from different areas, once again going down to the responsibilities of each areas. A lot of areas were quick to wash their hands of responsibility and throwing on to the next area." (Interview 2 line 405-407).

"...I think some of the means are a bit unwieldy in the different areas but I don't know how you could have got around that.....in our division we seem to have a lot of different groups that do different things and maybe that's not necessary in some respects." (Interview 5 line 406-409).

"The only way to do it is to change the IS department to give different people more ability to work across functions and at the moment we have, say two or three people. Oh! Be extreme. Why can't [name A] do the security build as well. I mean ... his group has part of the function. Why do we need to divisionalize [sic] it, that we do that bit and it goes to [department B]." (Interview 5 line 414-418).

"I think the organization also approached it from a 'let's try and give the vendor as much responsibility as possible and try not to impact on the other groups' rather than encouraging the groups to be involved.." (Interview 4 line 283-286).

"..today we seem to be a bit dysfunctional so we have one group that looks after the main frame and operating systems and another group that looks after the work group operating system and another that looks after the PC operating systems and never the twain shall meet. So to try and get a task that spans all of those can be a nightmare because there are relationships communication issues you've got the bureaucracy, you've got personality conflicts you have all of those things that traverse those areas." (Interview 4 line 374-379).

"..the single advantage that an outsourcer brings is the ability to just knock down existing walls and enable communications, remove interfaces that aren't necessary and create leverage solutions within an organization that currently may not be prepared to accept. For example, pulling like services together, even though they may not have traditionally have been run that way." (Interview 7 line 241-245).

"..the main thing is to get a stronger buy-in from the stake holders that are affected by it...to better understand why we need to outsource some of our task, to better understand

that they can be done better and that the perceived threat of losing control or losing pretty much all of our work isn't a realistic threat." (Interview 8 line 182-186).

"...the management level need to have a greater synergy in cross ownership of the tasks....to get a buy-in from the main stake holders involved in the outsourcing ... But that's one of the constraints of a hierarchical type organization - is the perceived borders between ownership at a management level and that's probably one of the most difficult areas to combat." (Interview 8 line 254-259).

"...it's a whole thing. Almost like segregated environments. And you need to break down that segregation and appreciate the involvement and impact on other groups within IS." (Interview 8 line 263-265).

"Just a comment on them how the [internal organization] works and why I don't think we are going to cope with more and more outsourcing. We are always Business and IS there's not a....project team from the Business that has IS staff as members. It's always we just bring in the IS staff to do the IS roles. From what I have seen of how the Business groups project team works they will get people from HR they will get people from Property and they will drag them in to do their job." (Interview 9 line 328-334)

"...could be two many fingers in the pie for instance, the sort of discussion process that we have in the [organization] for quite a few years it has been difficult, there has been a lot of stake holders, a lot of sign-off's are required. It can be seen as being too cumbersome if we were wanting to outsource that particular function we would have to make it much simpler and cut down the number of signatures and so on." (Interview 10 line 203-207).

3.1.2.4. Opportunities.

"If we would have done the roll out internally we would not have been able to meet the deadlines of the project basically because of the fact that we don't have enough resources to be able to get a handle on all the sites that were required." (Interview 2 line 131-134).

"because we outsource this particular part of the work we were able to get people that could specialize on the project." (Interview 2 line 149-50).

"...external vendors have experience in dealing with a lot of companies. Perhaps they know of better ways of implementing equipment...broader knowledge of the computer industryI think we can learn quite a bit of the methods and procedures." (Interview 2 line 252-256).

"I think it's a positive experience because everyone recognized we didn't have the ability to do that piece of work ourselves and in that type of thing is what we've got to do." (Interview 5 line 67-69),

"One of the great benefits to the work group is that in 3 months we have done something that would have taken a year to do normally." (Interview 3 line 310-311)

"But you know there's no way that that the internalized department could have geared itself up to do this roll out without the use of people who have done it before." (Interview 5 line 227-229).

"..effected in a positive way in that it gave us an opportunity to challenge our approach and consider things other than the traditional organizational approach...and I think that, probably to challenge those boundaries was a positive aspect." (Interview 4 line 61-67).

"..means that you can better cope with the peaks and troughs.." (Interview 4 line 162-163).

"..get the resources in from outside, get them to do the work and then they'll go away and there's no major impact to the operational areas....as a new business opportunity is opened it can be delivered much more quickly" (Interview 4 line 165-170).

"...they're there to complement your internal support groups and solutions development, if you like and you're able to be more flexible in how you approach delivery of service." (Interview 4 line 170-172).

"I'd have to say an outsourcing department would do it better that what we do it today." (Interview 6 line 197).

"The gains are that they would demand documentation and.....service agreements are put into place because an outsourcing company won't go in without some service agreement." (Interview 6 line 205-208).

"..positive ...because, in examining what we needed to put in place procedurally[sic] to deal with it [outsourcing], we also highlighted some deficiencies in our own current procedures which this helps strengthen." (Interview 7 line 51-54).

"..the vendor may take an approach that may not be available to an internal IT department who operate under, perhaps restricted policies or preconceptions of delivery ...they may see a solution or an operating procedure ...that the internal organization may not see." (Interview 7 line 105-109).

"..[the vendor] picking up the extra work during a roll out period like this where we had a lot more work than the staff." (Interview 9 line 122-123).

"..we had to write the procedures in a frame that any monkey could follow. We now have a procedure that does the task that we would normally do in a lot shorter time....we now have a method of procedure that is a lot faster, needs...less knowledge to use it." (Interview 9 line 125-129).

3.1.2.5. Threats.

"..lack of ownership could present a problem ...[it] will slowly start to deteriorate customer focus and customer satisfaction..." (Interview 2 line 219-223).

"I think the area that would most suffer as far as outsourcing would be customer focus." (Interview 2 line 228).

"Possibly ownership and compliance are threats. The responsibility ... all three of those threats are increased if the internal policies and procedures aren't clearly defined... and the more vague the procedure and the policy then the greater the opportunity of things going wrong..." (Interview 3 line 270-273).

"Lack of adherence to standards, that would be one threat. In order to get the job done within their constraints they may choose to cut corners." (Interview 4 line 137-138).

"..not having the focus on the organization because they're there just to do a job and as long as it works on the day, their not concerned with product or how it performs in the next ...twelve months.." (Interview 4 line 141-143).

"Level of care, commitment, especially commitment. Because they're just here for a window of opportunity, they perform the job and they're out of here." (Interview 4 line 149-150).

"[Outsourcing]...could in fact be negative to the IT organization because it would mean a reduction in services produced from the internal IT group." (Interview 7 line 96-97).

"..there are some informal communication procedures and sometimes they work ...and sometimes they don't...some of those informal procedures only occurred because we were looking at it as a short term solution....if you were looking at this as a long term solution you would want to formalize those informal procedures." (Interview 7 line 166-170).

"..the threat or the risk is that you do let go of the control over the conduct of that person in dealing with the customers... basically maintaining control over how that person does the work, to what level of professionalism they conduct themselves, how they present your group to the rest of the business. to your customers." (Interview 8 line 82-85).

"...the first threat is if they don't do their job then we are the people that pick up the flack.." (Interview 9 line 80-81).

3.1.2.6.Job Obsolescence.

"...also we've got that fear that might occur within our different people that perhaps that if we start dealing with the external vendor then our jobs could be on the line in the near future.. depending on the people, it may affect their responsibilities and their roles." (Interview 2 line 340-342).

"..the roll out - if it works so well that we might have decided that we don't need to keep our in-house [department A] group at all." (Interview 5 line 158-159).

"I guess that it could be perceived as a threat to the internal people that the outsourcing has been just a success therefore we'll expand the use of that and reduce internal people." (Interview 5 line 166-168).

"I'd have to say an outsourcing department would do it better that what we do it today. And probably deliver it.... I mean a threat would be a loss of jobs." (Interview 6 line 197-199).

"There's always a threat that the outsourcing does a good job, that they may at the end of the day take over the task that you add value to the company with." (Interview 8 line 86-88).

"...that's a threat to our jobs and that's the threat as well. I have to say I don't see outsourcing as being a threat to people's jobs... Your IT professional should know what they are doing, they shouldn't have a threat to that at all." (Interview 9 line 110-114).

3.1.2.7.Possible Solutions or Recommendations.

"...presentation [to] both organizations describing who the players are, where each player lives in the organization and reports to whom... I don't mean a presentation in the formal sense it could be just 'lets sit down', 'lets talk about it', 'lets go through the, why we are here etc.'. From that, once you have determined who the key players are you pair off or team off those players to get together then discuss amongst themselves how they want to go through this role this outsourcing." (Interview 1 line 412-419).

"Physically sitting near the other groups. Understanding what they are doing. Discussing problems more so and if you do that up front in your IT organization outsourcing is far simpler and far easier. The people in one group will treat the other group on a peer level as opposed to an us and them level". (Interview 1 line 452-456)

"...in future if we're going to deal with external vendors and deal with projects of this nature then I think we need to plan it better, perhaps allocate 'x' amount of people onto this project and, even better, to actually have them sit down on the same floor, or nearby, so there's no communication breakdown....which at times has occurred." (Interview 2 line 280-284).

"From my own experiences possibly devising more type of checklists." (Interview 2 line 357).

"So immediately, to sum it up in a nutshell, possibly we need to better the relations between our own internal groups." (Interview 2 line 364-365).

"So I guess better communicating the priorities within the internal groups" (Interview 2 line 398).

"..to devise a proper project team that will be able to assist [the vendor] probably a little bit more effective and efficiently than what we did." (Interview 2 line 437-439).

"We would need to document that work that I am doing formally so that anybody else in the group could do it..." (Interview 3 line 413-414).

"We would need to document everything.....the procedure currently used ...would need to be re-written with lessons to be learnt from the previous roll-out in more detail, but written in conjunction with working with the new vendor so that their staff that were doing the work would understand how to do it." (Interview 3 line 437-441).

"..you need to dedicate some people to getting procedure exactly right.." (Interview 3 line 467-468).

"Working alongside them [the vendor] in the pilot stage to get a better procedure to start with rather than trying with a poorly written, not poorly written but a procedure written vendor viewpoint." (Interview 3 line 513-515).

