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Title: Evaluating the Impact of IT Outsourcing in an Organization.

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DECLARATION

We hereby declare that this project is written by us and it is a record of our own research effort. It has not been presented before in any application for a degree or any reputable presentation. All borrowed ideas have been duly acknowledged by means of referencing and quotation marks.

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Acknowledgement

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ABSTRACT

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Title: Evaluating the impact of IT Outsourcing in an Organization.

Introduction: The continuous advancement of technology has increase the intensity of competition between organizations whose operations or core competence is based on information technology. Consequently this has force them to decide to either outsource or insource in order to survive the competition.

Purpose: The purpose of this thesis is to describe and analyze the reason for IT outsourcing, the factors to consider before outsourcing, how to manage a successful IT outsourcing and the impact of IT outsourcing on an organization which consists of the advantages (benefits) and disadvantages (risks) of IT outsourcing.

Research question: What are the impacts of IT outsourcing taking into consideration the reasons and factors for its successful implementation?

Method: This thesis combines description with exploration and analysis. We used both primary data and secondary data. Due to time constraint and the importance of detail information for this research, we adopted a semi-structured interview which allows the respondent to give their thoughts and detail insight on some of the questions. Taken into consideration the time allotted to the interview in the research schedule, we were still able to work with articles, books, news release and website materials as secondary data sources.

Conclusion: From the theoretical framework, a lot of emphasis was placed on cost saving or reduction as the reason for IT outsourcing but the empirical study and analysis indicate that the reasons for IT outsourcing is now shifting from cost saving or reduction to organization need to have access to advance technology and expertise although cost saving is still an important reason why organization adopt IT outsourcing.
Moreover, from the theoretical framework and empirical study of this thesis we could deduced that in order to implement a successful IT outsourcing the organization needs to consider some major factors such as identifying the need to outsource (why outsource IT?), what IT activities or infrastructure to outsource, identify the various steps and processes (such as contracts) involve in IT outsourcing, identify potential risks and possible outcome, criteria for choosing the appropriate IT outsourcing vendor and evaluate the down time and time required to find the most appropriate IT outsourcing vendor. We observed that organizations which spent more time in planning the IT outsourcing experience more success rate compared to those who spent less time.

Furthermore, from the theoretical framework and empirical study, we found that IT outsourcing has a major impact on an organization and its impact is dependent on how the factors for its success is managed. Although there are a lot of notable benefits of IT outsourcing but IT outsourcing also entails risks such as the hidden cost, security and confidentiality issues, service quality issues and system or operation disruptions just to name a few. In an attempt to mitigate risk, a company engaging in an IT outsourcing will try to protect its core activities and outsource non-core activities for security and confidentiality reasons. Though companies vary with respect to their operations, they will be optimistic to experience benefits that will outweighs any potential risks or cost in an IT outsourcing since the main objective of any company is to maximize profit and minimize cost.
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1.0 Introduction

The continuous advancement of technology has increased the intensity of competition between organizations whose operations or core competence is based on information technology and consequently this has forced them to decide to either outsource or insource in order to survive the competition.

There is a growing need for organizations to interact and integrate with their customers, suppliers and business partners in order to gain competitive advantage. Achieving this interaction and integration without losing sight on the core competence of the organization is very difficult. Information technology outsourcing is considered as one of the viable ways for firms to save cost, provide service quality, reduce lagging IT performance in order to keep pace with the IT trend and access appropriate skills while allowing the organization to concentrate on the core competence of the business. (Applegate et al. 2007, pp.440)

In 2000, IT outsourcing accounted for approximated 30% of IT budgets spent and research by the Gartner group who noted that “worldwide IT outsourcing market is expected to increase from $180.5 billion in revenue in 2003 to $253.1 billion in 2008 at a compound annual growth rate of 7.2%”. (Lim, Richardson, Zmud, 2007)

1.1. Purpose

The purpose of this thesis is to describe and analyze the reason for IT outsourcing, the factors to consider before outsourcing, how to manage a successful IT outsourcing and the impact of IT outsourcing on an organization which consists of the advantages (benefits) and disadvantages (risks) of IT outsourcing.

1.2. Research question

What are the impacts of IT outsourcing taking into consideration the reasons and factors for its successful implementation?
1.3. Topic Relevance

According to Bartel, Lach, Sicherman (2008), as the continuous pace of innovations in technology increases, executives have less time to amortize the sunk cost (costs that can not be recovered once incurred), cost of purchasing technology thus this has made insourcing relatively more expensive than outsourcing. On the other hand, an organization cannot afford to outsource all its IT activities since IT activities are their core competence. The reasons for outsourcing IT have moved from a simple cost reduction to an emphasis on improved business performance. Also, new IT technologies are not only vital to the business, but increasingly become the core competence of an organization.

Alexander and Young (1996) interviewed several manager about their views on IT outsourcing and reported that “the most typical attitude expressed is a mixture of enthusiasm and fear: enthusiasm for outsourcing as a means of controlling costs and of developing simpler, more flexible organizations with new sources of competitive advantage; fear that failure to recognize the risks will lead to major mistakes”.

This thesis will help executives, managers, chief information officer (CIO), and entrepreneurs in their decision making regarding IT outsourcing. It will also be of help to determine under which conditions it is more appropriate for organization to implement outsourcing, the benefits, factors and drawbacks to consider before implementing outsourcing. The paper will also provide some of the competitive advantage an organization can gain by successfully managing its IT outsourcing strategy.
2.0 Theoretical Framework

Definition/Overview
The term sourcing is used to describe the concepts of outsourcing and insourcing. From this point of view, outsourcing and insourcing are the two types of sourcing strategies (Kotabe et al. 2007, p.38). Organizing production means that a firm has to decide whether to produce intermediate inputs internally (Insourcing) or whether to purchase these inputs from external suppliers (outsourcing). Several firms are acquiring the same set of inputs both by carrying out in-house production and as well purchasing from external suppliers. This will depend on the company’s capabilities (or resources) or the relevance in conducting both sourcing strategies (insourcing and outsourcing). (Du et al. 2009, p.215)

2.1 What is IT Outsourcing?
Kishore et al (2003) defines IT Outsourcing as “the contracting of various information systems functions such as managing of data centers, operations, hardware support, software maintenance, network, and even application development to outside service provider”. In other words, the service provider or vendor will be responsible for the effective operations of the IT portfolio outsourced to them. Similarly, Lankford and Parsa (1999) defined outsourcing as the procurement of products and services from external organization or sources while Pati and Desai (2005) classify IT outsourcing as a special form of outsourcing that supplement in-house IT development activities and defined IT outsourcing as “the transfer of an organization’s staff, IT infrastructure, processes, applications and other IT-related activities to an external entity that possesses the capability to provide such services”.
Furthermore, Arnold (2000) quoting Buhner and Tuschke (1997), states that “Outsourcing is an abbreviation for ‘outside resource using’”. He further analyzes the construct (“outside resource using”) stating that “outside means creating value not within the own company”. Furthermore, Picot et al (1996), state that outside means the integration of external partners for the main aim of creating and adding value to the end users or customers. This outside construct is a strategic perspective on external resources. Sharpe (1997), state that outsourcing is the handing over of an organization’s non core activities to an external provider. In other words, it is the turning over of an IT infrastructure or applications to an external source.
According to Penrose (1959) viewing an organization from a resource-based view, simply states that an organization is a unique complex of resources and knowledge; and needs external resources in order to compete successfully. It is necessary for an organization to identify these external resources but making use of them to reinforce its position in competition is critical. (Arnold, 2000)

Arnold (2000) develops a general outsourcing model to identify the components involved in outsourcing.

