

Subject: IT Outsourcing vs. Smart-sourcing in the Utility Industry

Program: Information Technology Management

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Abstract

Businesses turn to outsource their information technology activities to third parties for different reasons. This research has been conducted to determine the challenges organizations and companies are encountering because of relying on IT sourcing and finding ways in which the challenges can be addressed. The research was done by relying on a case study concerning a company “X” which is a government utility organization to see how efficiently outsourcing has been done on organization “X”. The organization that was investigated was one of the pioneer firms in United Arab Emirates that started with IT outsourcing. The examination brought along with it limitations for the research, limitations such as political, economic and technological with respect to the utility industry. These limitations indicated that appropriate IT resourcing could raise the assumptions with respect to IT outsourcing. The results of the research have also indicated that significant differences in structuring the IT outsourcing may hinder the success of the IT outsourcing agreement while a successful management and governance may stabilize the relationship, expectations, strategies, visions and operations.

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Chapter 1: Introduction

Outsourcing is commonly referred to as the decision to either “make-or-buy” and is not a new idea in business. The decision to ‘make-or-buy’ means that, the company either makes their own resources or buys them. Companies and organizations have been using the concept of outsourcing for several years. Many companies have been outsourcing their production line operation such as cleaning, accounting and payroll services. Outsourcing is supposed to help business to cut down expenses in large portions, which make up to the profitability of the company. This further is supposed to help business to divert the attention of the firm towards the core business that gives it a competitive advantage. It also supposed to help business in cutting down the operational expenses and business operations in an effective manner. Outsourcing is supposed to benefits the organization by diverting attention towards the core business, helps in minimizing risks, gaining competitive advantage, enabling more resources for the core business, and enhancing technology.

Businesses are adopting IT outsourcing using different approaches. For example, Business progressions can be outsourced; they can be either internal or offshore. The internal outsourcing refers to the progression of resources from a third-party operating in the same country whereas offshore outsourcing refers to the progression of resources from a third-party operating in a distinct country (Ellram, Tate & Billington, 2008). Different methods are intended while outsourcing, as there is no “right” way to go though the outsourcing lifecycle like Smart-sourcing. Smart-sourcing is of strategic importance to companies as it involves outsourcing of distinctively designed high-end business processes. Experts who have the required domain knowledge along with methodical problem-solving capabilities perform these services (Sen & Shiel, 2006; Agarwal & Nisa, 2009). Smart-sourcing involves outsourcing of services having intrinsically tacit and explicit dimensions, (Nonaka & Toyama, 2007). Information Technology is a business asset, which has been expanding extensively over the years. Development and encroachment of information technology has led to the intensification in information technology outsourcing and this has led to expansion of activities conducted by an organization’s IT department. Apart from its augmented function, the international competition has pressed companies to relocate them in the global

competitive ground and to be more proficient by incorporating information technology into their procedure (Ellram, Tate & Billington, 2008).

1.1 Problem Statement

In order to achieve higher competence businesses and organizations have shifted to outsourcing IT, that helps them manage their regular information technology tasks through third-party merchants while freeing up their possessions so that they can deal with the wide-ranging appliance of information technology (Dataquest study, 2003). This technique helps to become more bendable and provides a prospective way of them making a diminution in price. In order to achieve economies of scale businesses are authorized to change their fixed costs into variable expenses but with that, some companies take no notice of the impending issues that go hand in hand with choosing the option to outsource.

Many organizations from all over the world have failed to outsource their services in a way that conveys an outcome that justifies the means (Dataquest study, 2003). The study also states that 53% of all outsourcing clients have renegotiated their contracts. The study will therefore be investigating the following:

1. Indications for a company that may lead it to outsourcing;
2. Major constraints and reasons faced by the IT projects;
3. Cost benefit analysis which includes business objectives and advantages of outsourcing;
4. Determining the types of IT services that should be outsourced; and
5. Determining the types of IT services that should be resourced.

Therefore, this research investigates whether or not the utility industry in the government sector should outsource its information technology processes. The study relies on literature reviews, which enables us to develop a model that involves risk factors for outsourcing. The investigation will focus on the outsourcing cycle which includes establishment of the outsource contract, management of the outsource contractor, and how decisions are made during the outsourcing process.

Different researches have indicated that inadequate vendors' management and ineffective vendors' performance management may be significant factors of increasing risks that contribute to failure of outsourcing contract. If businesses decided not to have any internal resources to manage the third-party relationship and tend to contract the strategies, their plans, projects, budgets, requirements, procurements and other IT contracts might be misunderstood, or deliverables and services might be below expectations.

1.2 Aims and Objectives

The aim of this study is to add value to the outsourcing decision by productively obtaining more competent and valuable information technology services from external third-party facility providers, the focus of this research is to emphasize that outsourcing information technology can help businesses and organizations decrease their costs and increase profitability. However, if the business does not have a clear vision, a strong groundwork or an understanding of the need to outsource its services and projects, then the business will not realize the benefits of outsourcing. The study highlights how to administer contracts and how to manage the service provider.

The objectives of this research are to centre on the following:

- 1- To examine whether the IT outsourcing contract would succeed without the internal IT resources;
- 2- To evaluate how accountable are the internal IT resources and the third-party resources;
- 3- To measure how customer satisfaction can be achieved by identifying key factors that can affect the performance of the merchants; and
- 4- To investigate corrective actions that businesses can undertake to improve the existing outsourcing structures.

The research will achieve its objective by:

- 1- Presenting a review of the various theoretical frameworks that are incorporated in information technology outsourcing. These theories will be analyzed to understand the benefits that are gained through outsourcing and the risk factors involved in the context of those theories.
- 2- Presenting a literature review in order to acquaint the reader with the background on information technology outsourcing. The literature review will be followed by the methodology applied in this study.
- 3- Theories are to be discussed that play a vital role in determining the outsourcing needs.
- 4- Along with the existence of an internal IT resource, it is to be justified whether the government sector in the utility industry should outsource its information technology progressions or not.
- 5- Best approach should be recommended for the maintenance of contract after the examination of a real business case which outsourced its IT function and after scrutinizing the following:
 - Strategic changes
 - Political changes
 - Technological changes
 - Economic changes
 - Resource changes
 - Service and support changes
- 6- The risks that are to be incurred in order to keep an internal IT resource that handles the outsourced company should be justified.
- 7- Suggesting the best move from the researcher's point of view towards the smart-sourcing of overseeing the outsourced merchants.

1.3 Hypothesis

Outsourcing may lead a utility organization to spend double the original IT operational expenditure if there is no proper internal assessment of costs, benefits and expectation of the provided services or projects. Therefore, some hypotheses need to be examined, including:

Hypothesis Group 1: Outsourcing of whole IT activities is positively related to organization performances.

H1.1: Outsourcing of whole IT activities has positive performance effect on organization strategies

H1.2: Outsourcing of whole IT activities has positive performance effect on organization economies

H1.3 Outsourcing of whole IT activities has positive performance effect on organization politics

H1.4 Outsourcing of whole IT activities has positive performance effect on organization technologies

H1.5: Outsourcing of whole IT activities has positive performance effect on IT managements

H1.6: Outsourcing of whole IT activities has positive performance effect on IT Planning

H1.7 Outsourcing of whole IT activities has positive performance effect on IT operation and delivery

Hypothesis Group 2: Partial IT outsourcing is positively related to organization performance

H2.1: Outsourcing of partial IT activities has positive performance effect on organization strategies

H2.2: Outsourcing of partial IT activities has positive performance effect on organization economies

H2.3 Outsourcing of partial IT activities has positive performance effect on organization politics

H2.4 Outsourcing of partial IT activities has positive performance effect on organization technologies

H2.5: Outsourcing of partial IT activities has positive performance effect on IT managements

H2.6: Outsourcing of partial IT activities has positive performance effect on IT Planning

H2.7 Outsourcing of partial IT activities has positive performance effect on IT operation and delivery

Chapter 2: Literature Review

This chapter reviews the literature related to IT outsourcing in general and in more particular to IT outsourcing management. Information technology is not a homogeneous function, but comprises a variety of IT activities (Kern & Willcocks, 2002). Therefore, to understand information technology outsourcing clearly, the literature review is subdivided into seven categories. They are:

- IT outsourcing
- Software and application development;
- Management of the infrastructure;
- Providing consultancy services; and
- IT planning and management.
- IT outsourcing assessment and framework
- IT Smart sourcing

The study also examines how the performance, progression and services that can be achieved through outsourcing information technology services. The primary approach used to develop the literature was to search online literature by searching the following key words: IT outsourcing, IT service provider, new approach of outsourcing, smart sourcing, IT cost saving, third-party relationship management, successful outsourcing and intelligent IT outsourcing.