"develop theory work first and think your way through it and spend ages documenting everything which is very time consuming...put a pilot site in as soon as you can and document what happens to make the pilot site work." (Interview 3 line 606-609).

"...an internal group needs to change its thinking to be more focused on planning changes and business projects...if we're going to permanently outsource the deployment aspects." (Interview 5 line 289-291).

"change the structure to make it more efficient or less people involved or less people to manage, that's what you'd have to do." (Interview 5 line 419-420).

- "..if you wanted an objective to try and minimize the involved parties in a roll out, maybe that would be the way to focus." (Interview 5 line 432-433).
- "Again I support a lead project manager that the outsourcer clearly identified as the person that they need to go to raise any issues with and that's obvious, that's what we did." (Interview 5 line 435-437).
- "..you've got to work with them [the vendor] as though they're an internal department to a certain extent." (Interview 5 line 441-442).
- "I think the key role that was missing was a vendor relationship manager. Somebody who doesn't have direct control or ownership over that particular project but is there purely to facilitate that relationship. So they don't have an axe to grind, they don't have a particular agenda to achieve. So they're not going to push through the deliverable at the expense of the relationship. I think that's probably the key thing that was missing." (Interview 4 line 335-339).
- "They could be involved in some of our development, the final development, when procedures were put together for conversions, be involved in that procedure." (Interview 6 line 335-336).
- "..we don't know what our requirements are, how do we expect the outsourcing [vendor] to know what our requirements are?... Maybe we needed to understand exactly what they were and actually document them and then say to them this is what we want you to do." (Interview 6 line 357-361).
- "There is no set of procedures that meet every situation...every instance ...so long as there's continued commitment to improve our procedures, [outsourcing] can be dealt with without too much pain." (Interview 7 line 147-149).
- "..we would communicate to the right people this time to make life a little bit easier, we would put a peer structure in place so that again it includes communication.." (Interview 1 line 313-315).
- "..improving the communication procedure between our organization and the vendor...that could be improved with tool sets...by a closer relationship being

established between the two,...changing procedures to, perhaps a little bit more formalized, so that everybody completely understands the process." (Interview 7 line 155-159).

"...when we endeavour to do it again, we would get the outsourcer more heavily involved in explaining or agreeing on the scope of work and how they're going to do it and what they're going to give us." (Interview 8 line 218-221).

"..we would make sure that the paths that can be automated are but we would probably add far more checking...some log files...check lists." (Interview 9 line 185-192).

"...there wasn't a team....there was no roll-out project team....there were several people....representing your respective departments....it might have helped if we had a project team to work with the outsourced company....there may be times when it shouldn't be a totally outsourced....there may be a need for a team leader and [an internal] team leader in these roles....in our troubled sites in Melbourne and Brisbane there were [internal organization] staff and we did have less problems in those instances." (Interview 9 line 297-307).

"...full time [internal resource] for the duration yeah... you probably would have got more value out of that if they [the internal staff] worked full-time..." (Interview 9 line 312-317).

"The IT staff [should be]...full-timers in that project not just people that were dragged in to do a few hours here and few hours there and end up doing it full time anyway because they have no other time. (Interview 9 line 344-346).

"...allocate more people to do specific tasks to be able to make sure that [the vendor] has all the right information and equipment from the very start rather than at times bumbling our way through it.." (Interview 2 line 442-444).

"...we need some work to do to formalize the processes and procedures between us to make sure that it is understood across all parties, all areas, and to get acceptance and I suppose ownership from both parties. That's us and the outsourcing vendor." (Interview 10 line 116-119).

"...working closer together with the outsourcing vendor in getting the procedures understood....giving ownership between us and the outsourcing vendor using procedures. Ownership and acceptance of those procedures." (Interview 10 line 140-143).

"What level of detail is required in terms of management...take a step back and understand what it is that we want the outsourcing vendor to do in the first place and make sure that we have all the requirements there ready to understand the whole big picture." (Interview 10 line 176-179).

"..we actually need a contract manager within the IT group." (Interview 10 line 185).

3.1.3. Process.

3.1.3.1.Informality of Procedures.

"Within a lot of work groups there are formal procedures and informal procedures." (Interview 1 line 265).

"There are informal procedures that are in place and they often get extrapolated to something different and that extrapolation is based upon the knowledge of the corporate culture." (Interview 3 line 392-394).

"Oh! I was talking to [name A] who was talking to [name B] who was talking to [name C] who said how you fix that one'. So it became a bit of ring people and find out." (Interview 3 line 348-350).

"I have never seen anything in writing on how to pick a server name and yet everyone knows how to do it because people have learnt from past experiences." (Interview 3 line 399-401).

"..before this roll out, it was handled on an ad hoc basis, whatever person was available [would] work internally, informally with the people in the company to make it work." (Interview 3 line 454-456).

"Apparently in dealing with internal groups there's obviously a lot of formal procedures but there may be a level of informal procedures." (Interview 5 line 249-250)

3.1.3.2. Quality of Processes.

"They [the processes,] need to be refined more....we actually need to add more procedures to our current lot. There are procedures missing because as I mentioned way back, we didn't have enough time at the very beginning of this and hence there are certain steps and procedures missing.." (Interview 1 line 243-247).

"...we would need to I guess, one go back again document our procedures more – for them to be clearer, look to add to the procedures so that we include things like system health checks" (Interview 1 line 296-297)

- "..but we would still have to have more steps and tasks added to the procedures." (Interview 1 line 315-316).
- "..to update our procedures. That is definitely something required now." (Interview 1 line 321-322).
- "Well, we could've modified the procedures but not for the time frame required....make it work now rather than spend a week writing procedure, develop it, testing it, train the people in the department saying 'Here's how, you now do this thing when this event happens'." (Interview 3 line 86-89).
- "We wasted many hours fixing problems that shouldn't have occurred. If the vendor had done what they said they would do, if the vendor followed the procedure that was issued to them to be done reliably but they didn't do that. One little mistake on their part it would take me 4 hours to fix the problem up" (Interview 3 line 146-148).
- "in 3 months we have done something that would have taken a year to do normally. We now have 9 months up our sleeves, free time to get other things done Never mind that we will spend the next 3 months fixing it, but at least it gives us 6 months ahead ... we have gone past the initial pain of getting stuff out there, we can now concentrate on getting the procedures right.." (Interview 3 line 310-316).
- "I don't think we have the networking change is very well procedurized [sic]...we're used to the installers coming down with their router tucked under their arm. They just do it and give it back..." (Interview 5 line 255-257)
- "..a clearer understanding of the process and who's doing what and how we hand it over from deployment to who supports it and the documentation with it. I think we should streamline that.." (Interview 5 line 281-283).
- "They haven't done this right but there was no process to inform them how it should be done and how that could be avoided." (Interview 6 line 311-313).
- ".. I would generally say that my current procedures and policies are generally not adequate full stop." (Interview 7 line 126-127).

- "..some of the procedures that were put in place...with the short term view to deal with that specific instance....we would need to review those policies and procedures in terms of a long-term standing relationship." (Interview 7 line 137-140).
- "...there's a skill development in using an outsourcer in that you become a lot more focused on the quality of what you're developing the processes and procedures...to be able to be understood and followed by someone with no assumed knowledge of our environment...that works in a positive way in improving dramatically the documentation and processes.." (Interview 8 line 120-125).
- "...we'd need to rewrite all the procedures for the legacy [systems]...I think we'd need to rewrite pretty much the way we do everything. (Interview 8 line 153-158).
- "...the procedure they followed were not necessarily the same as the people who we share the task with. They either wrote their own or had variations on them." (Interview 9 line 23-25)
- "...there were other problems that caused us more work...all sorts of detail could have gone into the procedures they would follow, taking into account the fact that they know nothing...they are only following procedures." (Interview 9 line 71-74).
- "One of the problems we had with the procedure was there was not enough checking." (Interview 9 line 158-159).

3.1.3.3.Adherence to Procedure.

"..the vendor had a procedure to follow of how to install a server they'd get to a point where it failed,... Typically they would call us saying 'We've got this problem what'll I do'. ... they'd say 'I'm not following the procedure I'm just putting this box on the desk and trying to make it work'. ... it'd be them saying we're here, we're stuck, what'll we do. And they'd forget what the problem the previous night, they hadn't written it down." (Interview 3 line 229-239).

"..because we control the build processes we got them to adhere to our standards fairly well." (Interview 5 line 184-185).

"..because they didn't follow our procedures to the letter that was where we had to go back and fix the problem.." (Interview 9 line 94-95).

3.1.3.4.Level of Comfort / Care.

"One would be the comfort factor. If you are uncomfortable with dealing with people you do not know their skill set etc. that can create a level of discomfort." (Interview 1 line 166-167).

"..we need to make both parties more accountable and we actually need to add more procedures to our current lot.." (Interview 1 line 243-244).

"...our people found themselves fixing up a lot of things after the fact that they believe the outsourcers should have done." (Interview 5 line 59-60).

"Because that task wasn't completed by the vendor or it wasn't completed sufficiently what happens is ...it won't function properly causing a lot of pain.." (Interview 6 line 47-49)

"..if the procedures for adding the printers - if they weren't successfully completed by the outsourcer and then again the help desk....actually [had to] complete that [task]." (Interview 6 line 69-71).

"...a lot of hours of our time were there picking up problems that came from the work they did." (Interview 9 line 51-52).

3.1.3.5.Impact on Process.

"..they need an Administration account to do the job. They had to work out what's the risk of giving this to this person.... So the whole process of securing data and securing systems just stopped for 3 months." (Interview 3 line 197 - 204).

"So we were committed to a schedule and a deadline.. which impacted on our other services that we had to deliver as a department." (Interview 4 line 105-107)

"And what would be some of the examples of the impacts to your work group? A high amount of calls coming into the help desk.... Yeah the resolution cannot be implemented within the service agreement time frame. (Interview 6 line 121-123).

"...what are the threats or risks from using an outsourcing vendor to your work group function...OK. To my work group function it would be customer service, familiarization with the environment. So therefore because we're familiar with the environment, we'd be providing a better service." (Interview 6 line 185-187).