As shown in Fig.1 above, outsourcing is divided into four major elements namely:

1.) **Outsourcing subject:** This is an organization that plans to either adopt outsourcing or insourcing and needs to make strategic sourcing decision.

2.) **Outsourcing object:** These are the processes or process results that might be outsourced and the organization activities are categorized into company core activities (which is the core business or competence of the organization), core-close activities (these are the activities that are directly linked with the company core activities), core-distinct activities (these are supporting activities), and disposable activities (activities with general availability). (Reichmann & Palloks, 1995)
3.) **Outsourcing partner:** These are all possible service providers or vendors for the activities considered for outsourcing.

4.) **Outsourcing design:** According to Arnold (1998), the basic design for outsourcing decision is based theoretically on Williamson’ institutional economics and ideas of Coase (1937) and Common (1931). They identified three major governance structures for economic activities namely: market, hierarchies, and hybrid.

**2.2 Reasons for IT Outsourcing or Drivers for Outsourcing**

There are many reasons why an organization chooses to outsource all or part of its IT infrastructure or operations. According to Harland, Knight, Lamming and Walker (2005), one of the motivations for outsourcing is that “it can free up assets and reduce costs in immediate financial period”. His opinion regarding the motivations for outsourcing is also supported by Rimmer (1991) who points out that organization which outsource part of their in-house operations experienced a significant savings on operational and capital costs. According to Harland et al (2005) quoting Walker and Webber (1984, p.373), transaction cost economics (TCE) which is the basis for make or buy decisions is determined mostly by cost-effective options which includes “the uncertainty associated with executing the transaction and uniqueness or specificity of the assets associated with the goods or services transacted”. According to Sparrow (2003), IT outsourcing can help reduce capital expenditures; Rather than investing capital funds in IT resources, organization can choose to outsource as an operational expenditure. Apart from the short-term cost savings stated by Harland et al (2005), Prahalad and Hamel (1990) states that organization choose to outsource because it enable them to focus on their core activities. In support of Prahalad and Hamel (1990) view, Robin (2005) point out that every company has limited resources and are faced with difficulties on how to efficiently deploy these resources to add value to their organizations and this has opt executives decision to adopt IT outsourcing which will in turn help the organization to focus its limited resources on their core business functions. In addition to Robin’s views, Sparrow (2003) states that IT outsourcing will help organization focus on information interpretation and exploitation of IT systems rather than focusing on data procession and maintenance work. According to Douglas and Scott (2005), there are situations where an organization may want to outsource some of its current core
functions if changes in the nature of the business lessen the importance of those core functions, or to avoid major IT investment on less important functions and in worst case if the organization survival depends on such functions, this can make the organization find a vendor or supplier that can perform the function better and outsource it.

Furthermore, other researchers observe that as outsourcing providers continue to advance in IT infrastructure and operations, outsourcing to them will allow organizations to exploit and benefit from their more advance technologies. (Lamming, 1993; Venkatesen, 1992; Greaver, 1999) Douglas and Scott (2005) state that the common reason for outsourcing IT functions that require high skill levels such as engineering and computer services is that IT outsourcing can help an organization have an access to new skills. Furthermore, Douglas and Scott (2005) use a scenario where by a company may discover that the current skill set for its in-house IT staff is inadequate for a particular function and this might have adverse effect in the long run; this problem can be solved by outsourcing that function to a vendor who is specialized in that function and is highly competent in current procedures and technological advances. Moreover, Levy (2005) in a study carried out by Kotabe et al.(2007, p.38) asserts that the core driver of the latest form of global outsourcing is the “increasing organizational and technological capacity of firms in decoupling and coordinating a network of remotely located external suppliers performing an intricate set of activities”. As a result executives should understand and appreciate the main roles that engineers, product designers, and production managers and purchasing managers just to name a few, play in global sourcing strategy development.

According to Applegate et al., (2007, pp. 442) the following factor can drive IT outsourcing:

- Breakdown in IT performance (e.g. outsourcing due to failures of major systems development).
- Intense Vendor Pressures (resulting from aggressive expansion of operation and sales force).
- Simplified General Management Agenda (delegating the complex and time-consuming tasks and concentrate on core competencies).
- Financial Factors (e.g. save cost of investing in IT infrastructure; reducing IT staff, etc.)
• Corporate culture and eliminating an internal irritant (e.g. tensions between IT departments and employees that use IT; making strategic changes can be difficult for IT departments).

According to DiRomualdo & Gurbaxani (1998), motivation for outsourcing are shifting from a primary focus on cost saving or reduction to an emerging emphasis on improving business performance and competitive advantage. With the continuous advancement of technology and the role IT plays in an organization has posed some difficulties for organizations to acquire and manage all the capabilities and skills necessary to cope with the emerging technology while still focusing on the core competence of the organization, which has made them to adopt IT outsourcing. (DiRomualdo & Gurbaxani, 1998)

2.3. Factors to consider before IT outsourcing

According to Douglas and Scott (2005), the size and the type of an organization has no correlation to the success of IT outsourcing rather the success of IT outsourcing depends on certain factors such as planning, execution (including training), selection of the right partner(s), and flexible service level agreement with the outsourcing vendor.

IT outsourcing has a lot of benefits but organization that plans to adopt IT outsourcing needs to consider a number of things such as why outsource in the first place, and what are involve in managing a successful IT outsourcing. Furthermore, the organization needs to evaluate and identify the strengths, weaknesses, and the basic needs of its IT department in comparison to the strategic benefits they can achieve through outsourcing. (Whitepaper, 2002) Douglas and Scott (2005) states that before any organization or firm want to adopt IT outsourcing, they should consider these four (4) points stated below critically:

• There is a need for an organization to evaluate its current processes or needs from a fresh perspective in order to decide what to outsource and what not to outsource.

• Finding a suitable service provider is time-consuming, complex process and requires a thorough knowledge of the vendor landscape, including capabilities, delivery processes, quality of work, and ability to innovate.

• In order to evaluate the value of an outsourcing relationship such as contracts and service level agreements (SLA) will require technical, legal, and process expertise and in most
cases in order to have control over the outsource process may require local presence at the vendor’s location and knowledge of the outsourcing vendor’s culture.

- “Managing uncertainty and mitigating risks requires formulating an alternative strategy while setting up the outsourcing relationship, and planning in advance for business process migration to a second vendor in the event of failure”.

According to Power, Bonifazi and Desouza (2004), when an organization wants to outsource its IT, they should understand the long-term ramifications of IT outsourcing to their overall business strategy and address questions such as “do we know what our core competencies are?, Can our customers, suppliers, and competitors validate our core competencies?, can IT outsourcing be a core piece of strategy that lets the organization achieve its desired result?, and do we have the data to identify potential areas that may be candidates for outsourcing?”.

In similar view with Power et al (2004), Harland et al (2005) states that an organization should determine how much of its IT operations, processes, infrastructure, and skills they want to outsource because outsourcing all the IT activities may take away all the internal competence, skills, and learning relating to performing those activities which will in turn make in-sourcing problematic.

Han et al. (2008) states the importance of firm’s capability role in successful IT outsourcing. The firm’s capability includes IT capability (Technical and Managerial capabilities), organizational relationship capability and vendor management capability. It is essential that an organization assess its IT capability so as to be able to leverage the outsourcing of vendor’s technical expertise and effectively monitor vendor’s work.