Outsourcing has a broad field of application and effects; the people, technology and type of business involved. Outsourcing is therefore an interesting research area for both organizations and academic researchers. Outsourcing includes characteristics of processes that are acceptable to alteration and evolve for updating and incorporation of everyday business requirements.

Outsourcing of progressions such as manufacturing or information technology that were considered to be different from the hub actions of a business earlier are now united with the leading business functions, which are the key factor relating to this particular study. Information technology outsourcing is an important progression of business because of its advancement. This research will concentrate majorly on delimiting a new role within the company once a third-party IT service provider has intervened.

Mainframe computer management used to be the only domain for large corporations, which catered to the initial information technology outsourcing. It is not only adopted by large firms, but also by small and medium sized organizations that are not capable of running their own IT infrastructure due to lack of resources. These small and medium sized companies can take advantage of the applications provided by these third-party service providers to minimize the expenses incurred by acquiring more human resources and IT equipments. Based on profit and loss accountability, the collaboration between customers and merchants is done with the parties having same opinions and interests. The dependence of high waged internal merchants is not favoured as compared to the alternative of outsourcing. One more reason that adds to the concept is readiness to the accessibility to the third-party service providers who are present in developing countries. The labour force of the offshore localities is adequate and more promising in handling modern technologies and therefore enhances companies to rely on outsourcing. Information technology outsourcing is a deliberate selection since it is amalgamated in business progressions (Ellram, Tate & Billington, 2008).

When the easy processes such as the continuation of professional websites and computer networks were outsourced, it came a long way from the former stages. Large business organizations and firms outsource not just easy progressions, which is a common observable fact when entailed to outsourcing. Large businesses tend to outsource whole subdivisions and at times even most of their business functions to third-party service providers. Today companies are intended to outsource their operations for deliberate reasons unlike the historical principal reason for outsourcing, which was the cost saving

(Juras, 2007; Jurison, 1998). They necessitate getting your hands on skills and resources that are if not occupied and the drop in the scale of certain tasks; these could include a company's obligation for immediate dissemination of the market, so that the company has better administration abilities for tasks that are bigger in nature.

Relocating the possession of some of the business activities of an organization to a third-party service provider is where outsourcing could be involved (Juras, 2007). Outsourcing can be defined as a simple "make-or-buy" decision. In context of this definition, decisions are made by considering what tasks are to be performed internally against what to buy in the marketplace (Ellram, Tate & Billington, 2008). Make-or-buy decisions can be defined as a "basic transaction paradigm which can also be seen as the canonical (the usual or standard state or manner of something) transaction for transaction cost economics" (TCE) (Williamson, 2008). It suggests that outsourcing expands from the sourcing out of a whole business progression; this aspect of the term outsourcing is in the context with the sourcing out of the control of an organization's cafeteria.

Service Level Agreement is another viewpoint for activity of an effective outsourcing initiative that can support the progression. The service provider agrees to perform the progression, which is to be outsourced at a lower rate than the fee presently being provoked by the host organization is completed through agreements of service level agreements, which helps to achieve better targets than the organization is achieving now (Ghodeswar & Vaidyanathan, 2008).

2.1 IT Outsourcing

In different scientific papers and literatures many definitions of the word 'outsourcing' can be found, the authors assume a comparable approach in each of the definitions. The differences are due to their attempt to conform to the word to different aspects in their definitions, which are appropriate to their respective research. The term's lexical analysis shows that the word 'outsourcing' is an abbreviation for "outside resource using" (Yin, & Wang, 2008). Lei and Hitt (1995) mentioned that outsourcing refers to relying on external sources for manufacturing components and adding values to the internal activities. A deal that is granted for the relocation of some of the organization's monotonous internal activities and verdict rights to external service providers is one viewpoint of outsourcing is to see it from the standpoint (Ghodeswar & Vaidyanathan, 2008).

Different types of outsourcing can be used for outside resources, such as:

1. Offshore outsourcing
2. Near-shore outsourcing
3. In-house outsourcing
4. Internal outsourcing

As presented earlier, giving more spotlight to IT assets and progressions, the term 'information technology outsourcing' follows the conventional meaning of outsourcing. In order to clarify, traditional information technology outsourcing refers to obtaining external services or products from third-party vendors (Willcocks, Lacity & Kern, 1999). The complete life cycle of development, transition and maintenance of processes and appliance that precisely cater to the needs of the business is incorporated in the established definition of information technology outsourcing. The current tendency is to see information technology as a tactical alternative in which companies can have the association for a short time with many partners at a particular time, which is multi-sourcing and does not pursue the large scales long-term bond with a sole third-party service provider (Hoecht & Trott, 2006).

2.1.1 Theoretical Framework

Theories present different viewpoints on Information technology outsourcing and IT operations (Dibbern, et al., 2004). They can be shared to study the different angles of information technology operations as these theories are not mutually exclusive (Gottschalk & Solli-Sæther, 2006). This paper will only contemplate on the recurrently cited theories in information technology literature, due to the constrained extent of this study, i.e. transaction cost theory and resource theory.

2.1.2 Transaction Cost Theory

In information technology outsourcing the transaction cost theory is one of the most quoted theories which is often named in combination with Oliver Williamson (Lacity & Hirschheim, 1995) and its beginnings are based on Ronald Coase's 'The Nature of the Firm' (1937). According to Coase this theory is basically defined by the firm's boundary (Gottschalk & Solli-Sæther, 2006). This concept implies that some sort of cost is incurred whenever these transactions occur. It is actually a "make-or-buy" approach that represents the transaction where internal and external costs are compared (Jurison, 1998). 'Bounded rationality and opportunism' are two behavioural assumptions described by Williamson (Bahli & Rivard, 2003). The impracticality of having and counting all the required information during the 'make-or-buy' decision is referred to as Bounded Rationality (Lacity & Hirschheim, 1995). Partial human capacity does not facilitate us to foresee and take into account all the consequences that might occur due to our decisions (Bahli & Rivard, 2003). The supposition of opportunism refers to the prospect of a third-party service provider acting opportunistically to obtain personal gain. The merchants can be portrayed from the view of "self-interest seeking with guile". Williamson explains that risk of opportunism poses a threat and is high when the number of merchants is low. Sufficient contracts should be predetermined to reduce the risk of opportunism in such circumstances according to (Williamson 1975).

The transaction cost theory is one of the major preliminary points for those making an allowance for outsourcing information technology according to Willcocks and Lacity which is an instrument required in order to understand the concept of information technology outsourcing better (Willcocks & Lacity, 1998). Since the viewpoint of this paper for information technology outsourcing is fundamentally a 'make-or-buy' decision for the utility industry in the government sector, the transaction cost theory shall be given deliberation to give explanation for information technology outsourcing that it is a workable option and how it should be utilized.

2.1.3 Resource Theories

Contrary to the transaction cost theory, which reflects an economical approach to information technology outsourcing, resource theories look at outsourcing as a strategic management approach (Grover, Teng & Cheon, 1998). Resource theories are categorized into two subdivisions: 'resource-based theory and resource-dependency theory' (Dibbern, et al., 2004).

2.1.4 Resource-Based Theory

It is assumed that the resources help to fulfil the criteria specifically in business operation to gain a competitive edge. The subsistence of resource heterogeneity and inactivity is presumed by such competitive advantage according to the resource-based theory. When companies need to gain a competing advantage they refer to the concept of heterogeneity of the resources. When accessed is gained through accessing the resources of completion it is referred to as inactivity or immobility of resources. Based on two assumptions, four criteria are recognized to direct towards a sustainable competitive advantage that resources must fulfil. As proposed by these criteria, resources must be high in value, extraordinary, not imitable perfectly and not sustainable (Barney, 1991). The resource-based theory explains that resources that could be characterized possessed by an organization competitive advantage and sustainability can be ensured.