"..additional definitions required to communication channels, notification and escalation procedures..[The].channels etc. already existed but they need to be added to for another third party coming in and making some changes" (Interview 7 line 30-35).

"..the same amount of change would have been effected if any other third party had gone about this process. Whether it was internal or external wouldn't have made any difference." (Interview 7 line 41-43).

"There [were] new policies and procedures put in place for the actual dealing of work with an outsourcer. But pretty much all the tasks that were outsourced, the policies and procedures that were pertaining to those were impacted fairly heavily." (Interview 8 line 30-33).

3.1.4. Knowledge.

3.1.4.1.Internal Knowledge.

"One of the other problems is outsourcers do not know the history of an organization." (Interview 1 line 197).

"Initially it was frustrating at times because of their lack of knowledge of the [organization]...." (Interview 2 line 178).

"..there's a learning curve to achieve by the vendor in order to get all the knowledge that they require to learn the [organization's] way and the[organization's] technology and how it all fits together." (Interview 2 line 193-194)

"If we could write the procedures to match the skill of the people who are going to be running with them and I think it's all to easy to write sketchy procedures and based upon personal experience ...a lot of the documents of the company are integrated that way. It's all very hard to string them together and to bring in a third party makes it doubly difficult to communicate." (Interview 3 line 276-281).

"..our internal policies and procedures aren't suitable for working with external people. Our policies and procedures are written for internal use only ... we have never taken into account the fact that we could bring [in] some external people." (Interview 3 line 370-373)

"The vendor has difficulties following that because it was written from our viewpoint of someone that knew how it worked and what our structure was." (Interview 3 line 491-493).

"That was probably all the way through, they [the vendor] didn't have the same picture, they didn't have the same view or the same picture that we had." (Interview 3 line 515-516).

"It did require us to change some of the process that we followed in terms of the fact that most of our processes were built around internal employees performing the tasks and for the first time some of those process were challenged in terms of things like confidentiality, disclosure of information, adherence to policies, liability to the organization." (Interview 4 line 14-18).

"Some of them [i.e. procedures] are informal. Some of them are based on assumptions that everything will always be done by an [internal] person... Some of them are just historical." (Interview 4 line 197-199).

"A lot of them [the procedures] had to be rewritten or severely reviewed to be able to work within an outsourcing arrangement." (Interview 8 line 33-35).

"...all the documentation of our legacy systems has a significant amount of assumed knowledge of our environment and without that assumed knowledge, the documentation is really close to useless." (Interview 8 line 134-136).

"The procedures have been pretty much dropped a lot for the legacy systems because there have been changes along the way where the procedures weren't updatedthere is a lot of experience rather than processes followed in doing the work.' (Interview 8 line 140-143).

"I suppose the procedure ordinarily relies on a little bit of experience from our installers...the outsourcers, they didn't have the experience and probably things that we would have referred to as common sense things, checking, they didn't do. So the impact was then that we had to really pick up the slack of the problem." (Interview 9 line 43-47).

"They [the vendor] are not following procedures with the experience of working for our organization." (Interview 9 line 74-75).

"...their rewriting of the procedures were on clarifying things. Our documentation probably assumes a certain amount of understanding of the [internal organization] and of course they had added to this." (Interview 9 line 91-93).

"Our policies and procedures weren't geared for an outsourcing company.." (Interview 9 line 201).

"Our processes and procedures are really geared for internal staff that understand or that have had some time working with the systems inside the [organization]." (Interview 10 line 105-106).

3.1.4.2. Vendor Knowledge.

"Some of the members of our team believe the members of the outsourcing team were not competent enough in the work they were doing, whilst others believed certain individuals were competent." (Interview 1 line 105-108).

"Mainly hand holding of the vendor who was doing the installation because of their need for training on the spot." (Interview 3 line 119-120).

"...using the external vendor with their lack of knowledge caused us to spend, it's just a time thing again, if we had more resources we could've spent time hand holding them to get it together." (Interview 3 line 211-214).

"They say [the vendor] 'Oh we have engineers in the field', We go 'Yes', and our impression of engineers in the field are people who know how to pull apart PC's and rebuild them and re-load software. Their impression of engineers in the field are people who can unload boxes and plug them in." (Interview 3 line 282-285).

"..you do expect that the vendor's staff have a certain technical skill and when it becomes obvious that they haven't got this certain skill then we need to find ways to tell the vendor 'hey' change this staff because these guys have got no clue.." (Interview 3 line 479-481).

"We have documentation that works because we use it day in day out but they have different people they may not have knowledge we expect them to have." (Interview 9 line 213-214).

3.1.4.3. Knowledge Transfer.

"...installation procedures have to be passed on to the outsourcer and that involved some time and effort in passing not only the skills set but also the nuances of our environment.." (Interview 1 line 128-129).

- "...being able to pick their brains and be able to learn a few tricks or two.." (Interview 2 line 264-265).
- "..network people [from the vendor] assisted my network group well during that phase." (Interview 5 line 109-110).
- "..at the network design level the vendors network designing group were able to put a great deal of input into our company to tell us how we should build the network.." (Interview 3 line 361-363).
- "..But the outsourcer that actually did assist us in identifying those [broadcasting problems] and quieting them down.." (Interview 5 line 203-204).
- "..so to me they would have had value I guess if they QA the bills and maybe gave some advice. I actually don't think that happened..." (Interview 5 line 204-206).
- "Was there any reciprocal knowledge transfer or skills transfer from using the outsourcer? Not as such, not directly. I don't think it was formally built in as a process, or a deliverable process... I think that's unfortunate because I think a lot of things that were done by the organization could have been passed onto experienced [organizational] personnel. What we deliver for the future projects would be much more quality focused. So it's probably one of the most valid criticisms I have of this particular project work. I don't think that feedback was really provided and I don't think we really worked much or enough in the exercise itself." (Interview 4 line 174-183).
- "...as far as the skill transfer level is concerned 'did we get something from them.' No to be honest we didn't." (Interview 9 line 151-152).
- "The main impact would have been having to work with the outsourcing organization and personally us trying to understand them and them trying to understand us and our procedures and so on. So there was a bit of give and take there and accommodating each other." (Interview 10 line 44-47).

3.1.5. Structuring the Relationship.

3.1.5.1. Communication.

"One of the main components though, I guess it's a risk, if there is a lack of communication that can cause the first two problems I was talking about. I sort of can't stress that enough." (Interview 1 line 174-176).

"...communication can come in many forms, sometimes one to one or peer-to-peer is a more effective way of communicating that in a large group. Some people will actually bottle up their problem and/or issues in a large group as opposed to peer-to-peer discussions." (Interview 1 line 185-188)

"That [weekly communication] was effective in some ways although some people might have been a little reluctant to air their views with the outsourcer there so maybe an additional meeting would have been better value.." (Interview 1 line 344-347).

"Basically this person is introduced to this person, your brief is to hand over a process procedure to the outsourcer, go ahead and do it.." (Interview 1 line 405-406).

"..I must admit it took a while for [the vendor] to get a handle on it as far as what the information and what in fact we were providing them and what it all meant and how we sort of put it into useful information..." (Interview 2 line 163-165).

"They just happen to be in a different location so there were communications issues.." (Interview 5 line 14-15).

"...at a weekly meeting we would raise points and issues... this is a problem, please tell tech in the field ... don't do it again so the company would say 'yep I'll go and tell him that' and it never got through to him... But the procedure for his work never got updated to include more details." (Interview 5 line 245-251).

"..ensuring that they are adequately kept up to date with changes in our environments so that they are able to adapt their processes around that." (Interview 4 line 214-215).

"So being involved much earlier in the process rather than being handed a - 'this is the solution and this is the organization that is going to deliver it, please now try and try and work within that boundary'." (I5 line 222-225).

"I'd say that the external communication was better than the internal....at least you had voice mails every morning which gave you a clear picture of what ...happens on the night of the cut over." (Interview 6 line 174-177).

3.1.5.2. Relationship issues.

"I guess there is the old adage of us and them attitude that can come about." (Interview 1 line 68).

"...the comments are personal and that type of forum [weekly meeting] is not the place to raise those comments. By that I mean some members of the outsourcer may be particularly rude when they are deploying some of the gear to certain sites and that's not the kind of thing you want to bring up in that forum. It's more on a one to one management level or peer-to-peer type arrangement... It takes a bit of the emotion out it. You don't want to give too much emotion away in that meeting I don't believe anyway. There's a lot of face." (Interview 1 line 383-386).

"[The vendor would not] if you could say take it as seriously as what we would have liked them to.." (Interview 2 line 197).

"..you've got that rift that you may have people coming in from outside the organization that pretend to be cowboys... they seem to have this perception that they can walk in and do whatever they want because they've got the job to look after it." (Interview 2 line 223-227).

"People bitched a lot saying [the vendor] didn't do this or that or whatever." (Interview 5 line 356-357).

"...it almost became an 'us and them' kind of role, that ended up leveling itself out as time went by but I guess it challenged a few of our ideals up front." (Interview 4 line 72-73).

"..was the relationships and rapport built. Things like that. ...there was certainly a lot of opportunity for that... Rather than saying it wasn't there, I think it's more that people didn't bridge that gap, didn't take the chance while it was there." (Interview 4 line 263-269).

"I think overall. Not just our department. But overall. There was still very much an 'us and a them' approach." (Interview 4 line 273-274).

"My first experience with the vendor was, you know, a large conference room, we're all gathered around in a U shape with the objective being presented to all the people in the room. These people who weren't familiar with each other, didn't know who they were, what their rolls were, what their responsibilities were. I think if they'd known that in advance, it would have made it much easier." (Interview 4 line 316-320).

"So I think that familiarity, the introduction, and again back to that thing about ownership, if some of that had been pushed back onto the internal groups I think they would have made it a much more solid and effective process. It was very much an 'us and them'." (Interview 4 line 324-327).

"...a new vendor manager was appointed from our organization extremely early on in the process which is critical and also continued throughout the relationship. I think without that, it would be extremely difficult to have a successful organization/vendor relationship." (Interview 7 line 177-180).