The motivation which usually determines the decision goal of an organization to outsource its IT function typically includes: improved quality of service, cost reduction, and access to recognize expertise and new technologies among others. Since there are considerable risks associated with any business change, many studies according to Zhang et al. (2008) have focus on some possible factors that can influence IT outsourcing success and failure practice such as: **IT configuration, IT function, vendor-client relationship, IT outsourcing contract management, and knowledge sharing and transferring between the service receiver and provider.**

- **IT configuration and IT function:** At the pre-decision stage of an IT outsourcing, a firm should be able to identify the gap of IT resources and IT capabilities. The resources of a
firm can be classified into three categories: IT infrastructure (the tangible resource consisting of the physical IT infrastructure components, IT human resource (comprising the technical and managerial IT skills), and IT-enabled intangible resources (include special knowledge asset, customer orientation and synergy among others. On the other hand there are three types of IT capabilities namely: value, competitive and dynamic capabilities. They possess the attributes of value, heterogeneity, and imperfect mobility which enhance their role in competitive advantage. While value capability means the ability to assemble and deploy IT infrastructure, competitive capability involves IT management capabilities such as IT business experience and the relationship infrastructure which are not only valuable but also difficult to transfer since it is heterogeneously distributed. On the other hand, dynamic capabilities try to achieve congruence with the changing business environment by reflecting on the importance of renewing the organization’s capabilities and the intensity of the organizational learning. It is also necessary to evaluate the internal capabilities before deciding whether to outsource or not. Pre-decision is a necessary condition to carry out outsourcing decision since the identification of the IT gap will help to; understand the IT role and value for the firm’s strategy, and differentiate the core and non-core IT resource and capability. Therefore an understanding of IT requirement for business vision is relevant. (Zhang et al., 2008)

• **Vendor-client relationship:** Before choosing an appropriate vendor(s) in order to create a vendor-client relationship, a series of selective activities should be made by the firm such as; selective outsourcing scope (determined by the combination of the resource based theory (RBT), transaction cost theory (TCT), IT asset specificity, uncertainty and internal IT capability)], and the identification of the candidate outsourcing projects. There are two types of vendor model; single vendor and multi-vendor. The choice of a vendor model type will depend on the total cost and benefit of transaction that will be calculated. Items to consider in this calculation include; the cost of information processing service, set-up contracting cost, the cost of monitoring and coordinating the activities of the vendor(s), and switching cost. (Zhang et al.2008)
• **IT outsourcing contract management:** After choosing an appropriate outsourcing vendor model, the next thing to do is to formulate a contract in the relationship which is a vital thing to do and should include; outsourcing duration, service level agreement (SLA) price model among others. To build a contract entails much investment such as energy, time and skilled personnel. “The transaction cost theory argues that any contract will inherently be incomplete”. This is to avoid any unforeseen events that may occur after the contract specification. As a result formulating a contract should be done at a very high level of detail, or the contract should be made self-enforcing as far as possible when specifications are not feasible. It should be noted that “firms must align their IT contracts with their strategic intent and strive to strike the right balance between risks and rewards”. (Zhang et al., 2008)

• **Knowledge sharing and transferring between the service receiver and provider:** At the implementation decision stage, a firm should now focus on how to monitor and facilitate contract operation. Here, relationship management and contract management are the key issues. To achieve communication including formal and informal model between the parties becomes more important and as well necessary. Organizations should put in place relationship manager or joint committees to maintain a good inter-organizational relationship. (Zhang et al., 2008)

According to Zhang et al., (2008), the decision process of IT outsourcing (according to a typical IT outsourcing process) can be classified into four stages, namely: the pre-decision stage, the selective decision stage, the implementation decision stage and the outcome decision stage. According to Zhang’s findings based on previous research, the transaction cost theory (TCT) and the resource-based theory (RBT) were used to develop a framework for IT outsourcing decision process, particularly discussed at the pre-decision stage and the selective decision stage.

**2.3.1 Transaction Cost Theory perspective (TCT) for IT Outsourcing Decision**

The assumption here is that firm will seek to minimize costs associated economic transaction. Production costs and transaction costs are the two types of cost identified in TCT. In TCT, if other companies produce their products more efficiently, then applying outsourcing will reduce
production costs. On the other hand with the degree of contract negotiation and regulation, transaction costs may increase. Thus transaction cost analysis will influence a company’s decision to choose whether to outsource or not. Based on the TCT arguments, transaction costs are the result of asset specificity, transaction frequency, and behavioral and environmental uncertainties. TCT will provide a framework to evaluate internal production against external outsourcing option. Previous research has shown that asset specificity has more impact of transaction cost than transaction frequency and uncertainty. Asset specificity in IT outsourcing is the ‘degree of uniqueness of such assets as the hardware, software, or human skills required by clients’ outsourced information systems’. Asset that has high-specificity is a major driver of sourcing decisions whereas non-specific assets do not create a hold-up dilemma and can be related with lower transactions costs. However, a major deterrent to outsource is uncertainty, and the most important reason to outsource is the level of technical skills. Therefore deterrents of information system outsourcing decision are high IT asset specificity, and high uncertainty shown in fig.2 below. (Zhang et al., 2008)

**Fig.2 TCT for IT outsourcing decision**

Source: Zhang et al. (2008)

### 2.3.2 Resource-Based Theory (RBT) for IT Outsourcing Decision

According to the resource-based theory, the firm is considered as a set of resources and capabilities that can obtain sustainable, beyond normal returns to the extent of possessing valuable, rare, imperfect imitability and non-sustainability resources, and that there is the existence of isolating mechanisms to prevent the dissemination of resources belonging to competing firms. The relevance of the RBT is that an organization should take into consideration how to obtain and hold unique resources that are important to continuing operations and productions, with the smallest amount of investment. For an organization to attain its strategic
objectives, it is essential to acquire resources externally to fill the gap that exist between current internal capabilities and the required abilities to arrive at strategic goals. Lack of resources can be made up by strategic alliances or purchases, and outsourcing is one of the method of complementing the organization’s capabilities and resources by helping to advance the organization’s strategy to make better use of its capabilities when confronted with external opportunities. Information technology nowadays is considered as a strategic resource in most organizations. Safeguarding a company’s competitive advantage depends on its IT capabilities. IT capability is defined as ‘‘its ability to mobilize and deploy IT-based resources in combination or co-present with other resources and capabilities’’. Several companies do not have the IT capabilities needed to accomplish their goals and they cannot wait for years to develop their internal capabilities. The RBT recommended that non-core assets and competencies should be identified and outsourced while on the other hand core strategic resources should always be kept for in-house development. (Zhang et al., 2008)  

The diagram below summarizes the RBT perspective for outsourcing decision.

![Diagram showing RBT perspective for outsourcing decision](image)  

Fig.3. RBT perspective for outsourcing decision  

Source: Zhang et al., 2008
2.4. Managing a successful IT Outsourcing

According to Han et al. (2008), a firm’s resource capabilities and interaction process have a major impact in the successful management of IT outsourcing.

According to Applegate (2007, pp. 450), in order for IT outsourcing to be successful, there must be an ongoing management of the relationship between both parties. Consequently four critical areas were suggested to manage the relationship between the vendor(s) and the organization in question (that is the outsourcer). These are:

- **CIO function** which consists of partnership/contract management, architecture planning, emerging technologies and continuous learning.

- **Performance measure**: although a realistic measurement of outsourcing success is generally difficult, Applegate et al. (2007, p. 451) stated that companies or organization have to develop performance standards, measure results and interpret them based on the purpose and actual outcomes of their IT outsourcing.

- **Mix and Coordination of tasks**: Most large systems development projects are difficult to coordinate and monitor especially when client firm's and outsourcing vendors are on different geographical locations. Applegate et al. (2007, p. 451) stated that it is very important and critical to manage the dialogue across the two organizations as the resulting effect will lead to successful outsourcing.

- **Customer-vendor interface**: The sensitive interface between client firm's and outsourcing vendors is very important. Outsourcing does not mean delegation of client firm's final responsibility to the outsourcing vendor and both parties need to manage the agreement and relationship.