2.1.5 Resource-Dependency Theory

The resource dependency theory puts weight on the exterior that is the environment in which they function unlike the resource-based theory, which focuses on the interior of organizations. Suggested by Resource-dependency theory is that each firm is dependent on the external resources that are not available from the surroundings of the organization itself. Such resources could include 'land, labour, capital, information, specific product or a service' (Kotter, 1979). Resources that cannot be obtained internally are to be obtained externally (Grover, et al., 1998). Success of an organization depends on how the resources are acquired from the partners externally as no organization can obtain resources internally which is actually what resource-dependency theory states. Currently, information technology is a crucial factor for any organization in the business world, the external provision is to outsource IT operations. Resource theories are pertinent when keeping in view the outsourcing of information technology of the government sector.

The determinants that play a vital role in information technology outsourcing would be analyzed by the theories mentioned above so that it could be justified that whether the utility industry in the government sector should outsource its information technology operation to what extent if it is to be done. The reasons and risks that should kept in mind when outsourcing information technology operations are discussed further in thesis part of the paper with respect to the theories mentioned above.

2.2 Software and Application Development Outsourcing

Developing new software from scratch or upgrading an old version of business software through a third-party service provider, software and application development outsourcing can be referred to it for the purpose of adding value. Third-party services can range from restricted data stores to full software suites, facilitating enhanced accessibility and system scalability according to Candan et al. (2009). This could trim down businesses' task of maintaining and supervision of complex IT infrastructures. Such stipulation of outsourcing is referred to as application outsourcing or Software as a Service (SaaS). To further clarify, application outsourcing as a part of information technology outsourcing is "the process of delivering, developing, managing, deploying, maintaining, licensing and providing support of business software by an external supplier" (Leclerc, 2003). As the appliance services are regarded as a mode of outsourcing IT functions, this type of outsourcing also encompasses the area of Application Service Providers (ASPs).

2.3 Infrastructure Management

Infrastructure management outsourcing can be enhanced through application outsourcing, but it should be considered as a separate information technology outsourcing venture. Beulen et al. (2005) define the term "infrastructure management" as a preventative and remedial measure that physically maintains and repairs or optimizes information and communication technology hardware. Infrastructure management stands as an outsourcing process when these services are handed over to a third-party service provider for transition, maintenance and transformation. Management of computers and networks remotely and the integration and centralization of systems could be an example for outsourced infrastructure management. Outsource infrastructure organization can also include managing hardware that deals with work such as helpdesk equipment, server computers, end-user IT devices, mainframes and storage devices (Pandit & Srinivasaraghavan, 2009).

2.4 IT Consultancy

IT consultancy is a term that concerns to the consultant services that facilitate the customers of businesses to estimate several technological programs. A third-party service provider that provides knowledge, consultations and guidelines regarding matters that will influence the organization's IT assets and business functions, such services are acquired by organizations by entering into contracts. Outsourcing the business means that the IT activities that are already present would be outsourced to a third-party consultant so that the activities can be improved and profitability could be increased.

2.5 IT Planning and Management

The first step to consider before engaging organization in outsourcing, business need to decide how the contracting will be done (Everest Partners Group, 2005) and to achieve the outsourcing purpose and objective and to minimize conflicts that can be encountered.

While (Pinnington and Woolcock 1997) suggested that it is significant for the organization to develop metrics, and to define the expectation of each party while outsourcing. This will enable the organization and the third-party to have a benchmark to measure against. In the same research, they argued that a client may engage in long term contracts with service provider and then struggle in managing the outsource company which could lead to contract failure. According to (Dewett & Jones, 2001), effective relationship and organization structure can play a vital role in preventing risk and stimulating innovation and improving the organizational efficiency.

2.6 IT Outsourcing Assessment and Framework

Organization must be proactive and closely monitor the progress of the outsourced company. Business must develop a mechanism to measure and ensure that outsourcing provider operates in a quality manner consonant with the business's overall objectives. (Earl, 1996) emphasized the importance of developing outsourcing metrics and key performance monitoring indicators that can help the organization in evaluating the progress of the outsourced company. Based on (Antonucci et. Al. 1998) the success and failure of the outsourcing can be determined by the end user level of satisfaction.

One of the effective frameworks for managing outsourcing is IT governance framework. According to (Weill, 2004); good governance ensures that the right groups are making the key IT decisions so that those decisions enable the desired goals and behaviors of the enterprise. Good governance makes clear who can make decisions and how they are accountable for the enterprise goals. IT governance is regarded as the framework for making right decisions and ensuring accountabilities.

2.7 IT Smart sourcing

Smart-sourcing involves outsourcing of distinctively designed high-end business processes which are of strategic importance to the outsourcing company. These services being outsourced are performed by experts who have the required domain knowledge along with methodical problem-solving capabilities (Sen & Shiel, 2006; Agarwal & Nisa, 2009). Smart-sourcing involves outsourcing of services having intrinsically tacit and explicit dimensions, (Nonaka & Toyama, 2007) for example, real-time inventory management. For example; FedEx, through its e-business applications, has created an information infrastructure that enables it to manage inventory by motion- extending the ability to manage inventory at rest. FedEx has urbanized and incorporated supply chain solution that allows its customers to attach to their selling and supply chain alliances in a flawless way, which helps them to diminish inventory, shorten order cycle time and improve time to market the product and services. FedEx has incorporated its physical transportation with its virtual information systems, which meets the needs of businesses of not only transportation services but also a full variety of supply chain management. FedEx offers dedicated services to suit the altering requirements of businesses for managing inventory systems. Make a purchase of FedEx services for managing inventory-in-motion would be an example of smart-sourcing.

2.7.1 The Many Faces of Innovation

Every organization can innovate in three fundamental areas of business: by creating new products, and services or markets; by extending or improving the features of its existing products and services, or markets; or by increasing efficiency in their existing products and services. Organizations only have a core capability in one of them, though they witness innovation in all the fundamental areas of their businesses. For example, Dell Computers is not renowned for its product innovation but is recognized for its innovation in supply chain operations. On the other hand, Apple Computers is widely established for its product innovation and designs but not for its distribution network. It is vital for an organization to identify its core competencies of businesses and separate them from operational outliers.

Often, non-core areas starve the innovative capacity of an organization by occupying a large amount of a precious resource and managerial efforts.

Smart-sourcing with its known definition allows an organization to focus on the core business functions whereas the job of innovating change is taken by partnering firm.

The following table shows some differences between outsourcing and smart-sourcing:

Outsourcing	Smart-sourcing
Cut Costs: Focuses on cutting costs (The primary consent in outsourcing is to reduce costs, which often limits the innovative capacity of organizations)	Cut Costs + Increase Innovation: Combines cost cutting with increased innovation (It focuses on creativity and innovation that can lead towards cost reduction)
Streamline Operations: Focuses on operational areas (Only certain defined tasks are performed by third-party supplier according to their contractual agreement)	Streamline the Value Chain: Considers the entire value chain (In smart-sourcing, external vendors work closely with the businesses to add value to the entire business process)
Partner On What You Know: Creates homogenous processes that lack differentiation (External supplier only facilitates what you already do or know at a lower cost)	Differentiate: Innovates processes to increase differentiation (External vendors help to determine new ways of achieving your goals)
Tactical Improvement: Used when markets are predictable (Only follows a descriptive strategy)	Strategic Excellence: Used to align with shifting markets (New strategies emerge during the process)
Discontinuous: Changes in technologies and architecture are disruptive to the business (Changes in technologies make the outsourced functions invalid)	Continuous: Leadership is combined with continuous innovation which buffers the business process from technology change (Technological changes are accommodated through continuous innovation)
Arms-length Partnership: Advocate the status quo (External vendors work for you)	Trust-based Partnership: Endangers trust and collaboration leading to greater value (External supplier works with you)

Table 2.1: Outsourcing vs Smartsourcing

Chapter 3: Methodology

The chapter comprises the methodologies that are used in order to conduct the research, which starts with defining the area of the research problem, then explaining the questions that are to be answered for the research, then the research strategy to be used and then an overview of the survey to be conducted.

Research Problem Area: The research problem is specifically to be defined in the area of Outsourcing Information Technology

Research Question: Two research questions are included in this study:

- 1- Along with sustaining IT resources of the firm internally, would it be acceptable for the government sector in the utility industry to outsource its information technology?
- 2- What are the reason and risks attached if the firm opts for outsourcing information technology?