"..in this kind of situation you get two parties often at arms length with somebody or some group sitting in the middle acting as the communicator...the process could have been strengthened, a little walk around of both groups to each other, a little face to face, a little something up front to try and break down communication barrier which otherwise might exist." (Interview 7 line 202-206).

3.1.5.3. Staff readiness to work with Outsourcer.

"We would expect the same kind of pressure even if an internal group had done these actions." (Interview 7 line 69-70).

"Impacts of dealing with the vendor. Dealing with the vendor took a lot of time and that stopped us from ... the vendor was being pushed to meet the time frame so we had to run along with that." (Interview 3 line 183-187).

"It's a big time saver by going to an outsourcing company - also tends to push your goals. You set ambitious goals for the work group and for the whole IT structure, that because of using a third company you have financial considerations ... The contractual obligation of the vendor has with us they want to meet their obligations so they pushed us, we pushed them and it was a push, push situation." (Interview 3 line 319-327).

"Do you feel that your work group functions internal IT policies are perceived as suitable to work and interact with an external outsourcing vendor?"

- "Not at the moment. They should be but they are not at the moment." (Interview 1 line 234-238).
- "No, our internal policies and procedures aren't suitable for working with external people." (Interview 3 line 367-370).
- "No." (Interview 6 line 220-224).
- "Yeah I think so. However.... We can probably do better.. and again, if we take the attitude that they're just like another install department it fits in when you consider it like that." (Interview 5 line 235-238).

"At this stage I would say we are not in a good position. We should be though." (Interview 1 line 247).

"..although there is not as much pressure when you're dealing internal [than when dealing with a vendor]." (Interview 1 line 253-254).

"..if we had to go in business with [an outsourcing vendor] tomorrow we would probably fall short." (Interview 2 line 324-325).

"..having that function outsourced, just meant that you were dealing with another party, no matter that it was a party within your organization or without, it really didn't make any difference at the end of the day. Once you ironed out all of the procedural issues, the communication issues, the responsibilities and liabilities etc., they just grew to become another functional part of the organization and I think as time went by, that would have just improved and we would have nurtured it even further in that way" (Interview 4 line 92-98).

3.1.5.4. Vendor access to internal support staff.

"I think we did some work in terms the roll out support which was probably not well done." (Interview 5 line 121-122).

"..they [the vendor] needed to have on-call people in order to assist them through the night.... now I was one of them but I don't think I was given the right tools to be able to be on call for them effectively." (Interview 2 line 469-471).

"Initially the problems came about after the support, there was a distinct lack of support from our own internal groups to the outsourcers. And the support had to come from a variety of groups because of the nature of the problem and we didn't have all that support in place. That needs to be up front next time you do it, you cover all the support angles." (Interview 1 line 462-466).

"...we didn't get on to the right support people even though we had one of our team down there... I didn't have our network people on call for that piece of work." (Interview 5 line 361-363).

"...in fairness to the outsourcing company they didn't have that ability to ask questions...

They missed a crucial step at the beginning ...this wasn't picked up until they were almost finished their roll out." (Interview 9 line 176-179).

3.2. Ordinate Data.

In reference to whether the respondent thought their policies and procedures were impacted by the selective outsourcing arrangement 70% responded Yes. Of these 57% were Managers and 43% Consultants.

40% of respondents thought that the involvement of their work group with the tasks that the selective outsourcer was performing was Very High. 75% of these Very High responses were from Consultants.

80% of responses thought that their work group function was impacted through involvement with the selective outsourcing arrangement to Some Extent or greater. 30% of responses thought the impact was to a Great Extent and of these 67% were Consultants. 50% of responses thought the impact was to Some Extent and of these 60% were Managers.

50% of responses thought that the impact from dealing with the selective outsourcer was Negative, of these 60% were from Consultants. 30% thought that the impact was Positive, of these 67% were Managers. 20% of responses were Neutral.

In regards to the respondent's work group function policies and procedures being suitable to work with an outsourcer, 60% of the responses were No, with 67% of these being Consultants. 20% of responses were Yes, all from Managers. 20% were Non-response, all from Consultants.

In regards to whether there was a process to address impacts caused by the outsourcing vendor 50% of responses were Yes, with 60% of these from Consultants. 50% replied no and Managers made up 60% of these.

As to whether the above process worked, 40% of responses were Yes with Consultants accounting for 75% of these. 60% of responses were No with Managers accounting for 67% of negative responses.

50% of responses indicated that there was a process in place to address impacts caused by the vendor. Of these 80% thought that the process worked. 100% of Consultants

who indicated that there was a process in place though that it worked. 50% of Managers who indicated there was a process in place though that it worked.

In regards to the appropriateness of the engagement phase, 40% of responses thought that it was appropriate, with 75% of these responses from Managers. 50% of responses did not think the engagement phase was appropriate and of these 80% were Consultants.

Question 2. Were the policies and procedures of your work-group function impacted through this selective outsourcing arrangement?

	Consultant Manager		Were your policies and procedures impacte	d	
Yes 3 4 No 2 1					
			through this selective outsourcing arrangement?		
13% of Consult	yes responses were	Number of Responses	3 2	Yes No	
67% of Consult	2411021	Nun			
33% of Manage	no responses were ers		Consultant Manager		

Question 3. What was the level of involvement that your work-group had with the tasks that the outsourcing vendor was performing?

Little None	0	0	Amm			Level of involvement with the tasks that the outsourcing vendor performed.		
		· • 11	4		4			
75% of Very were Consult 25% of Very were Manage 60% of resp	High response ers. onses were Hi	s s igh				□ Very High □ High □ Little □ None		
Consultants.	responses wer			Consultant	Manager			

Question 5. To what extent would you say that your work-group function was impacted, through involvement in the selective outsourcing arrangement?

	Consultant	Manager
To a great	2	1
To some e	(3	2
Neutral	0	2
To a little e	0	0
Not at all	0	0

30% of responses were GREAT EXTENT (GE).

67% of GE were Consultants. 33% of GE were Managers.

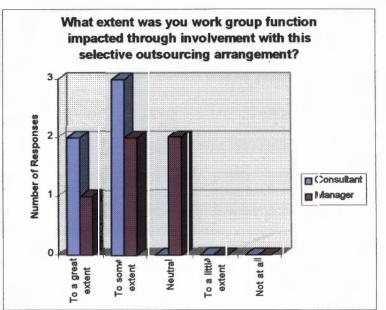
50% of responses were SOME EXTENT (SE).

60% of SE were Consultants.

40% of SE were Managers.

20% of responses were NEUTRAL all from Managers.

80% of responses indicate impact to SE or greater.



Question 6. Was the impact: Negative, Positive, or Neutral, Please elaborate? Please give examples?

	Consultant	Manager
Negative	3	2
Positive	1	2
Neutral	1	1

50% of responses - NEGATIVE.

60% of negative responses

were Consultants.

40% of negative responses were Managers.

30% of responses - POSITIVE.

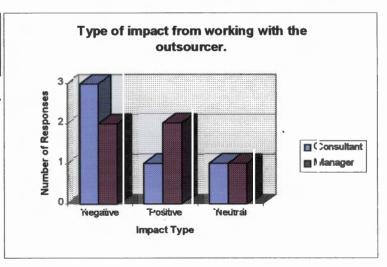
33% of positive responses

were Consultants.

67% of positive responses were Managers.

20% of responses - NEUTRAL

50% Consultants 50% Managers



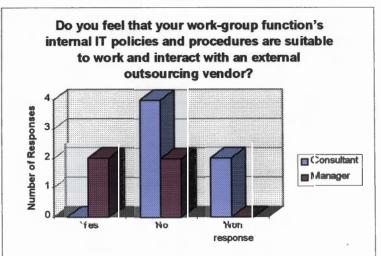
Question 10. From this most recent experience do you feel that your work-group function's internal IT policies and procedures are suitable to work and interact with an external outsourcing vendor?

	Consultant	Manager
Yes	0	2
No	4	2
Non respon	1 2	0

20% of responses were YES. all from Managers.
60% of responses were NO.
67% of no responses were
Consultants.
33% of no responses were
Managers.

20% of NON RESPONSE all

from Consultants.



Question 13a. Can you comment on the process within the internal IT group for addressing any impacts caused by the outsourcing vendor? Was there one?

	Consultant	Manager
Yes	3	2
No	2	3

50% of responses were YES. 60% of yes responses were

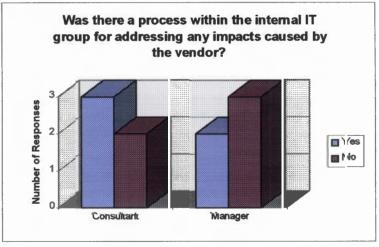
Consultants

40% of yes responses were Managers.

50% of responses were NO.

40% of no responses were Consultants.

60% of no responses were Managers.



Question 13b. Can you comment on the process within the internal IT group for addressing any impacts caused by the outsourcing vendor? Did you feel that it worked?

	Consultant	Manager
Yes	3	1
No	2	4

40% of responses were YES.

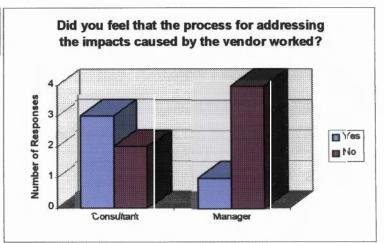
75% of yes responses were Consultants

25% of yes responses were Managers.

60% of responses were NO.

33% of no responses were Consultants.

67% of no responses were Managers.



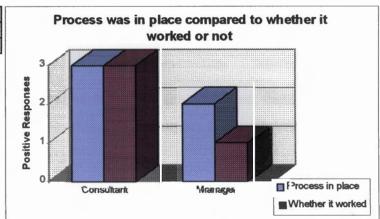
Bi-variate Analysis reviewing whether the process worked when it was said to be in place.

	Consultant	Manager
Process in	3	2
Whether it	3	1

50% of responses said a process was in place. Of these 80% believed the process worked.

100% of Consultants who said there was a process in place believed it worked.

50% of Managers who said there was a process in place believed it worked.



Question 14. Did you feel the engagement (or initiation) process with the outsourcing vendor was appropriate?

l.	Consultant	Manager
Yes	1	3
No	4	1
Non Respo	0	1

40% of responses were YES.