Similarly, Han et al. (2008) focused on outsourcing relationship and the process theory as well as the resource-based view theory of the IT resource capability and a conceptual model was developed to examine the casual structure of capability, process, and relationship in IT outsourcing.

Furthermore, in analyzing the impact of a firm’s capability on the outsourcing process, Han et al. (2008) identified the firm’s resource capability factors and as a result developed a first order factor analysis of resource capabilities in the interactions between the outsourcer and the
provider. This was based on the fact that relationship intensity should be affected by the IT outsourcing process.

The major difference between Han et al. (2008) and Applegate et al. (2007) is that, they integrate the corporate IT resource and capabilities theory with social exchange theory. They adopted a process theory approach (which is a set of sequential, necessary conditions. It ensures that the set of outcomes do not occur unless the specified set of events in a chain is fulfilled) to explain the impact of the client firm’s resource capability on outsourcing success.

The interaction process is introduced as an intervening construct on the casual chain between the firm’s resource capability and relationship intensity in their model. The model emphasizes three basic processes (Exchange, Communication, and Cooperation) in the development of a close relationship between the service providers and client firm.

![Diagram](image)

**Fig. 4 Result of the model analysis using LISREL**: Source: Han et al. (2008)

The result of the model analysis shown above is useful in providing a managerial perspective on how to develop a successful outsourcing relationship with vendors. It identified the interaction process as a key intervening variable that affects relationship intensity and evaluates the firm’s resource capability as the first stage before the interaction process. The outcomes indicated that information sharing, communication quality and collaborative participation influenced the relationship intensity with outsourcing vendors positively and this was achieved by adopting the process theory and a resource-based view at the same time.
2.5 Impact of IT Outsourcing

2.5.1 Advantages/Benefits:

Most companies consider their information systems being at a lower risk if managed and developed by external experts who are competent rather than doing the job by themselves with little or no resources and competent expertise. It is also seen that General Managers, far from reducing their control, may find that they have an even more control over their external suppliers than they do over the internal experts they replace. This is because at times they prefer to deal with vendor(s) (externally) than dealing with their internal competencies (staff expertise). One reason for this is because of the outsourcing contract that exists in the relation. Though formulating a clear cut contract entails several difficult issues, there is that desire to build client relationships in order to stay in business, also taken into consideration the reduction of political intrigue. Managing supplier relationships in the quest of integrating a company’s various services will result to a significant scope for the company to outperform another competitor, hence achieving a proprietary competitive advantage. (Alexander 1996, p.117, 118)

The following can be identified as some of the benefits/advantages of IT outsourcing:

**Access to advanced technology:**

The existence of a vendor(s) in an IT outsourcing relationship provides organizations with advanced technology and competent personnel. Typically, client organizations start considering an outsourcing arrangement when planning an important upgrade of IT services. Consequently they are likely to get the “‘best-of-the-breed technology services’” from vendors that can support them in achieving their missions. (Chen 2003, p.10)

**Greater ability to meet the demand for skilled IT personnel**

Chen (2003, p.10) was of the opinion that one of the major problems facing most companies in carrying out large IT projects is the shortage of IT personnel.

It should be noted that good software development skills and expertise are often difficult to find, and outsourcing will therefore enables firms to have access to such needed capabilities and
resources, in order to fill the gaps that exist in their current capabilities, hence supplementing in-house competences. (Koh et al. 2007, p.89)

**Quick deployment**

Another benefit of IT outsourcing over in-house service provision is quick deployment. As far as new and significantly expanded IT services are concerned, outsourcing sometimes has an edge over in-house provision. In-house provision requires a lot of capabilities to afford such as hiring a large number of new IT personnel, establishing the IT infrastructure, integrating old and new systems, and making procurement decisions for different components that go with the new services. This can be a difficult and discouraging task. On the other hand, vendors can provide a packaged solution that contains all these shortcomings mentioned in in-house provision. If the vendors are experienced in some unique type of services, many systems are tested and potential loop holes can be predicted, and as a result the deployment time can often be less than half of the time needed for in-house provision. (Chen 2003, p.10)

**Flexibility in the choice of technology and modules**

Fixation on the purchased technology is one of the major drawbacks of in-house IT service provision. Obtaining IT equipment for in-house service provision is a large capital investment and because of financial reasons this sometimes forces the continued use of outdated (or obsolete) technology. IT outsourcing will therefore provides client organizations the flexibility in the choice of technology and modules. Since the nature of technology is “fast-changing”, outsourcing allows for better risk management. As a result the risk is shifted to the vendors as they are in charge for technology upgrades. (Chen 2003, p.11)

**Improvement of cash flow management**

Usually, outsourcing assist client organizations with cash flow management. Generally there is a “fee-for-service” basis assigned to the client organization for any outsourcing arrangement and subsequently the client organization is waived from a large initial capital investment. (Chen 2003, p.11)
Cost savings

This is another reason for IT outsourcing. Economies of scale may tolerate vendors to offer services at a lower rate as compared to in-house IT service provision. Several client organizations may share the same IT infrastructure as the vendor. The cost incurred in maintaining a specialized support crew is also shared by a number of client organizations. The cost savings are particularly significant when acquiring a highly specialized service, which is generally expensive. (Chen 2003, p.11)

2.5.2 Risk/Disadvantages:

According to Patry, Rivard, and Aubert (1998), the contractual arrangements and decisions required to make a successful IT outsourcing agreement entail risks. As a result risk is something very difficult to avoid in any contractual arrangement just like any other business ventures such as new product development and IT/IS projects. Therefore, it is important to forecast the necessary risks and implement measures that will prevent them from occurring. According to Harland et al (2005), one of the motivations for outsourcing is that “it can free up assets and reduce costs in immediate financial period” but Lacity, Willcocks, and Feeny (1995) states that hidden costs are the biggest problem of IT outsourcing and according to Earl (1996), transition costs (which includes setup costs, redeployment costs, relocation costs and parallel-running costs) and management costs (which refers to the human resources invested in managing an outsourcing contract) can increase quite rapidly over a time period and most companies underestimate these two types of cost. Earl view was highlighted by Cross (1995) who states in his report the experience of British Petroleum (BP) who outsourced its IT operations to several vendors and later discovered that IT outsourcing contracts “required far more management resources than they were worth”. In addition to transition costs and management costs, Nelson et al (1996) identified the contracting costs (which include “costs related to searching and evaluating the appropriate vendor, benchmarking the services offered, specifying the legal terms of contracts and resolving disputes”) and Lacity et al (1995) also identified other type of hidden costs such as maintenance on personal computers, sales tax on equipment purchases which can add up to huge sum of money and the client assumed these hidden costs were included in the contract but were not.
Furthermore, failure by outsourcing vendors to deliver services against its premises is considered dangerous to the company and handling over critical activities to the outsourcing vendor can be a detrimental effect because it can lead to an unhealthy balance of power. Customers will also find it costly and time-consuming switching to alternative supplier as they will be powerless in the face of price increase or the inflexible atmosphere that the supply could provide. Outsourcing is disadvantageous to an organization’s core competencies since the opportunity to learn and develop new combinations may be diminished, hindering the going-concern of the organization. (Alexander 1996, p.117, 118)

The risks or disadvantages of IT outsourcing can further be classified as follows:

**Loss of control over service quality**

The primary concerns that IT outsourcing can expose client organization to is the loss of control over service level and service quality. In the work of Chen (2003, p.11), Ware (2002) stated that Once a client organization outsourced an IT service, factors such as the project scope, costs, technologies, and IT direction of the client organization, may be beyond direct management control usually available to in-house IT service provision. When a huge gap exists between the client organization’s knowledge of services and the vendor, control is particularly not an easy task. Consequently client organizations have difficulty in the validation of any claims that vendor organizations make, since they may not have access to vital information possessed by the vendor for claim validation. (Chen 2003, p.11)