Majorly there are two types of research methods that are used to conduct research, with respect to this research the two methods are defined below:

- i. Exploratory Research
- ii. Descriptive Research

Exploratory research is initiated with a broader goal so that one is able to understand the concept of outsourcing completely it then further narrows down with the help of arguments and logical reasons to justify the reasons for the government sector to go for outsourcing. The main purpose of the research conducted is to find that whether the government sector continue with the internal IT functions or should it go for outsourcing along with the continuation of the Internal IT function.

Descriptive research is basically required to find the solution to the problem at hand that whether the government sectors continue with the internal IT functions or should it go for outsourcing along with the continuation of the Internal IT function required. Whereas exploratory research explains the broader view of the Information technology resources, that whether they should be continued from within the organization or they should be outsourced.

Exploratory Research is qualitative in nature whereas Descriptive research is quantitative in nature so the research is focusing more on the descriptive reach and less on the exploratory research as descriptive research would help come up with answers to questions that are backed by numbers and proper calculations.

Data Collection: The establishment of an IT outsourcing model is the main objective of the paper which lays emphasis on defining the role and accountability of the internal and external IT firms, so that the success rates of outsourcing technology could be increased. For this a clear vision of objectives and expectations is required for the development of a framework. In order to explore and explain the reasons and risks specifically related to IT outsourcing in more detail a case study would be used.

In order to examine the case study, qualitative method is used for better understanding of different reasons and risks of outsourcing. Qualitative research is a standard term for analytical methodologies described as ethnographic, anthropological, naturalistic, field or participant observer research according to Jacob (1988). Where variables are looked at in a setting where they occur naturally.

Research Strategy: The strategy opted in order to conduct the research would be through secondary sources and also keeping in view the literature review. By doing so the research problem could be thoroughly examined which would lead to logical arguments and then finally to the conclusion.

Survey: A survey was conducted to measure the end user level of satisfaction. The survey is divided into five sections:

- 1- Overall Evaluation
- 2- Applied Innovation
- 3- Business Performance
- 4- Partnership and strategic compatibility
- 5- Open Questions

In order to distribute the questionnaire, two groups were defined; group X and group Y. Group X included the employees of of the company “X” whereas group Y included the employees of the outsourced company “Y”.. Group X, was distributed the questionnaires to answer questions and inquire about group Y. A sample size of 40 was taken to conduct the survey. Ratings were done on a scale of 0 to 4, where 0 being poor and 4 being excellent.

List of questions is mentioned below:

1. Overall, you would rate Y’S performance as?
2. Innovation is the successful introduction of new ideas. The extent to which Y provides innovation that adds value to your business is?
3. Y’S ability to recommend IT best practice is?
4. Your access to Y’S senior management when required is?
5. Y’S ability to communicate effectively with you is?
6. Your ability to access Y services is?
7. The performance of the Y Service Desk is?
8. Y’S ability to provide skilled people with the right capabilities are?
9. Y’S efficiency (i.e. speed) in resolving service breakdowns is?
10. Y’S effectiveness (i.e. final result) in resolving service breakdowns are?
11. Y’S effectiveness in satisfying service requests are?
12. Y’S ability to meet deadlines is?
13. Y’S effectiveness in maintaining the availability of the IT infrastructure is?

14. The ability of Y people to collaborate with individuals in your organization is?
15. Y'S account managers' understanding of your business goals and objectives is?
16. Your confidence in Y'S ability to serve as a long-term business partner is?
17. How would you rate the improvement in the performance of Y'S over the last year?

Interview: In order to understand all concerns related to the case study, interviews were conducted with members from the organization IT Governance board with the intention of getting the senior management opinion of the outsourcing experience and the list of questions asked is mentioned below:

1. Whether senior organization managers think that IT services provider is providing IT services which is equal or better than services which used to be provided by old IT department?
2. Senior organization managers think that the IT service provider is aware of the organization objectives and strategies, is that so?
3. Interviewees were asked about their opinion about the IT outsourcing experience.
4. Whether the senior managers think that the organization has a clear outsourcing framework, strategy and governance?
5. Whether the senior management thought that the outsourcing contract has a clear scope?
6. Whether the organization can evaluate the performance of the outsourcing company key resources and services or not?
7. Whether organization is facing any kind of risk while maintaining the outsourcing contract?
8. Whether organization is thinking that the outsource company can achieve service excellence and innovation?

Chapter 4: Case Study

4.1 About the Organization

A national organization that is wholly owned by the government in the United Arab Emirates, the organization is maintaining as a separate legal entity and has complete financial and administrative independence.

The organization is responsible for implementing government policy regarding the water and electricity sectors in the Emirates, including privatization; It supplies electricity and portable water to a population of more than 1.5 million over an area of 67340 sq km. The organization manages the affairs of five wholly owned subsidiaries that are responsible for miscellaneous activities in the utility industry.

Energy sustainability, operation and maintenance, water and electricity, distribution, network assets management, meter read, and assurance of the quality the services for supply of water and electricity is considered as a big challenge since establishment. Improvements in organizations were made in order to congregate challenges and to capitalize on upcoming opportunities by the expansion of its range of services.

Due to the quality of services, augmentation of highly developed IT infrastructure, continues provisioning of pioneering solutions, unvarying obligation to satisfy customer demand and fast response to market changes the organization have achieved momentous steps forward.

4.2 Organizations' Objectives

- 1- Development of values and systems for organizations and their implementation through actions and behavior that is necessary for sustainable success.
- 2- Development and deployment of policies, plans, objectives and processes so that strategy is delivered.
- 3- At an individual, team-based and organizational level, management, development and release of the full potential of the organization's staff.
- 4- Proper planning and management of external partnerships, suppliers and internal resources so that policy and strategy could be supported and the operation processes could be implemented effectively.
- 5- In order to fully satisfy and generate increased value for customers and other stakeholders, design, manage and improve processes.
- 6- With respect to customers, people and society as a whole, measure and achieve outstanding results.

4.3 IT Background

For a business on this type and scale IT has always been considered as a must for improving efficiency and effectiveness; also for ensuring the services quality. It was always considered as part of the organization culture for continuous improvement by utilizing the best available technology. It was always used to support the organization strategy and to improve standard services to customers.

In the past, the IT department was responsible for carrying out all IT functions and strategically important projects, which were intended to improve the organization's business and IT infrastructure. Moreover, the IT department was responsible for other normal duties like:

- Production and maintenance of IT strategies and plans;
- Helpdesk and desktop support;
- Audits and maintenance of hardware and software on a regular basis;
- Installation and configuration of new software and hardware;
- Development and design of software; selecting, testing, installing and support;
- Network support and management;
- Managing IT budget.

These projects and duties were performed by IT specialists of different professions and were controlled not only by IT department managers, but also supervised by the organization management board.

Company	Financials	HRMS	GIS	Maximo	Billing
Total Users	148	6512	891	2025	765

Table 4.1: summary of the organization enterprise applications in use

- Financial : e-Business suite is family of applications that automates and streamlines financial processes.
- HRMS : Allows automation of all aspects of workforce management
- GIS : Geographic data system for capturing, managing, analyzing and displaying all forms of geographically referenced information
- Maximo : Manage procurement, inventory and maintenance
- Billing : Manage bill generation, credit and collection, disconnection and all customer data

4.4 Outsourcing Decision

The organization outsourced its IT services which also included its IT department to “Y” third-party IT service provider in 2005 which is actually a joint venture between a local company and a global renowned IT outsourcing company. The organization went under an agreement for ten years with the third-party service provider. All IT functions, resources, and the skills possessed by the company were transferred to the “Y” third-party IT service provider according to the agreement, which was governed by a contract and Service Level Agreements (SLA).

4.5 Outsourcing Process

Based on political factors the organization has decided to outsource its IT function and has conducted an outsourcing process as follows:

- 1- Award IT outsourcing contract to a single source
- 2- Transmit all IT staff to the “Y” third-party IT service provider
- 3- Provide services in three phases:

- a. PMO: Present Mode of Operation

During this phase “Y” will provide the services that used to be provided by previous IT staff

- b. TMO: Transition Mode of Operation

During this phase “Y” will provide old services as well as upgrading IT environment

- c. FMO: Future Model of Operation

During this phase “Y” will implement and manage policies and application integration

4.6 Outsourcing Functions

The expected mission of the IT service provider is to follow the organization's mission in providing high quality, customer-focused information technology services and business solutions to the employees, ensuring the best conditions of all systems at all times.