25% of yes responses were Consultants.

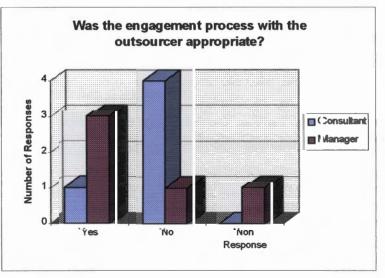
75% of yes responses were Managers

50% of responses were NO

80% of no responses were Consultants.

20% of no responses were Managers

10% NON RESPONSE all from Managers.



4. Discussion.

This discussion will draw upon the output of the results data and draw comparisons between the published theory on selective outsourcing reviewed as part of the literature search. Comparisons will be drawn, to tease out similarities and anomalies between the published theory and the actual experiences from the research. The comparative analysis will extract meaning from the results data that can be applied to management principles when engaging in selective outsourcing.

The themes that have been identified in the Results data have been further refined into the following themes: Planning; Management Control; Process; Threats and Opportunities. The sub-themes from Structuring the Relationship and Adherence to policy have has been aligned with Management Control. The sub-themes of Knowledge have been aligned with Process.

4.1. Planning.

A number of themes were identified that fall under the overriding theme of planning. These are identified as time constraints, resource constraints and work load.

4.1.1. Time Constraints.

Outsourcing vendor contracts are predominantly time driven, with penalties applied for late delivery. In selective outsourcing arrangements where the IT department has chosen to co-source the completion of outsourced tasks in conjunction with internal IT staff it is common for the outsourcing vendor to 'push' internal staff to augment the completion of a task. This quite often occurs without consideration to, or prioritization of, the other responsibilities or tasks that fall under the management of the internal IT work group. The outsourcing vendor often does not have visibility of the other tasks that are the responsibility of the IT work group with whom they are co-sourcing the completion of a task. Evidence of this from the research is provided below.

[&]quot;..it took away resources from the day to day business of the work unit. We have a number of other tasks that had to be delayed as a result of resources looking at these issues for a number of weeks." (Interview 10 line 67-69).

"..in working with the vendor the pace of the work or the speed in which the work was done was a lot faster so that would have impacted the work group function that you performed....." (Interview 2 line 140-145).

"For 3 months it was constant reaction mode and not being able to spend time on any other projects I've had running......We weren't able to develop the ongoing procedures to support the installed systems..." (Interview 3 line 164-169).

"It's a big time saver by going to an outsourcing company - also tends to push your goals....the vendor.... want[s] to meet their obligations so they pushed us, we pushed them and it was a push, push situation." (Interview 3 line 319-327).

There is a link between adequate planning and time constraints in that from the research it is apparent that a number of respondents felt that sufficient time for planning was not allowed for and this in itself contributed to some of the difficulties experienced.

"..the level of planning was not sufficient enough to allow it to work the first time." (Interview 3 line 29-30).

"..if it was to happen again a little bit more planning needs to be done on what do our internal people do now, our install[ations] people and how can that be more proceduralized [sic] or more automated or at least have some form of checking unit or more checking in it." (Interview 9 line 165-168).

"I think we had about 2 weeks to prepare between [when] it was realized Oh! Hey we haven't done any planning'." (Interview 9 line 241-242).

"...when all of a sudden its like 'Oh! It's happening tomorrow night and we are nowhere near ready for it'. Maybe it was just too fast but we didn't, I think we squandered our time, we didn't use it effectively, we didn't plan to use it effectively. We failed to plan." (Interview 3 line 566-568).

4.1.2. Resource Constraints.

There is a need for internal IT management to recognize the human resource and staffing level issues involved when entering into co-sourcing arrangements with outsourcing vendors whose success is measured on achieving set target dates. It was felt that a 'vendor relationship manager' set apart from the specific day to day tasks of the outsourced project work would have been of assistance in managing these resource conflicts and overall governance issues. Evidence from the research that supports this is provided below.

"I think the key role that was missing was a vendor relationship manager. Somebody who doesn't have direct control or ownership over that particular project - but is there purely to facilitate that relationship..... I think that's probably the key thing that was missing." (Interview 4 line 335-339).

"..we actually need a contract manager within the IT group." (Interview 10 line 185).

There is a link between the availability of resources and time constraints. The less resource available the greater the time constraints imposed. Time constraints can be as

a direct result of resource constraints. Examples that support this from the results data are given below.

- "Specific people within the work group like myself and a few others spent 60 hours a week for 3 months working on just getting the thing to hang together..." (Interview 3 line 103-104).
- ".. I go back to my original statement that there was not enough time.... to provide automated and detailed procedures, we had to intervene and help in a lot of instances with the deployment." (Interview 1 line 77-78).
- "..there was probably a lack of planning in the sense of allocating the right amount of resources for this project to interact with [the vendor]. I think that too many responsibilities were shared with few peoplewe were fortunate that the main people involved ... didn't get sick or they didn't get hit by a truck." (Interview 2 line 274-278).

"If we had enough time it would have been picked up". (Interview 1 line 289).

4.1.3. Workload.

Working with an outsourcing vendor allows the IT department to achieve more objectives and thus increases the demand placed upon internal resources and the concomitant stress that accompanies a heavy workload with limited resources. A greater workload can be the reason that the outsourcer was brought in, in the first place, thus creating a link between a greater workload and the use of outsourcing vendor.

- "...the issue is not so much because it was an outsource vendor but one of the reasons you got them in was we had a workload it's the flow on effect of the fact that we are doing more sites [or work] than we normally would that was really the key problem not just that it was an external vendor. The conditions of why you got the external outsourcer in." (Interview 9 line 220-224).
- "One of the great benefits to the work group is that in 3 months we have done something that would have taken a year to do normally." (Interview 3 line 310-311)
- "But you know there's no way that the internalized department could have geared itself up to do this roll out without the use of people who have done it before." (Interview 5 line 227-229).

4.2. Management control.

The area of management control encompasses a number of sub themes which include the structuring of the outsourcing relationship, human resource concerns, communication, structure of the internal IT group and inter-departmental issues, level of ownership and adherence to procedures.

4.2.1. Structuring the Relationship.

Considerable research data was provided on structuring the relationship, particularly in regards to the structure of the project team for the staff working with the selective outsourcing vendors. From the research it was identified that the project team structure was not appropriate nor was the part-time allocation of internal IT staff to the project. Reference to some examples from the results data below support this.

- "...there wasn't a team....there was no roll-out project team....there were several people....representing your respective departments....it might have helped if we had a project team to work with the outsourced company." (Interview 9 line 297-303).
- "...in future if we're going to deal with external vendors and deal with projects of this nature then I think we need to plan it better, perhaps allocate 'x' amount of people onto this project and, even better, to actually have them sit down on the same floor, or nearby, so there's no communication breakdown....which at times has occurred." (Interview 2 line 280-284).
- "The IT staff [should be]...full-timer's in that project not just people that were dragged in to do a few hours here and few hours there and end up doing it full time anyway because they have no other time. (Interview 9 line 344-346).

"Initially the problems came about after the support, there was a distinct lack of support from our own internal groups to the outsourcers. And the support had to come from a variety of groups because of the nature of the problem and we didn't have all that support in place. That needs to be up front next time you do it, you cover all the support angles." (Interview 1 line 462-466).

Further thought needs to be given to staffing and building the support structure and providing the internal mechanisms to ensure that the relationship can function to its potential. Consideration should be given to establishing specific purpose built project/support teams.

4.2.2. Communication.

It was felt that there was ample opportunity for communication with the vendor and that there was regular communication. Some questions were raised in regards to the value of some of the communication. An example from the results data is given below.

"That [weekly communication] was effective in some ways although some people might have been a little reluctant to air their views with the outsourcer there so maybe an additional meeting would have been better value.." (Interview 1 line 344-347).

There is the potential for more effective communication particularly at the technical level to occur on a peer-to-peer basis rather than a large group forum where some people could potentially 'bottle up' there problems or issues.

4.2.3. Inter-departmental Issues.

A large number of inter departmental issues were identified with processes being owned across functional groups. This in turn led to difficulty in managing and controlling the selective outsourcing of a task.

"The only way to do it is to change the IS department to give different people more ability to work across functions and at the moment we have, say two or three people. Oh! Be extreme. Why can't [name A] do the security build as well. I mean ... his group has part of the function. Why do we need to divisionalize [sic] it, that we do that bit and it goes to [department B]." (Interview 5 line 414-418).

- "..I think some of the means are a bit unwieldy in the different areas but I don't know how you could have got around that....in our division we seem to have a lot of different groups that do different things and maybe that's not necessary in some respects." (Interview 5 line 406-409).
- "...but there was a lot of to-ing and fro-ing from different areas, once again going down to the responsibilities of each areas. A lot of areas were quick to wash their hands of responsibility and throwing on to the next area." (Interview 2 line 405-407).

The type and number of interfaces for the outsourced task can greatly impact the completion of that task. Terplan asserts that responsibilities should not be shared between individual persons or work groups (Terplan 1995:321).

- "..today we seem to be a bit dysfunctional so we have one group that looks after the main frame and operating systems and another group that looks after the work group operating system and another that looks after the PC operating systems and never the twain shall meet. So to try and get a task that spans all of those can be a nightmare because there are relationships, communication issues you've got the bureaucracy, you've got personality conflicts you have all of those things that traverse those areas." (Interview 4 line 374-379).
- "....the main thing is and this is a bit hard to qualify, its more a "walls" attitude and by that if you have certain departments in your IT group which perceive there are walls between them, outsourcing a particular group is still going to have the walls there. You have to break them down internally before you outsource a particular operation otherwise the problem always is this" (Interview 1 line 447-451).
- "...it's a whole thing. Almost like segregated environments. And you need to break down that segregation and appreciate the involvement and impact on other groups within IS." (Interview 8 line 263-265).

4.2.4. Level of Ownership

To remove inter-department issues there is a need to investigate reducing the ownership of processes across functional groups thus reducing the number of interfaces to be managed when outsourcing a task.