**Possibility of compromised security**

Another risk factor here is security. Because of outsourcing, critical data may be stored in a facility outside the client organization, and the network-connected information systems of the client organization and those of the vendor may subsequently be subjected to security threats. Another risk here is that if the major technology infrastructure of vendors is shared by multiple client organizations, there can be many sources of security threats. When security practices are problematic, security can also be an issue. In addressing security threats, factors such as personnel training and background screening of IT personnel are essential. (Chen 2003, p.11)
**Possibility of service disruption due to instability of vendors**

Many client organizations consider stability of vendor as a major risk factor. The survival of vendors unlike public organization is dictated by the rules of the marketplace. Vendors that supply IT services may go out of business without clear warning signs (Chen 2003, p.11). Besides, the external provider’s personnel may also change over the course of a long term outsourcing effort, and it might be difficult to replace personnel that will proceed with the challenge. As a result the outsourcing effort will fall apart consequently leading to chaos throughout the company that hired the vendor. To resolve this situation the company has to spend additional resources such as time, energy, and money in search for a new vendor before starting the outsourcing process all over again, hence making the whole process complicated. (DeRose 1995, p.53)

**Increased complexity of managing and monitoring the outsourcing contract**

It should be noted that the complexity of relationship management is usually underestimated. The management and maintenance of an outsourcing contractual relationship poses some risks. Client organizations need to transfer their personnel and technical resources to the vendor after the contract is negotiated. If not prepared properly, client organizations will likely run into problems of poor service quality or a mismatch between organizational needs and service provided by vendors. IT outsourcing arrangement may function efficiently but not in alignment with the organization’s strategic goals if the transfer of knowledge about the existing system or needs for a new system at various levels of the organization is ignored or done poorly. Lack of a proper monitoring of service level by the client organization may put it at risk of running into major service disorders. The lack of a joint problem-solving mechanism and poor communication may cause missed opportunities for early detection of problem and continuous improvement. (Chen 2003, p.11-12)

**Prolonged procurement process**

Complicated rules and procedures could exhaust the resources of a client organization. The opportunity of changing technology and leadership is another complication associated with the lengthy procurement process. The key portion of technology identified in the preliminary
contract may have to be re-examined and some of the terms of service may need to be re-negotiated. If the procurement process takes a long time, this may affect leadership. All of these add to the challenge of maintaining a good working relationship with vendors. Furthermore complex rules and procedures can create barriers to entry and limit the selection available to client organizations. (Chen 2003, p.12)

**Union pressure and budgetary uncertainty**

IT outsourcing is even more complex in the public sector when union pressure and uncertain budgetary support are present. The treatment of IT personnel concerned in an IT outsourcing arrangement has a great impact on the success of the project. (Chen 2003, p.12)
3.0 Conceptual Framework

Summarily, the following diagram is used to explain the concepts used in the theoretical framework discussed above

![Diagram of IT Outsourcing Framework]

Fig. 5. A deduction from the theoretical framework.
Source: Authors

From the diagram illustrated above an organization has to consider some factors and reasons (as shown in the theoretical framework above) before engaging in an IT outsourcing arrangement, and these reasons and factors need to be evaluated accordingly for the interest of the organization.

Moreover, there are risks and benefits associated when an organization is involved in any given activity and consequently an organization will definitely experience some benefits and or risks as a result of managing an IT outsourcing arrangement. The intensities of such risks and benefits will depend on how successful an organization manage its outsourcing deal, hence risk and rewards experienced after an IT outsourcing agreement will depend on managing it. Therefore
the impact of IT outsourcing will depend on the factors and reasons to consider before outsourcing and how an IT outsourcing process is managed taken into consideration the potential risks and rewards attributed to it.
4.0 Methodology

This section covers the methodology we have used in collecting our data in order to answer the research question. This chapter is composed with the following sections; research purpose, research approach, research strategy, data collection, sample collection and the methods used to increase the validity and reliability of our thesis.

This thesis combines description with exploration and analysis. According to Saunders et al (2000), an exploratory research method seeks to find out “what is happening; to search new perspective; to ask questions and analyze findings with a view from a new perspective”. Furthermore, Fisher (2007, p.140) states that exploratory research may involve the use of different research methods such as interviews, observation, documents and so on.

According to Zikmund (2000), descriptive research tries to determine the answers to how, where, who, what, and when questions. Paul & Eriksson (2001) also note that descriptive research purpose is most appropriate when the problem is well structured and organized.

Reynolds (1971) states that explanatory research purpose try to improve a precise theory which can enable a researcher to make empirical generalizations found in the descriptive stage more clear.

4.1 Research approach

Denscombe (2000), identified two main research approaches namely qualitative and quantitative research approaches and the usage of either of them depends on the type of studies been conducted.

IT outsourcing is consider to be a complex area and with the limited time and resources available to us, we have decided to use a qualitative research approach. (Holme & Solvang, 1991)

4.2 Research strategy

According to Foster (1998), the criteria used in selecting research strategy depends on the type of research question, the extent of control the researcher has over the behavioral event and the degree of concentration on contemporary as opposed to behavior event.

We conducted interviews as we believe our research is contemporary since we are focusing on current issue and currently doing it now and do not have control over the behavioral events.
4.3 Data Collection

A research can be based on primary data which is data collected for the first time and for a specific purpose and secondary data which is data collected from previous or other researchers. Secondary data is said to be easier and realistic to implement compare to primary data because of the easier accessibility of already existing data. (Lundahl & Skavad, 1992)

There are three main forms of interviews namely open or unstructured interview where an interviewer engages in informal conversion with the respondent and the respondent leads the direction of the interview; pre-coded or structured interview is where the interviewer reads from a prepared script and is not expected to deviate from it; and Semi-structured interview is in between open interview and structured interview, the interviewer has a schedule to remind them of the main issue that need to be covered by the respondent. (Fisher, 2007)

We used both primary data and secondary data. Due to time constraint and the importance of detail information for this research, we adopted a semi-structured interview which allowed the respondent to give useful and detail insight on some of the questions while still keeping with the time allotted to the interview in the research schedule and using articles, books, news release and website materials as secondary data.

4.4 Selecting the Sample and Interview Method

Saunders et al (2003) describe a type of sample selection known as convenience sampling which is easily available to find information and it is best applicable when working with interviews.

We sent interview request letters to seven (7) companies in Sweden, three (3) companies in Nigeria and two (2) companies in Pakistan. Three (3) out of the seven companies in Sweden, one (1) out of the three (3) companies in Nigeria responded but none from Pakistan. All the companies who responded to our interview request have adopted full or partial IT outsourcing. We email the interview questions to our respondents before conducting interview using Skype.
4.5 Data analysis

According to Yin (2003), the process where the researcher examines, tabulates tests, categorizes, or combines the evidence to address initial propositions of the study. Miles and Huberman (1994) further state that data analysis also consists of three simultaneously different activities stated as follows:

- Data reduction; in this stage, data is focused, selected, abstracted, simplified and transformed. The objective of data reduction is to arrange the data so that conclusions can be verified and drawn accordingly.
- Data display: Here, data is concentrated and organized in a compress way to make it simpler for the basis of drawing a relevant conclusion (ibid).
- Conclusion drawing and verification: at this phase, the researcher begins to make comments and clarify issues on the research. This is accomplished by noting regulations, patterns, explanations, configurations, casual flow, and propositions. (ibid)

This thesis utilized these three activities in its data analysis process. Data reduction was made based on relevant concepts that relate the thesis, and present a comparison between empirical data and theories obtained. To make things as easy as possible, the process of linking theories to empirical data, and draw conclusions was conducted in a way that different theories and data was matched and categorized.