The primary responsibilities are in the areas of providing information technology, developing and implementing recommended standards for information technology, developing and maintaining security policies and systems and coordinating the acquisition of information technology among all departments.

In more detail the third-party IT service provider scope of work are:

- 1- Enterprise Management (Cross Functional Services)
- 2- Centralized Services Desk Services
- 3- Operation Center Services
- 4- Security Services
- 5- Database Management

4.7 IT Governance Board

The organization has decided to form an IT Governance Team to closely scrutinize and administer the IT process with the intention of civilizing the service provided by the third-party IT service provider, and in particular to achieve the following:

- Administer the actions of the third-party IT service provider to guarantee smooth running and error-free work, in agreement with the organization's code of business ethics, accounting policies and internal control guidelines.
- Perform managerial operations and exercise financial authority at the level established by management.
- Development and evaluation of the IT business plan and the strategic plan, and make sure that all IT matters are in line with the IT standards.
- Set up evaluation guidelines, and observe and organize provided services as per SLA.

The underlying assumption of the relationship between the organization and the IT service provider is that of a partnership that jointly addresses the business cycle from strategic direction through system delivery, support and maintenance to service level measurement and continuous improvement.

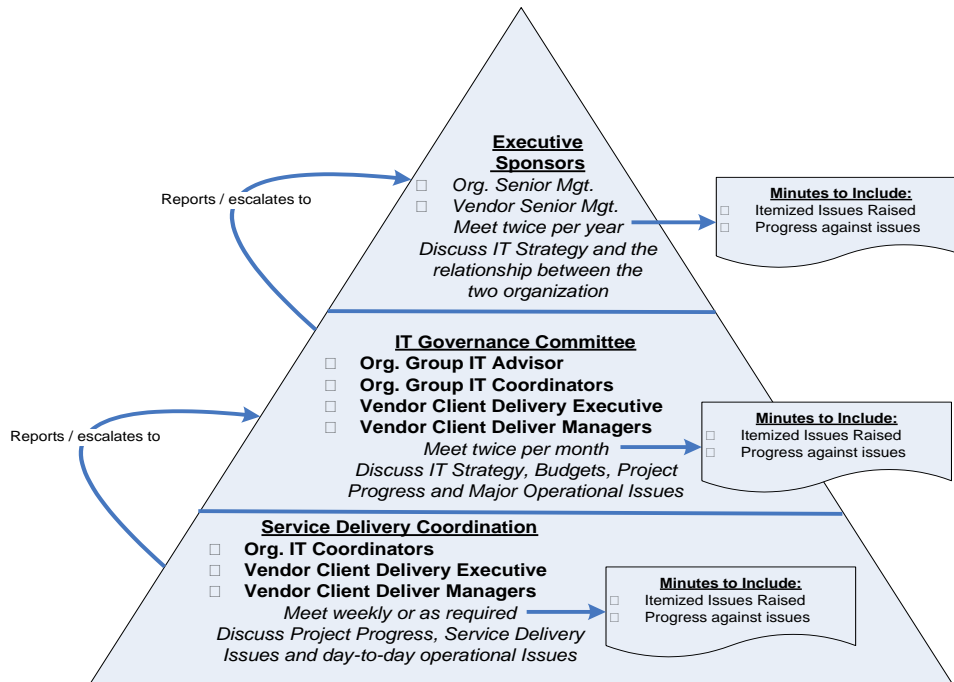


Figure (4.1) Governance Model that is Used in the Case Study

The literature review has shown that IT governance is an integral part of outsourcing since it determines how the services outsourced will be managed and how the contractors will offer the services. IT governance provides the framework in which the services will be offered and the terms and conditions for offering the services. Managing services from third-parties can be difficult tasks since it requires a proper understanding on how the third-party operates. Failure to implement effective IT governance can contribute to losses within the organization.

Chapter 5: Findings and Outcome

5.1 Contract General Concerns

In order to understand all concerns related to the case study, interviews were conducted with members of the organization IT Governance board which consists of the IT advisors and the Business Information Technology Managers of each group company on March 2010 with the intention of getting the senior management opinion of the outsourcing experience (Refer to list of interview questions in appendix "B"). Below are the major concerns and findings that were raised during the interviews:

- Question one asked whether senior organization managers think that IT services provider is providing IT services which are equal or better than services which used to be provided by old IT department and all management answered that the level of service being distributed was not up to the mark when compared with the time before the third-party IT service provider took over IT service.
- Question two asked senior organization managers think that the IT service provider is aware of the organization objectives and strategies and more than 80% of the interviewee answered that the third-party is working independently and is not aware of the organization plans, strategies or objectives.
- Question three asked interviewee their opinion about the IT outsourcing experience and 100% of interviewee agreed that outsourcing have not achieved its objective for many reasons, for example one of the major reason for outsourcing was accessing to global expertise while in reality the organization has not accessed to the expert and the vendor global partner consultants, the third-party IT service provider was too interested in selling new services to the organization. Also, the organization managers felt that the involvement level lowered in IT issues as they used to be when the organization ran the IT.

- Question four asked whether the senior managers think that the organization has a clear outsourcing framework, strategy and governance. The answer on this question was little difficult as most managers thought that the organization does not have a well structured for managing the outsource IT third-party while few of the managers where confused as the organization have appointed bodies to manage the IT outsourcing but they have not defined their structure officially in the organization chart. Moreover, interviewee thought that previously projects which were to improve the organization's IT Infrastructure would be chargeable by the third-party IT service provider while in the past it have been carried out by the various Team Leaders as day to day operation.
- Question five asked whether the senior management think that the outsourcing contract has a clear scope and the answer on this question was 100% no.
- Question six asked whether the organization can evaluate the performance of the outsourcing company key resources and services or not, and there was no clear answer on this question as some of the interviewee thought that this task should not be determined by the organization specially that the core reason for outsourcing from their perspective is to focus on the business core activity and to leave the IT activities for external firm who will take the responsibility of managing it from A-Z, while most the interviewee thought that the organization does not have a tool for measuring the outsource organization performance and they are relying only on the monthly progress reports which are provided by the IT outsourcing third party. Yet, more than 95% of the interviewee thought that the third-party IT service provider was not submissive with the concurrence in terms of what services were being delivered and to what customary.

- Question seven asked whether organization is facing any kind of risk while maintaining the outsourcing contract and the answer on this question was that the organization felt that several skilled, well-informed and account-experienced personnel were leaving the third-party IT service provider for one reason or another – the organization hired several resources back. Also, it was felt that asset supervision and tracking was not within the scope of the contract and also there are no internal resources accountable for this function.
- Question eight asked whether organization is thinking that the outsource company can achieve service excellence and innovation, and all interviewees thought that the third-party IT service provider is not inspecting or finding new IT innovations, which used to be handled and introduced by the old IT department.

Chapter 6: Data Analysis

This chapter presents the collected information and analyzes the data derived from the interviews. In addition, content analysis and financial figures are provided. This chapter provides answers to the following questions:

- While maintaining internal IT resources should the utility industry in the government sector outsource its information technology?
- What are the reasons and risks implicated in outsourcing information technology?

The main objective of conducting data analysis was to find solutions for the problem that the study was investigating, which were the challenges that companies and organizations are encountering when they outsource their IT services and how companies and organizations can manage their outsourced contracts. The types of data analysis were qualitative and quantitative analysis. The qualitative analysis was conducted to present the data that was collected in charts and graphs. This was then followed by a quantitative analysis that described the data that was presented.

6.1 Reasons to Outsource Information Technology in the Utility Industry

The reasons for outsourcing information technology operation for the government sector and in more particular in the utility industry, based on the analysed case study can be categorized according to their nature as strategic, technological, economic or political, and are accordingly presented below:

6.1.1 Strategic Reasons

A strategic reason for outsourcing information technology is that the core business activity of the utility industry in the government sector is the production and distribution of energy; thus outsourcing its IT department would give it a better chance of focusing more on its core business activity rather than on the non-core or supporting activities. Information technology has been existence for more years than the utility industry and because of that; it has mastered energy production and distribution. Concentrating on activities for which the utility industry in the government sector is appropriate reflects a competitive advantage. It leads towards transactional costs reduction, as IT firms are able to perform specific tasks at a lower price in an effective way.