There is a link between the internal IT staff perception of their level of ownership and the development of a 'us and them' situation. Examples from the results data are provided below.

"...it almost became an 'us and them' kind of role, that ended up leveling itself out as time went by but I guess it challenged a few of our ideals up front." (Interview 4 line 72-73).

"Some of the members of our team believe the members of the outsourcing team were not competent enough in the work they were doing, whilst others believed certain individuals were competent." (Interview 1 line 105-108).

"I think overall. Not just our department. But overall. There was still very much an 'us and a them' approach." (Interview 4 line 273-274).

Staff's readiness to work with the internal outsourcer is impacted by their reticence to pass internally acquired 'site-specific' knowledge onto the outsourcing vendor as it is perceived to threaten and undermine their position.

"Initially it was frustrating at times because of their lack of knowledge of the [organization]...." (Interview 2 line 178).

"..also we've got that fear that might occur within our different people that perhaps that if we start dealing with the external vendor then our jobs could be on the line in the near future.. depending on the people, it may affect their responsibilities and their roles." (Interview 2 line 340-342).

"I guess that it could be perceived as a threat to the internal people that the outsourcing has been just a success therefore we'll expand the use of that and reduce internal people." (Interview 5 line 166-168).

The internal staff's perception of the 'us-and-them' situation may provoke the internal staff to take a hands off approach leaving the vendor to struggle whilst they focus on the tasks that remain in house, to the exclusion of the outsourced tasks. An example of this from the data is provided below.

"They [the internal groups] didn't seem to want any sort of commitment to this project..." (Interview 2 line 380-381).

"Some [internal] groups they don't have ownership and therefore they treat the relations with the vendor as a second choice..." (Interview 2 line 361-362)

"...our people found themselves fixing up a lot of things after the fact that they believe the outsourcers should have done." (Interview 5 line 59-60).

"So I think that familiarity, the introduction, and again back to that thing about ownership, if some of that had been pushed back onto the internal groups I think they would have made it a much more solid and effective process. It was very much an 'us and them'." (Interview 4 line 324-327).

The examples below from the results data comply with the work from Houghton who identifies that if internal staff do not feel they have an input to a process that is outsourced, they will be less motivated and less committed to its success (Houghton 1992:29).

"I don't feel that the internal groups felt that they had much control over what was being delivered. And I think that [that] overall would impact on the quality of what gets rolled out. So let's try and foster that ownership from the internal groups - it is an important part." (Interview 4 line 290-293).

"I think the organization also approached it from a 'let's try and give the vendor as much responsibility as possible and try not to impact on the other groups' rather than encouraging the groups to be involved.." (Interview 4 line 283-286).

"..we need to make both parties more accountable and we actually need to add more procedures to our current lot.." (Interview 1 line 243-244).

The level of ownership is linked to the internal knowledge within internal groups. Internal IT groups may resent handing over responsibility of a function that may have in the past fallen within their domain of responsibility. Level of ownership can apply equally to the outsourcing vendor, as to the internal IT work groups. The outsourcing vendor's commitment to a task that they are only temporarily fulfilling can be questioned. As evidenced from examples in the research provided below.

"..lack of ownership could present a problem and that's basically because they don't seem to have that responsibility, they don't have that [organizational] tag on them, so they're here one day and gone the next in some cases." (Interview 2 line 219-222).

"..as they [the vendor] were quite quick to sort of brush off any complaints and redirect it back to us.." (Interview 2 line 200-201).

4.2.5. Adherence to Procedures.

There is a link between the control of IT functions and adherence to procedures. To maintain efficient management becomes difficult in an outsourcing arrangement when a new vendor comes into the equation when there are existing incumbent vendors, who perhaps may have been unsuccessful tendering for the outsourcing work which is now being performed. There are issues to resolve in regards to boundaries and responsibilities particularly in regards to areas of problem resolution. This was evidenced in the research from the examples given below.

- "..different vendor doing the roll out to the one doing the support. Then we need to get talking and agreeing on acceptance procedures. We didn't actually have a handshake or acceptance between [roll out vendor] and [incumbent support vendor]." (Interview 5 line 283-285).
- "...they [internal staff] weren't too sure whether to talk to [this vendor]..or to [that vendor] to pursue a problem." (Interview 5 line 133-136).
- "But we weren't able to just outsource tasks and then not worry about them. We were always supervising them. It was almost more work involved in outsourcing than it was in doing it ourselves." (Interview 8 line 42-44).

4.3. Process.

Process applies to the quality of the procedures, the informality of some of the procedures and inherent internal knowledge required.

4.3.1. Quality of Procedures.

There is a link between quality of procedures and the level of informality built around these processes. Typically the more informal the process, or the more assumed, internal (organizational) knowledge required, the poorer the overall quality of a process in regards to documentation, purpose and relevance of the process.

The quality of the processes owned by the internal IT work groups were felt to be inadequate to allow for seamless hand over to an outsourcing vendor. The examples below provide commentary on the quality of the procedures that were in use.

- "..I would generally say that my current procedures and policies are generally not adequate full stop." (Interview 7 line 126-127).
- "Our policies and procedures weren't geared for an outsourcing company.." (Interview 9 line 201).
- "If we could write the procedures to match the skill of the people who are going to be running with them and I think it's all to easy to write sketchy procedures and based upon personal experience ...a lot of the documents of the company are integrated that way. It's all very hard to string them together and to bring in a third party makes it doubly difficult to communicate." (Interview 3 line 276-281).
- "...there were other problems that caused us more work...all sorts of detail could have gone into the procedures they would follow, taking into account the fact that they know nothing...they are only following procedures." (Interview 9 line 71-74).
- "...there's a skill development in using an outsourcer in that you become a lot more focused on the quality of what you're developing the processes and procedures...to be able to be understood and followed by someone with no assumed knowledge of our environment...that works in a positive way in improving dramatically the documentation and processes.." (Interview 8 line 120-125).

4.3.2. Informality of Procedures.

A number of respondents identified that their procedures had some level of informality about them. Whether this be no documentation or poor documentation. The more informal a procedure the greater the difficulty in handing it over to an outsourcer. Informality within procedures leads to poor definition of the task to be performed and an inability to confirm whether the task was completed successfully. Examples referring to informality of procedures are provided below.

"Some of them [i.e. procedures] are informal. Some of them are based on assumptions that everything will always be done by an [internal] person... Some of them are just historical." (Interview 4 line 197-199).

"Within a lot of work groups there are formal procedures and informal procedures." (Interview 1 line 265).

"There are informal procedures that are in place and they often get extrapolated to something different and that extrapolation is based upon the knowledge of the corporate culture." (Interview 3 line 392-394).

"..before this roll out, it was handled on an ad hoc basis, whatever person was available [would] work internally, informally with the people in the company to make it work." (Interview 3 line 454-456).

4.3.3. Internal Knowledge.

For the two failings described above, internal knowledge is the redeemer. Problems with the quality of procedures or informality of procedure can be hidden by the possession or acquisition of internal knowledge (which is near impossible to hand over to an outsourcing vendor). The believe that internal knowledge can plug the gaps in poorly written or informal procedures is evidenced below.

"The vendor has difficulties following that [procedure] because it was written from our viewpoint of someone that knew how it worked and what our structure was." (Interview 3 line 491-493).

"Our processes and procedures are really geared for internal staff that understand or that have had some time working with the systems inside the [organization]." (Interview 10 line 105-106).

Unfortunately in an outsourcing situation internal knowledge is one of the most difficult pieces of information to transfer or communicate. Internal knowledge is rarely documented, it resides in various different locations and often only known to a few. An example of this is provided below.

"Oh! I was talking to [name A] who was talking to [name B] who was talking to [name C] who said how you fix that one'. So it became a bit of ring people and find out." (Interview 3 line 348-350).

This is why it is imperative for internal IT groups to take a fresh look at all the procedures currently in use by the internal IT group and identify those that need to rewritten in light of some assumed internal knowledge not provided in the written procedure. Assumptions based on internal knowledge need to be weeded out of procedures before consideration can given to outsourcing responsibility for completion of a task. Examples that support this from the results data are provided below.

"..our internal policies and procedures aren't suitable for working with external people. Our policies and procedures are written for internal use only ... we have never taken into account the fact that we could bring [in] some external people." (Interview 3 line 370-373)

"It did require us to change some of the process that we followed in terms of the fact that most of our processes were built around internal employees performing the tasks and for the first time some of those process were challenged in terms of things like confidentiality, disclosure of information, adherence to policies, liability to the organization." (Interview 4 line 14-18).

"A lot of them [the procedures] had to be rewritten or severely reviewed to be able to work within an outsourcing arrangement." (Interview 8 line 33-35).

As an adjunct to working through and clarifying procedures, is involving the outsourcing vendor early to assist in identifying where procedures are lacking and remedying the situation. Consideration should also be given to providing the outsourcing vendor the opportunity for their staff to spend time with internal staff or conducting familiarization courses in the organization's technical and cultural environment.

4.4. Ordinate Data.

It is difficult to extract meaningful conclusions from the ordinate results data with such a small sample. What the ordinate data does provide is the opportunity to explore whether there is a great variance between the responses of Managers and Consultants and assist in discerning if there is any bias in the results.

In summary both Managers and Consultants thought their work group function was impacted by their involvement with the selective outsourcing arrangement. With Consultants believing the impact to be the greatest. With regards to the type of impact from working with the outsourcer the Managers believed that the impact was positive as opposed to Consultants who felt the impact was negative.

60% of responses felt that their internal procedures were not suitable to work with an outsourcer. Two thirds of these responses were from Consultants as compared with Managers. None of the Consultants felt that their policies or procedures were suitable to work with an outsourcer. Only Managers (accounting for 20%) felt they were suitable. 20% of Consultants did not respond as to the suitability of their processes to work with an outsourcer. This may be as a result of a perceived threat in regards to job security.

The general belief between Managers and Consultants was that there was a process in place to address vendor impacts and that it worked. 50% or responses said that was a process in place with 80% of these believing that it worked.

There is a marked difference in the perception of Consultants and Managers in regards the success of the engagement process with the vendor. Overall Managers believed that the process worked and Consultants believed that it did not. This variance could be explained by the greater level of interaction that the Consultants had with the vendors and the greater opportunity for issues to develop.