4.6 Validity and reliability

Validity determines how the researcher can measure and what they are supposed to measure. While on the other hand reliability is about how the research methods are reliable when conducting a research. Validity and reliability are two measurement instruments showing how high the level of trustworthiness and credibility the research has. (Yin, 1994)

In order to validate our thesis, the literatures used was collected from experts in the field of IT outsourcing and the information scrutinized while empirical data was also collected from companies that has adopted IT outsourcing for at least three years.
Furthermore, to improve the reliability of our findings, open ended questionnaire was designed to enable the interviewee to make his own judgment based on the questionnaire. This is because restricting the interviewee just to select options (closed questions) from questions will not be appropriate to answer the research questions. Moreover, haven made reliable contacts in the company, and instructing them how we will keep their information strictly for confidentiality purpose, they promise to give us the relevant information pertaining to the research questions.

4.7 Method Critique
The issue of outsourcing is very broad and complex. Several researchers and authors have written about outsourcing from different perspectives but we will be focusing on IT outsourcing. Due to time constraint we used semi-structured interview and secondary data in collecting data used for our analysis. Our analysis and conclusion are limited because only four (4) out of the eight (8) respondents we requested for an interview accepted. Also due to the time constraint, we were unable to visit the company for the interview as they are outside Vasteras and Sweden so we conducted the interview via Skype. Given a much longer time would have been useful as it would have enabled us source for more companies and probably visit the company location for the interview.
5.0 Empirical Study

5.1 Findings

All the companies who responded to our interview request have adopted full or partial IT outsourcing.

5.1.0 List of Responsive Companies

5.1.1 Mazda Motor Corporation Europe (Sweden Branch)

Brief Company Background:

Mazda Motor Corporation was founded in 1920 under the name Toyo Cork Kogyo Co., Ltd and was later changed to Mazda Motor Corporation in 1984 from Toyo Kogyo Co., Ltd (1927). They manufacture and sell passenger and commercial vehicles and related parts and their major markets are in Japan, North America and Europe. (Linkedin, 2009)

The sales of Mazda vehicle in Europe started in 1967 and later established its local affiliate company in Germany in 1972. (Mazda in brief, 2008)

IT Outsourcing Findings:

Mazda Motor Europe has been involved in IT outsourcing for more than five (5) years now and more recently in April 2009, they have decided to outsource its server management for its Windows, Linux server environment and HP-UX. This includes the management of the enterprise IT security, consolidation and standardization of Mazda’s technology, maintenance and hardware provision for Mazda’s server and data storage environments.

The main reasons for outsourcing are aimed at reducing operational costs, create and manage standardized IT infrastructure, increase technology infrastructure availability for Mazda which will in turn improve their service quality to their customers, partners or dealers and using the outsourcing vendor’s best practices to enhance the scalability and stability of their technology. In response to what they consider before outsourcing its IT infrastructure, they access all the factors that can lead to the success and failure of achieving their goals for IT outsourcing.
The factors they considered before outsourcing is as follows:

- They start by evaluating and determining which part of their IT infrastructure and operations if outsource will reduce the operational costs and estimate the overall cost of outsourcing.
- They analyze the downtime involved when transferring their IT infrastructure operations to the outsourcing vendor and its effect on the general operations of the core business of the company.
- They identified and analyze the possible risks in outsourcing and analyzed possible solutions. They were mainly concern with security of their data and the control of operations between them and the service provider(s).
- Determine the type of contracts and other resources involved in IT outsourcing and if they can be aligned to meet the company objectives. They also determine the risks and benefits of outsourcing to several IT outsourcing vendors and a single outsourcing vendor.

After the implementation of IT outsourcing, the notable benefits achieved are as follows:

- Centralized and standardized IT infrastructure and operations which has help to enhance their services to their customers and dealers in 40 markets across Europe. This has in turn contributed to the increase of sales in Europe and export from Japan.
- Reduction of IT staffs and capital cost of acquiring IT infrastructure.
- Access to an innovative mix of technology and IT experts which have helped in improving their service quality to their customers at a lower cost.

In response to the difficulties and risks experienced in pre-outsourcing, in the process of outsourcing and post outsourcing, the main difficulties face during pre-outsourcing was finding the appropriate IT outsourcing vendor who has the capabilities to provide the services needed and issues of security and confidentiality. The major difficulties and risk faced during the IT outsourcing process was the number of man hours it required to get things started and the transition disrupted the company’s operations, for instance, most of the times the server was down and it affected the information flow between different Mazda’s outlets in Europe and their
rest of their office branches. In post outsourcing period, after evaluating how much capital was invested in the whole process, it was discovered the total capital invested in the outsourcing process outweigh the estimated amount plan for the project but the management of Mazda’s Europe expect to gain the extra capital invested in few years time. In order to manage a successful IT outsourcing, Mazda Motors transferred its IT staff to the outsourcing vendor location. They also try to maintain a close relationship by having a quarterly meetings and share information with the vendor company.

5.1.2 Zenith Bank Plc Nigeria

Brief Company Background:

Zenith Bank Plc was established in May 1990 and started its operations as a commercial bank in July same year. In 2004, they became a public limited company and were listed on the Nigerian Stock Exchange with over one million shareholder base. (Zenith Corporate information, 2009)

IT Outsourcing Findings:

With the advancement of information technology and with the introduction of GSM and high speed internet broadband in 2003, the bank deploys a wide area network facility which was outsourced to Cyberspace Network in 2006. Cyberspace Network operates a 3.5GHZ fixed wireless access license which provides a communication backbone for Zenith Bank Plc and its subsidiaries.

The main reasons for adopting IT outsourcing is to have access to advance technology and IT expertise aimed at providing efficient services to their customers using their newly introduced product and services offering such as internet banking, e-business solutions including local and international card business, online bills payment and joining the international banking community in E-banking services.

The main factors they considered before outsourcing is as follows:
Since the use of IT in the banking sector in Nigeria was at its early stages in early 2000, the major factor considered before IT outsourcing was the issue of security and confidentiality.

- Determine how much bank information the outsourcing vendor can have access and how to properly regulate those access without breaching the bank policies. This will involve several outsourcing contracts.
- Determine the cost of adopting IT outsourcing compared to insourcing.
- Evaluate and analyze the best strategy to use in controlling and monitoring the whole outsourcing process and managing the relationship between the bank and the outsourcing providers.

After the implementation of IT outsourcing, the notable benefits achieved are as follows:

- Access to an advance technology and IT experts which have helped in improving their service quality to their customers.
- Successful launching of new products and services offering such as internet banking, e-business solutions including local and international card business, and online bills payment.
- The IT outsourcing has provided an efficient wide area network communication between the bank and its customer. This has change internet banking and e-business solutions (local and international card business) from core-close activities (these are the activities that are directly linked with the bank core activities) to core activities.

The major difficulty experienced was finding a competent and trust-worthy IT outsourcing vendor. Security and confidentiality of bank information is still the major potential threat to their IT outsourcing. Since internet banking and e-business solution has become one of the bank core competences, any breakdown of network communication might result to losing customers and money. In response to how to successfully manage their IT outsourcing, the bank has implemented the use of different contracts and work closely with the outsourcing vendor by forming an alliance. Furthermore, both organization share information on a regular basis and the
all contracts are re-evaluated annually to make sure they meet the bank and government regulations.