Another strategic factor for information technology outsourcing is that it can facilitate processes such as mergers and acquisition, as the services provided by IT firms are based on high expertise and vast experience. In reorganizations, IT firms can support the government sector much more efficiently than the internal IT departments. The compact retort time the government sector could have when experiencing a change in capacity needs, is another deliberate reason for information technology outsourcing, similarly, the suppleness that can be obtained for the manageability of IT resources by outsourcing.

6.1.2 Technological Reasons

Access to leading-edge technologies is quicker and less costly, which is a significant advantage of outsourcing information technology by the government sector. The utility industry can trim down the technology-related risks, because by delegating IT to third-party merchants it can transfer the connected risks to them is another technological reason for outsourcing information technology. For instance, nowadays, one of the major risks related with information technology is the technological obsolescence due to the forceful nature of the information technology field. By utilizing external resources for IT operations, the government sector can tackle such risks in view of the resource-based theory.

6.1.3 Economic Reasons

As mentioned earlier in this paper, the predominant reason for outsourcing has always been the cost reduction. As the 'make-or-buy' decision targets optimizing the cost structures, the major advantage that the government sector can obtain by outsourcing information technology is cost reduction. The reduction in costs results from the economies of scale that IT firms are able to achieve. This enables IT firms to provide services at lower costs than those that the internal IT department of the government sector would incur. The cost reduction in the government sector would lead to the availability of utilities at a lower price to the consumers, which is one of the basic goals of any government. The external IT merchants tend to provide services more efficiently due to the accessibility of new technologies and their perseverance (due to financial necessity) to the outsourcing organization's satisfaction.

6.1.4 Political Reasons

Both public and private sectors have outsourced their IT to such an extent that it has been understood as a feasible irrevocable trend to be followed, which is a political reason for outsourcing information technology for the utility industry in the government sector is that many other industrial sectors. The managers are keen to subordinate the good of the department for the overall good of the company, which reimburses the public in general which is another political reason for outsourcing information technology.

6.2 Risks associated with Outsourcing Information Technology

Bahli and Rivard (2005) describe risk as “the notion of risk exposure, wherein the probability of occurrence of an undesirable outcome and the loss associated with it are taken into account”. This definition of risk is sufficient for the discussion that follows, as it accounts for all the negative outcomes of an action.

Based on the case study there were six themes or areas of concerns that were raised:

1. Strategy and Governance
2. Contract Scope
3. Key Resources
4. Security
5. Service Excellence and Innovation
6. Transformation

6.2.1 Strategic Risks

Strategic decision of Information Technology incorporates a number of risk factors that should be measured by the government sector. The complication of the external IT management in contrast to the internal management is a risk. To ensure that they enter into a predefined act agreement with the external merchants, the outsourcing company has to deal with contracts and procurement. Information technology outsourcing comprises appliance advancement, which requires strategy, plans, projects and budgets that have to be decided upon by the outsourcing company itself, depending on the external supplier, who might lack an understanding of the environment of the business' functions for such decisions, which might result in the loss of benefit to the products and services offered. Thus, the utility industry should also keep an internal IT department that is responsible for strategic decision-making and coordination with the external IT firms. “Each department is building its own IT capabilities to manage applications”.

According to (Dr. Baka, M. Aziz M 2010) the original intent to outsource IT was clearly focused on “Do IT Better”. However due to many changes in business environment since the organization outsourced the IT function; the “Business Impact” and “Commercial Exploitation” aspects have become more critical.

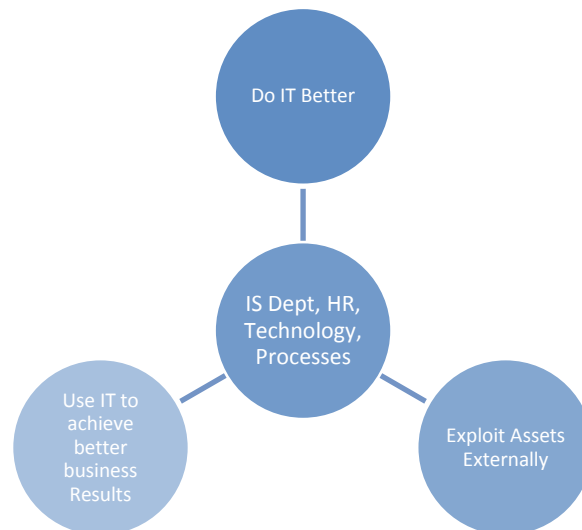


Figure 6.2.1 Strategic Intent of IT Outsourcing

6.2.2 Technological Risks

Sourcing out information technology also necessitate technological risks for the utility industry. Sourcing out IT operations can gradually lead to the loss of internal information technology knowledge since the core business of the utility industry is not information technology. At some point, the changes will be so noteworthy that the outsourcing company might no longer be able to comprehend them; the everlasting technological advancements will lead to invariable modification of IT by the external merchants. Government organizations might not put much effort into transferring the newly gained IT knowledge from their vendors, which might further lead to the loss of innovative capabilities of the government sector, as the external service provider will focus primarily on providing the requested services in order to meet the terms of their contract rather than innovating application ideas. The end user survey results have proved this risk as the organization was not even 40% satisfied with the technical support and applying innovation.

6.2.3 Economic Risks

One of the most important plans of the government sector in outsourcing information technology operations is to reduce costs but economic risks also pose a noteworthy threat. If the outsourcing company in the government sector improperly defines the determinants that will measure the presentation of the services provided by the external merchants, still the realization of the predetermined service levels is not definite (Cullen & Willcocks, 2003). Another risk factor is the opportunistic behaviour of the merchants. As mentioned earlier, within the scale of transaction cost theory, opportunism becomes a threat with limited number of vendors but entering into adequate contracts with the merchants can overcome this problem. The belowtable shows the changes in one of the organization group company expenditure over time, including the period of transition.

Year	2005	2006	2007	2008	2009
Budget	14,293,863.18	20,451,330.86	29,632,004.22	31,853,208.98	32,014,304.77
Actual	20,000,870.00	20,197,931.21	22,525,631	28,332,218.37	35,443,522.79

Table 6.2.3: IT Operational Expenditure

Table 6.2 shows that budget overruns is one of the greatest economic risks that organizations can encounter when outsourcing IT services and products. Budget overruns can occur when the contract was not properly negotiated or when the product or service delivered does not meet the organization's requirements. For example, Table 6.2 shows that the outsourcing budget for 2009 was 32, 014, 304.7 while the actual expenditure was 35, 443, 522.79, which results to an increase of 3429218.02 in the budget. This is a significant figure that should be properly controlled through adoption of appropriate governance of IT sourcing.

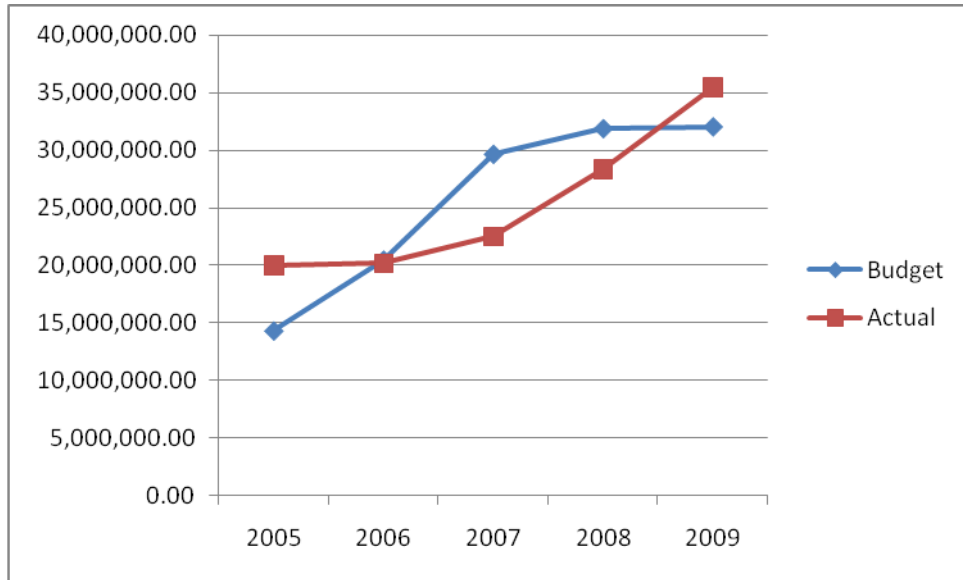


Figure 6.2.3: IT Operational Expenditure

These results show that operating and maintaining the IT department was cheaper before IT outsourcing rather than maintaining it after outsourcing was opted. The OPEX of the surveyed organization varied between AED 14 million and AED 35 million a year, which shows a difference of AED 21 million. The reason for this high variation is attributed to the additional cost of the IT service provider, which ranged from AED 11 million in 2005 to AED 23 million in 2009, which shows a difference of AED 12 million.