To try and pull the ordinate data together to draw a conclusion it would appear that the greater level of involvement that the Consultant had with the vendor has given rise to Consultants being more critical of the outsourcing arrangement. Managers felt that though there was an impact it was not overtly negative and that their work groups were able to continue functioning with minimal impact.

4.5. Threats and Opportunities.

The threats and opportunities to the various IT processes has been referred to throughout the discussion of the impacted processes. This section will briefly cover the general threats and opportunities as presented in the results data.

The general themes to come out in regards to opportunities were the ability of the IT group to complete more tasks in a shorter time frame (with additional vendor resources), allow staff to focus on core responsibilities and the opportunity to challenge and improve existing methodology and approaches to work.

An example of the benefit in regards to additional resource and completion of tasks in a shorter time frame is provided below.

"If we would have done the roll out internally we would not have been able to meet the deadlines of the project basically because of the fact that we don't have enough resources to be able to get a handle on all the sites that were required." (Interview 2 line 131-134).

Examples from the results data that point to the opportunity to challenge existing process are:

- "..effected in a positive way in that it gave us an opportunity to challenge our approach and consider things other than the traditional organizational approach...and I think that, probably to challenge those boundaries was a positive aspect." (Interview 4 line 61-67).
- "..the vendor may take an approach that may not be available to an internal IT department who operate under, perhaps restricted policies or preconceptions of delivery ...they may see a solution or an operating procedure ...that the internal organization may not see." (Interview 7 line 105-109).

The greatest threats were believed to be lack of ownership, deteriorated customer focus, compliance threats, adherence to standards, lack of commitment or level of care, reduction in services provided by the IT group, lack of control and increased threat of job obsolescence.

5. Conclusion.

As more IT services are selectively outsourced and organizations opt for best-of-breed vendors the challenge becomes how an organization can best manage multiple vendor interfaces and the hand over of internal IT group policies and procedures to the outsourcing vendor. For the IT group to deliver seamless service under these circumstances requires skilled management (Gartner 1996:102).

The reasoning for adopting selective outsourcing of shorter durations is that the economics of activities in IT shift rapidly. An example of this is, a unit of processing power that cost one million dollars in 1965 costs less than thirty thousand dollars today. The rapid change in the underlying economics makes it extremely difficult to evaluate the long term costs and risks of outsourcing and thus selective outsourcing is a more favourable option (Lacity 1996).

5.1. Recommendation.

The hypothesis for this research implied that selectively outsourcing IT functions can be done with minimal disruption and risk to the internal IT department's policies and processes. In this case study it was found that there was significant disruption to internal processes as a result of the selective outsourcing arrangement that was studied. The prime factors responsible for this impact were:

- Misalignment of processes across functional work groups.
- Insufficient planning in regards to allocated resources and time allocations.
- The unsuitability of the internal procedures for use by external outsourcing vendors.
- Inappropriate project team structure to work with outsourcing vendor.

Selective outsourcing is typically project based, task specific and/or short duration. Therefore the project planning needs to include all the preliminary up front engagement tasks normally conducted with an outsourcing services provider. Work is usually fast paced and contracts are time dependent being driven to scheduled delivery dates. Adequate resources need to be allocated and impacted processes identified. Allowing adequate time for all the necessary planning work to be done is critical to the success of the selective outsourcing engagement. Specific up front engagement tasks need to be identified, documented in detail, progressed through and tracked on a project plan like any other tasks, for every selective outsourcing arrangement.

The impacts to an internal IT group from selectively outsourcing tasks pertain to the engagement and governance of the selective outsourcing arrangement. Engagement becomes a reiterative process dependent on the duration and frequency of selective outsourcing arrangements. Therefore considerable effort should be devoted to ensuring that internal procedures are explicitly documented to such a level that there is ease of hand over from the internal IT group to the vendor. As the ease or difficulty of governance depends on the completeness of the engagement phase recommendations pertain to how the engagement phase can be better facilitated. Benefits from an improved engagement phase would flow on through to the governance of the selective outsourcing arrangement.

In order to successfully complete the engagement phase of the selective outsourcing arrangement the following key areas need to be addressed before selective outsourcing is considered.

- 1. Preparatory work required to remove internal barriers to processes in the IT group. Internal IT groups should look to achieve single ownership and reduce multiple interfaces in any given process. Strive to attain single ownership and responsibility for a function within the one work group. This will better facilitate documentation of a process and keep it uncomplicated for hand over to an external outsourcing vendor. Where this is not possible work needs to be done to remove any perceived or real barriers or walls in a process between work groups.
- 2. Shift in internal groups thinking to more planning rather than doing. We are seeing organizations achieving more in a shorter time frame through selective outsourcing. In order to achieve this there is the concomitant (work) load placed on internal staff. To keep pace with this work load requires a change of role for the internal IT staff to more of a governance role involved in the coordination of work rather than the actual hands on completion of tasks. This needs to involve resolution and clarification of ownership of processes in regards defining the responsibility of the internal IT staff and outsourcer.
- 3. Improve the quality of internal IT procedures by removing any ambiguity and dependence on internal assumed knowledge. IT groups should aim to remove any informal procedures within a process and replace them with agreed documented procedures. IT groups should strive to achieve modularization of internal processes based on input and output and thus limiting the ownership of a process to single work groups.
- 4. Implement appropriate Project Team structures with dedicated staff selected from the work groups affected. This relates both to a specific task focused project team and an internal IT group to take on the role of vendor relationship management. The task focused project team would have the responsibility for addressing issues such as early vendor training/education and implementing suitable internal support structures.

In planning for selective outsourcing the model needs to allow for more time up front to address the issues. Issues will become less and more generic the more that tasks are outsourced and the more modularized the internal procedures and processes become. Time spent on identifying the requirements and planning for the initial selective outsourcing arrangements will be well spent as the benefits will flow on to each successive selective outsourcing arrangement.

5.2. Limitations.

Limitations of this research are that the interpretation of the findings are based on judgment, the samples are not representative and can not be defined as a subset of internal IT groups within organizations. The limitations of the case study method are that an organization in one situation may not be comparable to another, though a number of insights can be gained and recommendations made pertaining to the case study organization, that may apply equally to any internal IT group.

With hindsight and whilst analysing the interview transcripts it was identified that there were missed opportunities in the interview process for delving further in to the respondent responses as to why a particular response was given. There was missed opportunity to further fine tune the responses and information received. A greater knowledge of interviewing style and application of these techniques would have lead to richer data and improved the quality, value and relevance of the data collected and thus the conclusions reached. For future work greater care would need to be applied to the phrasing of questions to ensure that the wording that is used does not lead the respondent.

5.3. Future Research.

There is scope to take this research a step further in regards to applying the recommendations to a number of IT groups within multiple organizations to validate the findings. The recommendations could be applied to a future selective outsourcing arrangement to test the validity and applicability of the recommendations to selective outsourcing arrangements and to try and measure any benefit.

Since completion of this paper the research target organization has since selected and engaged the same outsourcing vendor for a software deployment task under similar circumstances, time constraints and scope of work. The steps that have been taken to date with the vendor in regards applying the recommendations from this research are:

- To get the vendor 'on board' much earlier in the design phase of the work so that they can become familiar with the work required.
- The vendor will be writing their own procedures to follow with input and sign-off from the internal IT groups.
- Procedures to follow have been automated to a greater extent.
- The vendor has brought in new field staff for this scope of work and they have been given presentations and familiarization courses on the target organization's technical environment.
- The after hours support arrangements have been altered to ensure that the target organization has technical staff in their head office premises while there are software installations in the network. This approach has been taken due to the ambitious roll out time frame, number of software installations each night and the need to ensure prompt problem resolution.

Currently this scope of work is still proceeding. Some of the issues that faced the initial selective outsourcing arrangement do not apply to this subsequent outsourcing arrangement. Relationship issues have been largely resolved as a result of the previous outsourcing relationship.

6. Appendix.

6.1. Outsourcing Drivers.

The types of outsourcing relationship's with external service providers is changing. The goals, scope of work, who the buyer is, type of contract, and term of the arrangement frequently differ resulting in different types of agreements. Figure 8 provides a summary of the drivers for both Selective and Strategic outsourcing.

	Selective	Strategic
Business Drivers	Downsizing, Restructuring.	Acquisition, Merger, Reengineering.
Business Goals	Tactical: Increased IT efficiency, IT cost savings.	Strategic: Increased operational effectiveness, enable new strategies, products and services.
Scope of Deal	Selective IT functions: - Data Centre Network Desktop/Client Server Help Desk Applications.	Full enterprise wide or business unit IT or business process outsourcing.
Contract Type	Fee for service or commodity priced, service-level agreement-based.	Shared risk/shared reward business metric-based OR Fixed price per claim, call answered and check processed.
Contract Term	2-5 years.	5-10 years.
Vendor Qualifications	'Best of breed' by IT function, region or technology.	Industry or business process expertise, broad spectrum IT expertise, broad geographic coverage if necessary.
Buyers	IT management.	Executive management Business Unit management.

Figure 8. Displays some of the drivers for outsourcing.

Source: Gartner 19th March 1996. 'Supplementing IS Resources: External Service Providers'.

6.2. Advantages and Disadvantages of an outsourcing relationship.

Advantages:

- 1. Fix costs.
- 2. Control Costs.
- 3. Pay as you go.
- 4. Extend useful life of obsolete technology.
- 5. Obtain expertise.
- 6. Focus on your corer business.
- 7. Minimize negotiation cycles.
- 8. Attain technological independence.
- 9. Minimize IT management responsibilities.
- 10. Reduce attention to computer technology changes.
- 11. Gain quick access to advanced technology.

Disadvantages:

- 1. Total dependence on the outsourcing vendor.
- 2. Risk of third party confidentiality.
- 3. Increased security risk.
- 4. Loss if control in fulfilling you IT needs.
- 5. Change in accountability.
- 6. Loss of expertise.
- 7. Risk of technical paralysis.
- 8. Constituent issues, such as employee issues.

Source: Mylott, Thomas R., Computer Outsourcing, Managing the Transfer of Information Systems, Prentice Hall Career and Personal Development. USA, 1995.