5.1.3. Volvo Cars

Background of Volvo

In 1920s, cars made a real breakthrough in Europe and in the USA. As a result of a jubilee exhibition of 97 cars that took place in Gothenburg in 1923, many people in Sweden had great interest in cars at that time. Consequently, Volvo which is a Latin word that means “I roll” was founded and immediately started on April 14, 1927, and at that time the first car known as ÖV4 with nicknamed Jakob left the factory in Gothenburg. Quality was of supreme importance to the men who founded Volvo and this basic concept formulated back in 1926 still applies and will continue to apply to Volvo’s way of making cars. Volvo is recognized globally because of this basic principle of quality, hence the demands for Volvo cars around the world is up to expectation. (Volvo history, n.d)

IT Outsourcing findings in Volvo

Globalization, stiff competition in the automobile industry, promoting a focus on Volvo’s core IT activities and the need to cut down the company costs (such as: labor costs and other costs) are the major reasons for Volvo to outsource its IT activities. The supplier of Volvo known as WM-data is a Nordic IT company, now owned by LogicaCMG, is responsible for the development and administration of the Tivoli systems management platform used by Volvo Cars. The WM-data is now implementing new services to make existing systems more efficient and secure since the supplier already supports Volvo’s European server platform. Volvo Cars first outsourced its IT systems to WM-data in 2002, and this was to promote a focus on their core business. The WM-data IT company has developed solutions across the company in order to enable a better server management, authorization administration and developing solutions to meet regulations such as Sarbanes-Oxley. Attaining flexibility, maintaining profitability and cost reduction are some other factors considered by Volvo for doing outsourcing. Moreover the choice of a vendor by Volvo car is also a very important factor because it entails a lot of capabilities such as the vendor expertise to render the appropriate services. Besides, what are to
be considered in formulating a corresponding contract in the relationship is also taken into consideration.

After the implementation of IT outsourcing, the notable benefits achieved are as follows

- Through Outsourcing Volvo cars will experience a high level of domain expertise to the industry which will ease offering predictability, high availability and operations reliability in the company. Because of the numerous benefits gained by Volvo from hiring a vendor, they experienced a good relationship with their vendor and as well extend the contract of WM-data in 2007 to continuously provide services to Volvo cars.

- Promoting a high level of domain expertise in Volvo enhances high availability of services, improvement of offering predictability and also enhancing operations reliability. Therefore the existing systems are more efficient and secure enabling better server management

On the other hand the following disadvantages were noted:

- The exposure of Volvo IT infrastructure to the vendor resulting in security threat.

- Because Volvo car is globally located in many countries, it is difficult to find the appropriate vendor that will equal the task of complimenting the disruption of the company IT operations due to transition, hence making it difficult to integrate both the old and the new system.

- Transferring some of Volvo employees to the vendor is also a problem as employees are assigned task which are totally different from their previous experience, hence a psychological blow to them.
5.1.4 Saab AeroTech

Brief Company Background:

Saab AB, (originally was an acronym for "Svenska Aeroplan Aktiebolaget") was founded in 1937 with the main aim of manufacturing domestic military aircraft in Sweden and Saab AeroTech is a business unit of Saab AB. They provide a broad range of aftermarket products and service for life-cycle support of platforms and customer systems with capabilities in areas such as the commercial, civil security and defense sectors. (Saab, 2009)

IT Outsourcing Findings:

They have been involved in IT outsourcing for the past 11 years and they have outsourced the maintenance of its IT systems and software development. Their main reason for IT outsourcing is to save cost and help focus their other resources on their core business. Before considering outsourcing, they established a six (6) months program to help them determine which area of their IT operations and systems to outsource, determine the total price that will be involve in the process, determine the type of IT outsourcing (full or partial outsourcing), determine the suitable service provider(s) or outsourcing vendors, identified the different contracts involve in order to determine if they are suitable and meets company goals, other terms and conditions were also evaluated. Some of the notable benefits achieved include the reduction of IT staffs, reduction of capital investment on IT activities, access to highly skilled IT experts and high rating of their IT services by customers compared to their competitors. The major difficulties experienced include finding the right service provider who understood their needs and possess the capabilities and competence to offer full services in operations and infrastructure. At the initial stage, they had problems with the coordination and control of outsourcing vendor’s activities which was later resolved by forming a combine team with the outsourcing vendors and the adoption of different contracts.
5.2 Analysis

As shown in the empirical data obtained above, the companies interviewed have similar reasons for outsourcing, factors they considered before outsourcing and the management of IT outsourcing but differ in benefits (advantages), difficulties they experienced in pre-outsourcing, during the outsourcing process and post-outsourcing; and the potential risks. The differences in benefits, difficulties and potential risks are due to the differences in business areas and industry.

5.2.1 Reasons for IT Outsourcing or Drivers for Outsourcing

As shown in the empirical data, the major reasons why the companies interviewed (Mazda Motors, Zenith Bank Plc, Volvo Cars, Saab AeroTech) adopted IT outsourcing is to reduce operational costs, have access to advance technology and experts, focus on core business and create a standardized IT infrastructure. This reasons is in agreement with Harland, Knight, Lamming and Walker (2005), who stated that one of the reasons for IT outsourcing is to “free up assets and reduce costs in immediate financial period” and this view was also supported by Rimmer (1991) who points out that organization which outsource part of their in-house operations experienced a significant savings on operational and capital costs. Moreover, According Harland et al (2005), Prahalad and Hamel (1990), organization choose to outsource because it enable them to focus on their core activities and this view was supported by Robin (2005) who states that every company has limited resources and are faced with difficulties on how to efficiently deploy these resources to add value to their organizations and this has opt executives decision to adopt IT outsourcing which will in turn help the organization to focus its limited resources on their core business functions. In addition to Robin’s views, Sparrow (2003) states that IT outsourcing will help organization focus on information interpretation and exploitation of IT systems rather than focusing on data procession and maintenance work. Furthermore, other researchers observe that as outsourcing providers continue to advance in IT infrastructure and operations, outsourcing to them will allow organizations to exploit and benefit from their more advance technologies (Lamming, 1993; Venkatesen, 1992; Greaver, 1999) and finally, Douglas and Scott (2005) state that the common reason for outsourcing IT functions that require high skill levels such as engineering and computer services is that IT outsourcing can help an organization have an access to new skills. From all the articles reviewed, much emphasis
was placed on saving cost as the major reason for IT outsourcing compared to other reasons but from our findings, the major reason for IT outsourcing is for an organization to have access to advance technology and IT expert.

5.2.2 Factors to consider before IT outsourcing

As stated by Whitepaper (2002) earlier, IT outsourcing has a lot of benefits but organization that plans to adopt IT outsourcing needs to consider a number of things such as why outsource in the first place, and what are involve in managing a successful IT outsourcing? Furthermore, the organization needs to evaluate and identify the strengths, weaknesses, and the basic needs of its IT department in comparison to the strategic benefits they can achieve through outsourcing. (Whitepaper, 2002)

As shown in the empirical data, the factors to each of the company consider before outsourcing are similar and are also similar to Douglas and Scott four (4) critical points stated below

• There is a need for an organization to evaluate its current processes or needs from a fresh perspective in order to decide what to outsource and what not to outsource.

• Finding a suitable service provider is time-consuming, complex process and requires a thorough knowledge of the vendor landscape, including capabilities, delivery processes, quality of work, and ability to innovate.

• In order to evaluate the value of an outsourcing relationship such as contracts and service level agreements (SLA) will require technical, legal, and process expertise and in most cases in order to have control over the outsource process may require local presence at the vendor’s location and knowledge of the outsourcing vendors culture.

• “Managing uncertainty and mitigating risks requires formulating an alternative strategy while setting up the outsourcing relationship, and planning in advance for business process migration to a second vendor in the event of failure”.

Each of the companies interviewed, consider these four critical points stated above but differ in the approach use in determining these factors. For instance Saab AeroTech started a six (6) month IT outsourcing evaluation program by forming a team which comprises of the IT department staffs, head of each of the departments and top management to evaluate and analyze
the IT outsourcing process, benefits and risks while Mazda Motors (Europe) adopted the same strategy as their headquarters in Japan which fasten the implementation of IT outsourcing.