6.2.4 Political Risks

Political risks of information technology outsourcing are associated to the human resources of the outsourcing companies. The decision or consideration to outsource by a company in the utility industry can be viewed as a lack of trust in the specialized potential of the human resources of the company's internal IT department. The attenuation of personnel by the government sector could be instantly painted in the media when decided to outsource personnel. In order to outsource information technology, the decision to reduce the workplace from an emerging economy of low-wage countries can have a negative effect on the government organization's image both internally and externally.

In the case study which the research is focusing on the human resources that had transitioned from the organization to the IT service provider consisted of 158 employees. Those resources were playing different IT functions in the old IT department, which include and not limited to IT management, IT planning, system analysis, technical support and desktop support. Due to the lower cost of operation, the intention of the IT service provider was to move staffs who were occupying high position to a lower position. This augmented the total number of unsatisfied employees and in sequence had increased employee turnover.

Year	2005	2006	2007	2008	2009
Total number of Employee	158	150	117	108	103
No. of turnover	8	33	9	5	3
% turnover	5%	22%	7%	4.5%	3%

Table 6.2.4: Transmitted employee turnover

Relying on outsourcing can negatively affect the human resources of an organization. For example, Table 6.3 shows that the company has been losing employees since 2005. The company lost 8 staff members in 2005, 33 in 2006, 9 in 2007, 5 in 2008 and 3 in 2009. The loss of employees can create negative image of a company in the public domain since some of the employees who lost their jobs within the company are likely to comment negatively about the company. The number of employees is an important factor in determining the size of a company. This implies that companies that lose their employees are likely to become smaller. It is therefore important for organizations to ensure that when they outsource their services, the existing employees are kept busy by offering them an alternative work within the company.

6.3 Survey Results

The survey was conducted on May 2010 with the aim of finding out different opinions about the outsourced IT service provider. It was distributed to 200 end user employees (senior managers, operational managers, administrative, and engineers) and researchers have collected 20% complete survey out of the 200.

The output of this survey results showed that end users were not happy of the outsourced contract. The factors mentioned above were the ones whose ratings added up to the conclusion. The ratings ranged from poor to excellent. Results of the customer satisfaction survey for y group when summarized came out to be a score of 43.29, which was not even a 50%, so this depicts that the end users were not happy of the outsourced contract. The results of the survey conducted are mentioned in the table below:

RESULTS OF THE CUSTOMER SATISFACTION SURVEY FOR Y GROUP									
No.	Question	Poor	Fair	Average	Good	Excellent	N/A	Score	Response
1	Overall, you would rate Y'S performance as:	4	13	16	6	1	0	67	40
2	Innovation is the successful introduction of new ideas. The extent to which Y provides innovation that adds value to your business is:	14	11	10	3	0	2	40	40
3	Y'S ability to recommend IT best practices is:	9	9	15	6	0	1	57	40
4	Your access to Y'S senior management when required is:	0	0	0	0	0	40	0	40
5	Y'S ability to communicate effectively with you is:	1	11	10	14	3	1	85	40
6	Your ability to access Y services is:	0	0	0	0	0	40	0	40
7	The performance of the Y Service Desk is:	0	0	0	0	0	40	0	40

8	Y'S ability to provide skilled people with the right capabilities is:	1	10	16	12	0	1	78	40
9	Y'S efficiency(i.e. speed) in resolving service breakdowns is:	2	10	17	9	1	1	75	40
10	Y'S effectiveness (i.e. final result) in resolving service breakdowns is:	0	0	0	0	0	40	0	40
11	Y'S effectiveness in satisfying service requests is:	0	0	0	0	0	40	0	40
12	Y'S ability to meet deadlines is:	3	11	17	8	1	0	73	40
13	Y'S effectiveness in maintaining the availability of the IT infrastructure is:	0	0	0	0	0	40	0	40
14	The ability of Y people to collaborate with individuals in your organization is:	1	5	17	12	3	2	87	40
15	Y'S account managers' understanding of your business goals and objectives is:	4	9	8	5	2	12	48	40
16	Your confidence in Y'S ability to serve as a long-term business partner is:	3	15	9	9	0	4	60	40
17	How would you rate the improvement in the performance of Y'S over the last year:	4	9	13	9	1	4	66	40
TOTAL		46	113	148	93	12	268	43.29412	0

Table 6.3: Results of the customer satisfaction survey for (Y)

The acceptance and rejection of hypothesis was dependant on the survey results, score more than 60% was accepted and the score lower than that was rejected, and the hypothesis results are shown below:

Hypothesis Group 1: Outsourcing of whole IT activities is positively related to organization performances.

H1.1: Outsourcing of whole IT activities has positive performance effect on organization strategies- HYPOTHESIS REJECTED

This hypothesis is rejected because outsourcing of whole IT activities does not meet the end user and the organization expectation. The organization in this case was expecting that the external IT firms would support the government sector much more efficiently than the internal IT departments as the utility industry is mainly interested in serving citizens. Yet, the results of question number 15 and the feedback received during the questionnaire proved that end user were not satisfied from the outsourced IT service provider and that lead business to in-source back some IT functions and IT staff through the IT governance framework.

H1.2: Outsourcing of whole IT activities has positive performance effect on organization economies- HYPOTHESIS REJECTED

Based on the economic risk analysis the outsourcing of whole IT activities has negative performance effect on organization economies because it does not enable the organization save considerably as expected, moreover, the third party was considering all initiatives, requirements and projects as change in the contract scope.

H1.3 Outsourcing of whole IT activities has positive performance effect on organization politics- HYPOTHESIS REJECTED

Outsourcing of whole IT activities leads to complexity in management and lack of coordination in IT activities. It is therefore evident that negative political issues are bound to arise within the organization when some services are offered by a third party and other services were not defined clearly to be handle inhouse or by another external parties. Determining the most appropriate resource to handle IT activities may be quite difficult since the third party IT will often reject to handle most of the projects even when it does have the capacity to handle the activities.

H1.4 Outsourcing of whole IT activities has positive performance effect on organization technologies - HYPOTHESIS REJECTED

Based on the results of question number 2 on the survey, outsourcing of whole IT activities does not enable internal staff of the organization to acquire more information technologies by themselves but depend on external sources. The IT firm is a different organization and it may not be possible for the organization to understand how the firm conducts its activities. This may adversely affect the organisation technologies. For example, the organization will only be presented with the methodology in the contract and the proposed methodology may not be in line with the organization's technologies.

Although the main intension of outsourcing is to enjoy increased efficiency of the organization since its non-core functions are supposed to be performed efficiently by its technology partner. Outsourcing has lead to deterioration of technological advancement within the examined organization since the IT service provider was not capable of understanding the internal operations of the organization. Based on this fact, extra expense was occurring as the organization was forced to hire skilled staff who could support the different technology practices and activities that is provided by the third party.

H1.5: Outsourcing of whole IT activities has positive performance effect on IT managements- HYPOTHESIS- REJECTED

Managing IT activities and projects is usually a complex process that requires effective management strategies which should only be done by internal staff members because it is them who understand their organisation in and out. For example, the internal staff members are the ones who know when to acquire IT equipment, troubleshoot IT problems when they arise, manage IT contracts, etc. These activities cannot consume a large percentage of an organization's resources when properly managed.

H1.6: Outsourcing of whole IT activities has positive performance effect on IT Planning HYPOTHESIS REJECTED

IT planning should not be considered as a consultancy services since it involves evaluating the existing IT structures, projects and the needs of the organization and determining how the activities can be improved. IT planning directly affects an organization's budget and internal structures but it is better done internally than externally because it would be much cheaper and easier.