6.3. Opportunities of Outsourcing.

Figure 9 presents a summary of some of the potential opportunities of outsourcing:

Nº.	Opportunities of Outsourcing.
1.	Access to skills.
2.	Improved quality of service, achieve guaranteed service levels.
3.	Defined service levels.
4.	Focus on core business.
5.	Additional Flexibility.
6.	Access to technology.
7.	Improved performance parameters.
8.	Cost savings.
9.	Change fixed asset base.
10.	Improved balance sheet by removal of fixed assets.
11.	Increasing range of supply alternatives.
12.	Expedites ordering processing.
13.	Changing emphasis of IT activities to integration rather than creation.
14.	Increased control through contract for results.

Nº .	Opportunities of Outsourcing.
15.	Specific to network functions: (Muller 1996:450)
	To provide single point of contact and responsibility for all communications management.
	To improve the management of communications problems and reduce their incidence.
	To simplify operations through standardization of facilities, network architectures and procedures.
	To reduce the number of personnel involved in day-to-day operations and re-deploy these resources to core business concerns.
	To effectively manage equipment inventories, vendor warranties, licence agreements and maintenance schedules.
	To do all of the above more efficiently and more economically, while providing higher quality services to end users.
16.	Eliminates delays caused by vendor and carrier etc. (e.g. finger pointing). There are implications to the internal process when reviewing impact to internal processes (e.g. fault resolution).
17.	Reduces time spent on invoice reconciliation.
18.	The company is buffered from the effects of technical staff turnover.
19.	The outsourcer's experience is drawn from a broad customer base as well as its daily interactions with hardware vendors and carriers, the outsourcing firm may have much to contribute to client's internal process and procedure (for improvement).

Figure 9. Table presenting a summary of some of the potential opportunities of outsourcing.

6.4. Threats of Outsourcing.

Figure 10 presents a summary of some of the potential threats of outsourcing:

Nº.	Threats of Outsourcing.
1.	Inadequate human resources.
2.	Inadequate change management.
3.	An inability to take advantage of new and emerging technologies and lower than expected cost savings.
4.	Lost money either directly as a result of not achieving anticipated cost savings or indirectly through having to resume expenditure on IT.
5.	Reduced customer service levels or increased inefficiency.
6.	Additional management time to balance different units, need to allow different management and organizational cultures if the business are vastly different.
7.	Damage to staff morale.
8.	Cultural mismatch.
9.	Service provider dependency.
10.	Lack of flexibility.
11.	Requirement for long term commitment.
12.	Possible breaches of privacy.
13.	Lack of control of information.

N^2 .	Threats of Outsourcing.
14.	Deficient performance during the transition period. With the selective outsourcing this can be compacted many times over unless clear process for the transition if defined and followed.
15.	(Re) internalizing an outsourced operation can be extremely difficult. Corporate memory is lost and it will be very difficult to rebuild outsourced architecture at reasonable cost.
16.	High risk involved in hidden costs leading to potential cost escalation. Charging of excessive fees for services that the company assumes the contract covers.
17.	The threat of opportunism, where vendors take control of the client's IT function and may take advantage of the client (particularly during contract renewal) after the organization has eliminated dedicated people and has to start at ground zero (Hirschhem 1993:19).
18.	The investment of the organization in equipment infrastructure, as well as the skills, expertise and knowledge of their staff regarding that equipment infrastructure and the data itself is all lost when the IT function is outsourced (Clarke-Dickson 1998:94).

Figure 10. Table presenting a summary of some of the potential threats of outsourcing.

6.5. Interview communication handout.

6.5.1. Legitimacy.

Below is a copy of the information that was provided to the interview respondents before the interview to communicate legitimacy of the research, definitions and focus of the research and to assist them prepare for the interview.

I am a student at the University of Technology, Sydney, and am carrying out my major research project work which is a required part of my studies. Your help in agreeing to an interview would be greatly appreciated.

Your responses to the questions in the interview will be anonymous. Any references to organizations, individuals or departments will be removed. Transcripts of the interview can be made available if requested.

If you have any questions or concerns regarding this research project, please contact Seán Jones on the number below. Alternatively, if you wish you can contact my Supervisor for this project, Peter Bebbington, at the University of Technology on the number below.

I thank you for your valuable input to my research project. Should you require feedback from the results of the survey, please contact Seán Jones on [telephone number] with your contact details.

Student:

Seán Jones, Telephone [telephone number].

Student ID:

[student number]

Academic Supervisor:

Peter Bebbington, School of Computing Sciences, corner

Thomas & Harris St. Building 4, level 3, room 53.

Telephone: [telephone number].

Industry Supervisor:

Glenda Blanch. Telephone: [telephone number].

Academic Institution: University of Technology Sydney (UTS).

Purpose of Study:

Impacts of Selective Outsourcing of Information Technology

and Information Services.

What will happen to information gathered:

The results of the research will be written up as a thesis and bound. Four copies will be submitted to and retained by the

University. One of these copies shall be deposited in the UTS

Library and be made available for consultation or loan.

6.5.2. Research Project Proposal.

<u>Topic:</u> Impacts of Selective Outsourcing of Information Technology and Information Services.

The objective of this study is to identify the <u>impacts</u> to the internal Information Technology (IT) department's <u>policies and procedures</u> caused by outsourcing selective IT functions and to assess the <u>threats and opportunities</u> to an internal IT group, presented by outsourcing selective IT functions.

The trend to selectively outsource IT functions implies that this can be done with minimal disruption and risk to the IT departments policies and procedures. This research will attempt to validate this assertion and develop a model for internal IT departments to respond to the challenges presented by selective outsourcing. Organizations are increasingly acknowledging the strategic value of keeping some information technology functions in house. Traditional outsourcing of the 'whole of the IT function' is now tempered with the outsourcing of selective IT functions such as data centre management, network services management, help desk and desktop installations or network deployment.

It is argued that the 'operational functions' of an internal IT department are not core business and can be conducted more efficiently by outsourcing companies specializing in that function. It is these operational functions that can be either permanently or temporarily 'unplugged' from the internal IT department's responsibilities and handed over to an external service provider or outsourcer.

Where there is this selective and intermittent approach to outsourcing there is the need for the internal IT department to ensure that all their existing policies and procedures related to the outsourced function are adhered to. This model of outsourcing requires the IT department to retain investment in the other cross departmental resources that are also involved in maintaining and actioning the policies and procedures of the outsourced function. As such there is a need to:

- 1. Identify and agree what functions the external service provider will perform
- 2. What the associated impacts to internal IT process and procedures are, and
- 3. Implement policy, procedures and guidelines for quickly adapting and working in the new paradigm.
- 4. Monitor the effect on service delivery to the customer.

The goal of this research is to review the existing models of outsourcing currently in use and available to organizations. To assess how suitable or adaptable they are for 'selective outsourcing' and to identify from this, which areas of internal IT policy and procedures are most impacted. An analysis of the threats and opportunities presented to the internal IT department will be conducted.

Research will be conducted into one organization's experience with selective outsourcing and based on the findings, recommendations will be made as to how internal IT departments could approach selective outsourcing of internal IT functions and how internal IT departments could develop strategies for responding to the challenges posed by selective outsourcing.

6.5.3. Definition of Policies, Procedures and Impacts.

In Summary.

The policies and procedures discussed relate only to the target organization. The policies refer to the rules or guidelines that the IT departments adhere to and follow, in carrying out their day-to-day tasks. The procedures are the series of tasks that the IT departments complete to support the policies.

The reference to **impacts** refers to the specific impediments that hinder the successful completion of the procedures that support the policies.

In Detail.

The policies within an IT group can cover the broad areas of data policy, telecommunications policy, architecture policy, acquisition policy and control policy.

Policies within an IT group can be driven by technology or a business mandate and provides the guidelines for information management. The policies refer to the rules or guidelines that the IT departments adhere to and follow, in carrying out their day-to-day tasks. The procedures are the series of tasks that the IT departments complete to support the policies.

An example of a policy may be "where possible buy applications rather than develop them". A procedure to support this policy may be to first conduct a review of available packaged software once requirements are gathered.

Policies can relate to the way data is managed or stored, the use of passwords, naming standards, inventory control, configuration standards, conformance to software or hardware specifications, documentation requirements, change control, communication or reporting requirements or compliance to standards. In short, policies help ensure that work or tasks are completed to an agreed standard in compliance with a range of other business or technology related initiatives.

Policies are supported by procedures. Procedures are a set series of tasks to achieve the desired outcomes of the policy. Following set-out procedures greatly increases the

likelihood of compliance with the policy and therefore compliance with the overall strategies. Procedures can be either formally agreed, controlled and documented steps, or as is quite often the case informal where a series of tasks is historically completed to achieve the desired outcome.

The reference to impacts refers to the specific impediments that hinder the successful completion of the procedures that support the policies. These impacts may take the form of: lack of adherence or compliance to procedures, increased breadth and depth of available knowledge, exposure to different methodologies, requirement for a larger span of control and communication, differing levels of knowledge, poor communication of procedures, poorly defined procedures or lack of procedures.

These impacts in turn may have follow-on affects leading to improved methodologies, increased efficiency, resource constraints, time constraints, breakdown of communication/information exchange, poor relationships or reduced control of the environment.

Where a function that is outsourced requires the input of a number of work groups from the internal IT group, the scope for impact is greater. This is especially the case where there is the need to exchange information or data in regards to a process that spans cross functional work groups or boundaries. To introduce an additional third party outsourcing vendor into this process can often prove a more complex task than initially envisaged.

6.5.4. Interview Preparation.

To assist with your preparation for the interview please think about your work group's involvement with selective outsourcing in regards to:

- A recent selective outsourcing experience.
- The policies and procedures that your work group are responsible for.
- Your work group's involvement with the outsourcer.
- Any impacts to your policies or procedures whilst working with the outsourcer.
- Threats to your work group or the IT group by using an outsourcer.
- Opportunities to your work group or the IT group by using an outsourcer.
- The ongoing use of outsourcers and the impact on internal IT policies or procedures.
- Suggestions for how similar work could be approached in the future.

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