5.2.4 Impact of IT Outsourcing

5.2.4.1 Advantages/Benefits

The advantages and/or benefits of IT outsourcing seen from our empirical review (findings) concerning the companies interviewed (Mazda Motor Corporation, Zenith Bank Plc. Nigeria, Volvo cars, and Saab AeroTech) are the access to advance technology, the ability to meet the demand of expertise, the reduction of costs and they also experienced flexibility in the technology supplied by their vendor. This is in line with Chen (2003, p.10) who cited that the outsourcing company is likely to get the ‘best-of-the-breed technology service’ since they will be provided with advanced technology, competent personnel who will be able to integrate the old and the new IT system, hence quick deployment. According to Chen (2003, p.10) one of the major problems facing most companies in carrying out large IT projects is the shortage of IT personnel. It should be noted that good software development skills and expertise are often difficult to find, and outsourcing will therefore enables firms to have access to such needed capabilities and resources, in order to fill the gaps that exist in their current capabilities, hence supplementing in-house competences with skilled personnel (Koh et al. 2007, p.89). In addition, Economies of scale may tolerate vendors to offer services at a lower rate as compared to in-house IT service provision; hence the cost savings are particularly significant when acquiring a highly specialized service, which is generally expensive. This will therefore improve the cash flow management. IT outsourcing will also provides client organizations the flexibility in the choice of technology and modules. Since the nature of technology is “fast-changing”, outsourcing allows for better risk management. As a result the risk is shifted to the vendors as they are in charge for technology upgrades. (Chen 2003, p.11)
5.2.4.2 Disadvantages/Risks

On the other hand, the disadvantages and/or risks of IT outsourcing seen from our empirical review (findings) concerning the companies interviewed (Mazda Motor Corporation, Zenith Bank Plc. Nigeria, Volvo cars, and Saab AeroTech) are the difficulties in finding the appropriate vendor(s), security and confidentiality of the company IT infrastructure, disruption in the company operations due to transition and the formulation of an agreement binding the relationship is also a constraint. As far as the disadvantages and/or risks of IT outsourcing are concerned many client organizations consider stability of vendor as a major risk factor. The survival of vendors unlike public organization is dictated by the rules of the marketplace. Vendors that supply IT services may go out of business without clear warning signs (Chen 2003, p.11). Besides, the external provider’s personnel may also change over the course of a long term outsourcing effort, and it might be difficult to replace personnel that will proceed with the challenge. As a result the outsourcing effort will fall apart consequently leading to chaos throughout the company that hired the vendor. To resolve this situation the company has to spend additional resources such as time, energy, and money in search for a new vendor before starting the outsourcing process all over again, hence making the whole process complicated (DeRose 1995, p.53). The management and maintenance of an outsourcing contractual relationship poses some risks. Client organizations need to transfer their personnel and technical resources to the vendor after the contract is negotiated. IT outsourcing arrangement may function efficiently but not in alignment with the organization’s strategic goals if the transfer of knowledge about the existing system or needs for a new system at various levels of the organization is ignored or done poorly. Lack of a proper monitoring of service level by the client organization may put it at risk of running into major service disorders. The lack of a joint problem-solving mechanism and poor communication may cause missed opportunities for early detection of problem and continuous improvement. Because of outsourcing, critical data may be stored in a facility outside the client organization, and the network-connected information systems of the client organization and those of the vendor may subsequently be subjected to security threats. Another risk here is that if the major technology infrastructure of vendors is shared by multiple client organizations, there can be many sources of security threats.

(Chen 2003, p.11-12)
6.0 Conclusion

In a fast growing and changing markets with an increase pace in globalization, competition increases and becomes even tough. With this increase in competition a greater demand is assigned to manufacturing and service companies. To meet this demand posed by customers entails a lot of capabilities and resources that may be difficult to afford, and one way of achieving these resources is by engaging in IT outsourcing.

From the theoretical framework, a lot of emphasis was placed on cost saving or reduction as the reason for IT outsourcing but the empirical study and analysis indicate that the reasons for IT outsourcing is now shifting from cost saving or reduction to organization need to have access to advance technology and expertise although cost saving is still an important reason why organization adopt IT outsourcing.

Moreover, from the theoretical framework and empirical study of this thesis we could deduced that in order to implement a successful IT outsourcing the organization needs to consider some major factors such as identifying the need to outsource (why outsource IT?), what IT activities or infrastructure to outsource, identify the various steps and processes (such as contracts) involve in IT outsourcing, identify potential risks and possible outcome, criteria for choosing the appropriate IT outsourcing vendor and evaluate the down time and time required to find the most appropriate IT outsourcing vendor. We observed that organizations which spent more time in planning the IT outsourcing experience more success rate compared to those who spent less time.

Furthermore, from the theoretical framework and empirical study, we found that IT outsourcing has a major impact on an organization and its impact is dependent on how the factors for its success is managed. Although there are a lot of notable benefits of IT outsourcing but IT outsourcing also entails risks such as the hidden cost, security and confidentiality issues, service quality issues and system or operation disruptions just to name a few. In an attempt to mitigate risk, a company engaging in an IT outsourcing will try to protect its core activities and outsource non-core activities for security and confidentiality reasons. Though companies vary with respect to their operations, they will be optimistic to experience benefits that will outweighs any
potential risks or cost in an IT outsourcing since the main objective of any company is to maximize profit and minimize cost.
7.0 Reference:

Books:


Hedman & Kalling, 2002, IT and Business model concepts and theories.


Articles:

A. DiRomualdo and V. Gurbaxani, 1998, Strategic Intent for IT Outsourcing: Center for


Koh, C., Ang, S., Yeo, G., (2007). Does IT Outsourcing Create Firm Value?. St. Louis, Missouri USA, pp87-91


Research on Information Technology and Organizations. I.T. in Business, Paper 145


Whitepaper, (2002), “Optimizing productivity: Making the decision to outsource, ICT services


Websites:


Respondents
Saab AeroTech. Arboga (Sweden), Lilian Acroson

Zenith Bank Plc (Nigeria), Mr Udom Emmanuel

Mazda Motors (Germany), Steve Robertson

Volvo Car Corporation (Sweden), Erik Andersson
8.0 Appendix

Interview Questionnaire

Contact Person Name:

1.) Please give us a brief profile of your company such as your line of business and products.

2.) Is your company engaged in IT outsourcing? (Yes or No)

3.) How long has your company been engaged in IT outsourcing?

4.) How significantly does an IT activity or operations impact upon the costs and revenues of your organization?

5.) What is the major reason for outsourcing your IT? (Please delete the option that does not apply)
   A. Gain access to new technology
   B. Enabling organization to focus on its core business
   C. Financial advantages
   D. Lack of particular technology
   E. Lack of IT expert or skilled personnel
   Other (please specify)

6.) What IT activities or operations did you outsourced? (Please delete the option that does not apply)
   A. Software development
   B. System analysis and design
C. Testing of IT systems  
D. Maintenance of IT systems  
E. Other (please specify)  

7.) What factors did you consider before outsourcing?

8.) What are the benefits or advantages gained by your company after the outsourcing process?

9.) What are the Risks or difficulties faced by your company during the outsourcing process and after the outsourcing process?

10.) Rate the IT outsourcing in comparison to the expected company goals or objectives  
A. 1% to 30%  
B. 31% to 50%  
C. 51% to 70%  
D. 71% to 85%  
E. 86% to 99%  
F. 100%  

11.) At the time of the outsourcing evaluation process, how did your performance in the activity compare with that of your competitors/suppliers?

Thank You for your time.