Just like IT management, IT planning is a complex that is not easy to conduct when two parties are working on a similar project. IT planning involves creating a management team, analyzing the situation, formulating strategic direction, identifying the initiatives and implementing the plan. Whole outsourcing implies that the planning process will be repeated for both parties and this creates duplications in the planning process. This is an indication that whole outsourcing leads to complexity in the IT planning process.

H1.7 Outsourcing of whole IT activities has positive performance effect on IT operation and delivery – HYPOTHESIS ACCEPTED

IT operation and delivery involves acquisition of IT products, services, delivery and maintenance. These are complex activities and it is important to assign a third-party to handle them. The third party can help the organizations and companies improve their performance by making faster delivery to their staff members and customers. Although the IT firm may be a different organization, the understanding of how this firm conducts its activities may not be hard once a good business relationship has been created between the two. It is, therefore, evident that outsourcing of IT activities will allow organizations and companies to concentrate more on their core businesses and of cause their internal activities.

The organization indicated that it enjoyed 87% collaboration with X and this is an indication that X was willing to provide the services. X was also 75% efficient in providing services and this justifies the need of outsourcing IT activities.

Hypothesis Group 2: Partial IT outsourcing is positively related to organization performance

H2.1: Outsourcing of partial IT activities has positive performance effect on organization strategies – HYPOTHESIS ACCEPTED

External IT firms does not support the government sector much more efficiently than the internal IT departments. As a matter of fact, the study showed that after resourcing some of the IT function back the organization achieved 66% satisfaction by relying on Y's services.

H2.2: Outsourcing of partial IT activities has positive performance effect on organization economies - HYPOTHESIS ACCEPTED

The organization seeks the day to day services of third-parties when it is need and engages its internal resources in managing and planning IT project. This is an indication that outsourcing of partial IT activities has a positive effect on the organization's economies since it contributes to decrease in IT expenditure.

H2.3 Outsourcing of partial IT activities has positive performance effect on organization politics - HYPOTHESIS ACCEPTED

Organization politics emerge from the internal management structure of a company or an organization. For example, competition over positions, salary increase problems, miscommunication, etc, are regarded as form of organization politics. Managing IT services from a third-party would relieve an organization from these kinds of problems. For example, the organization rated Y at 86% in communication with the organization after the establishment of the IT Governance. This is an indication that managing an outsourcing IT services can help in resolving organization politics.

H2.4 Outsourcing of partial IT activities has positive performance effect on organization technologies - HYPOTHESIS ACCEPTED

Based on the results of question number 2 on the survey, The external IT entity is mostly limited to the technology that has already been implemented within the organization. The organization also has to rely on a skilled staff that can recommend IT best practices in term of introducing new technologies.

H2.5: Outsourcing of partial IT activities has positive performance effect on IT managements - HYPOTHESIS ACCEPTED

Managing IT activities and projects is usually a complex process that requires effective management strategies. For example, IT activities involve acquiring IT equipment, troubleshooting IT problems, managing IT contracts, etc. Even though an organization may have an IT department and a few trained staff in IT, the activities mentioned above can consume a large percentage of an organization's resources if not properly conducted. Besides, it is not easy to find an IT manager who can manage all IT activities since some activities require coordination with senior management and other departments. Assigning these activities to internal IT resource helps the organization to improve its management since it will only monitor and control what the third-party is doing. The third party will be assigned with all the responsibilities as far as issues to do with IT are involved.

H2.6: Outsourcing of partial IT activities has positive performance effect on IT Planning - HYPOTHESIS ACCEPTED

In addition to improving the overall organization management, outsourcing of partial IT activities helps in improving the performance of IT planning. IT planning should not be considered as a consultancy services since it involves evaluating the existing IT structures, projects and the needs of the organization and determining how the activities can be improved. IT planning directly affects an organization's budget and internal structures. It is therefore important for the organization to in source IT planning so that it can streamline its IT activities.

H2.7 Outsourcing of partial IT activities has positive performance effect on IT operation and delivery - HYPOTHESIS REJECTED

Outsourcing of partial IT activities has a negative performance effect on IT operation and delivery since it involves managing the operations and deliveries of the IT infrastructure and the day to day operation. IT operation and delivery involves acquisition of IT products, services, delivery and maintenance. These are straight forward activities that can be understood easily this is because the organization is already used to the operations and deliveries of the IT firm.

Chapter 7: Conclusions and Recommendations

7.1 Conclusions

Currently, businesses' dependence has increased on information technology, to acquire IT services at a very low cost, outsourcing information technology has become a more accepted business practice, and outsourcing is not a new idea and has existed for a very long time.

Organizations have come to understand that information technology is one of the key assets that can be used to add value to the products and services being obtainable. Value is added to the core business as the firm can focus on the core business instead which helps give them a strategic edge over competitors. It is concluded from the research results that the focus on the importance of developing an internal IT resource that performs strategic tasks can be considered as a new definition of smart-sourcing such as planning, project management, and determining budget, procurement, establishing a contract and managing the external IT firms and should be implemented. However, mismanagement of the contract may engage the organizations in a lot of corrective measures caused by the external IT firms hence the organizations end up wasting their time and other resources. This problem can only be contained by ensuring there is a competent IT Manager who is in charge of all the contracts carried out by the outsource vendor.

Reducing costs should not be the only agenda with which corporate executives must be concerned with in the modern dynamics of the business world. Organizations should understand that information technology is one of the key assets that can be used to add value to the products and services being obtainable. Outsourcing helps firms to decrease their costs of operation by a large proportion (Nonaka & Toyama, 2007). This also is supposed to add value to the core business as the firm can focus on the core business instead which helps give them a strategic edge over competitors.

Outsourcing helps in cost reduction and running businesses operations effectively. The strategic, technological, economical and political reasons with reference to the transaction cost and resource-based theories suggest that the government sector should outsource its information technology operations to external IT firms. However, businesses might encounter vital risks in different areas like data security, privacy, losing the company IT talented staff and moreover businesses might encounter serious issue like loss of control on managing IT.

Some risks can be encountered only if there was no strong foundation of how to manage, maintain and control the outsourcing service provider. It is concluded from the research results that the focus on the importance of developing an internal IT resource that performs strategic tasks can be considered as a new definition of smart-sourcing such as planning, project management, and determining budget, procurement, establishing a contract and managing the external IT firms.

7.2 Recommendations

The following recommendations are based mainly on results and findings of this research, but to some degree they are also influenced by insights gained through the literature review.

7.2.1 Smart-sourcing: A New Approach to Business Process and Innovation Excellence

Ideal smart sourcing can be implemented using partners who can help businesses to focus on its core function, balance risks and opportunities, lower costs, increase innovation across all of its processes. This approach is presented to the business process, in order to concentrate on the issues that pose risks in outsourcing information technology. If the greatest advancement of the nineteenth and twentieth century were made possible by taking the worker to the place where there was work in order to fuel manufacturing and enhance productivity. The excellence of the twenty-first century is in getting value of the price which they businesses are paying to the external IT firm. Enhancing value can be achieved by having a better understanding for different organization scenario combined with required skills, functional needs, infrastructure and most importantly business strategies and visions.

The quest for innovation has led to a much deeper revolution that can be referred to as smart-sourcing. Smart-sourcing from the researcher point of view must involves collaboration of the outsourcing organization with its service providers to join their competencies to facilitate ground-breaking excellence, not just in terms of information technology processes but across the entire spectrum of business activities. One of the most important quick wins that businesses need to consider while outsourcing that they do not need to re-invent the wheel. If organization is qualified in some IT function such as project management, IT planning and IT management then the organization must not demolish its internal strengths as that might associate unexpected risks if the outsourced service provider was not capable of administrating those functions.

7.2.2 Recommendation for Further Study

One question for future research is how businesses and vendors can share their perceptions and balance their roles and objectives. This area of research can be used to develop a new theory for smart-sourcing. Future research could investigate how organization can engage innovation in outsourcing while maintaining core objective of outsourcing which is cost saving. Such field research could improve business understanding of having clear vision of “Who should think?” and “Who should execute”? Due to lack of time I could not cater to the opinions of different firms, they might have a different view, so in future by diversifying the sample size we could get a better picture.

8.0 Appendices

8.1 Survey Questions and Results

8.2 Interview Questions

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