

Development of a framework for a successful outsourcing process.

What are the criteria for successful outsourcing?

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ABSTRACT

This paper's purpose is to provide a guideline into making the right outsourcing decisions. As markets become more competitive and the need for differentiation becomes critical to remain competitive in today's markets, outsourcing has emerged as tool to achieve this. Focus on core competencies and access to expertise is just some of the benefits of outsourcing. The main objective of this project is to develop a framework that will serve as a guideline to managers in making the correct outsourcing decisions. The research achieves this by exploring those activities critical to the success of an outsourcing project. This is achieved through a comprehensive literature study around the four phases of outsourcing; the decision making phase, selection and negotiation phase, the transition phase and the management phase. The project further investigates how well these activities are implemented in South African industries. 123 questionnaires were distributed to different industries in South Africa and industry professionals were requested to confirm activities that were performed during the outsourcing process. The questionnaires required the company to rank on a Likert scale the extent to which outsourcing affected certain performance areas. Cost being the primary driver of most outsourcing decisions, to further investigate the outcomes of outsourcing the project explores the effect outsourcing has on the financial performance of different industries in different geographical locations. It was found that most companies who outsource do experience an improvement in profitability and return of assets. However, this improvement in performance is not statistically significant. The project further investigates if this improvement is related to the value of the outsourcing contract. Findings concluded that; there is a positive significant relationship between the growth rate of the financial indicators and the size of the outsourcing deal. The research revealed that there are a great number of firms in South Africa that do not apply a structured outsourcing process. The managers of these companies believe that to have to pay someone full time to manage the process and have endless meetings and investigations on the reasons for outsourcing are counterproductive and reduce the potential gains. However, commitment to the outsourcing relationship and a through transition phase proved to be positively associated with improvement in quality. The findings from the literature and from the study were used to develop an outsourcing framework and scorecard.

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1 INTRODUCTION AND STATEMENT OF THE PROBLEM

1.1 INTRODUCTION AND BACKGROUND

Many companies fail to experience the benefits anticipated from their outsourcing initiatives. This is because many decisions are made with limited insight and information. The decision to outsource is based on the choice of which parts of the business will save more on cost, rather than how the decision affects the long-term capabilities of the organization. “To survive economically today, organizations must transform themselves and their markets in an ever more daunting challenge to redefine the business world before it redefines them”. (Brown & Wilson, 2005). There is a need for companies to take on a more modern approach to outsourcing.

IMPERIAL Logistics is a third party logistics service provider. IMPERIAL wants to educate its customers on the modern approach to outsourcing. Customers still adopt the old philosophy of using cost as the main driver of outsourcing decisions. Customers should use outsourcing as a strategic tool to achieve competitive advantage. Customers must realize that the real power of outsourcing lies in the innovations that outside specialist bring to their business. “No longer should outsourcing service providers be viewed as tools for becoming more efficient but as powerful forces of change” (Brown and Wilson, 2005).

1.2 PROBLEM STATEMENT

The customers of IMPERIAL Logistics need to take on a modern approach to outsourcing in order to realize its true benefits and gain competitive advantage on core functions. Many companies adopt a short-term perspective, being motivated primarily by the search for direct cost reductions. Typically managers seem to believe that no strategic planning is required. This leads to them learning from mistakes that could have been avoided. Guidelines are therefore needed to help management make the correct outsourcing decisions so that the true benefits can be realized.

1.3 AIMS AND OBJECTIVES OF THE PROJECT

The study aims to investigate those management practices during the outsourcing process that are key drivers of outsourcing performance. The project aims to explore the outsourcing process in order to determine what drives the success of an outsourcing project from both a

theoretical and practical perspective. The project also aims to investigate to what extent outsourcing improves performance. The main objectives of this project are to:

- Perform a literature survey around critical success factors for the outsourcing process and outsourcing framework.
- To identify criteria from the research, this will form the basis for the development of a scorecard that can be used by companies to evaluate the effectiveness of their outsourcing process.
- To link different management practices during the outsourcing process to the benefits of outsourcing thereby distinguishing between successful and unsuccessful outsourcing practices.
- To investigate the need for an outsourcing framework to guide managers into making the right outsourcing decisions and to investigate key reasons why managers outsource.
- To investigate the extent to which outsourcing improves firm performance.

1.4 PROJECT SCOPE

The project aims to investigate what activities are critical to the success of an outsourcing project. In order to achieve this, the entire outsourcing process must be analyzed. The project will focus on the four phases of outsourcing as identified by Griessel (1998:25). Within these four phases the project will explore the activities critical to the success of an outsourcing project. The phases are depicted in the Figure 1.1. The figure illustrates all subjects of discussion necessary to achieve the project aims mentioned above. The investigation is not limited to the South African industry. It will also examine how outsourcing affects performance of companies representing different industries and geographic locations.

The final and main deliverable is a framework that will guide managers into making the correct outsourcing decisions so that the true benefits of outsourcing can be realized. To develop this framework it is necessary to develop hypotheses in order to prove the legitimacy of the framework. The framework will be developed from theories and relevant literature. It is therefore necessary to prove if the literature and real life practices and outcomes are in agreement.

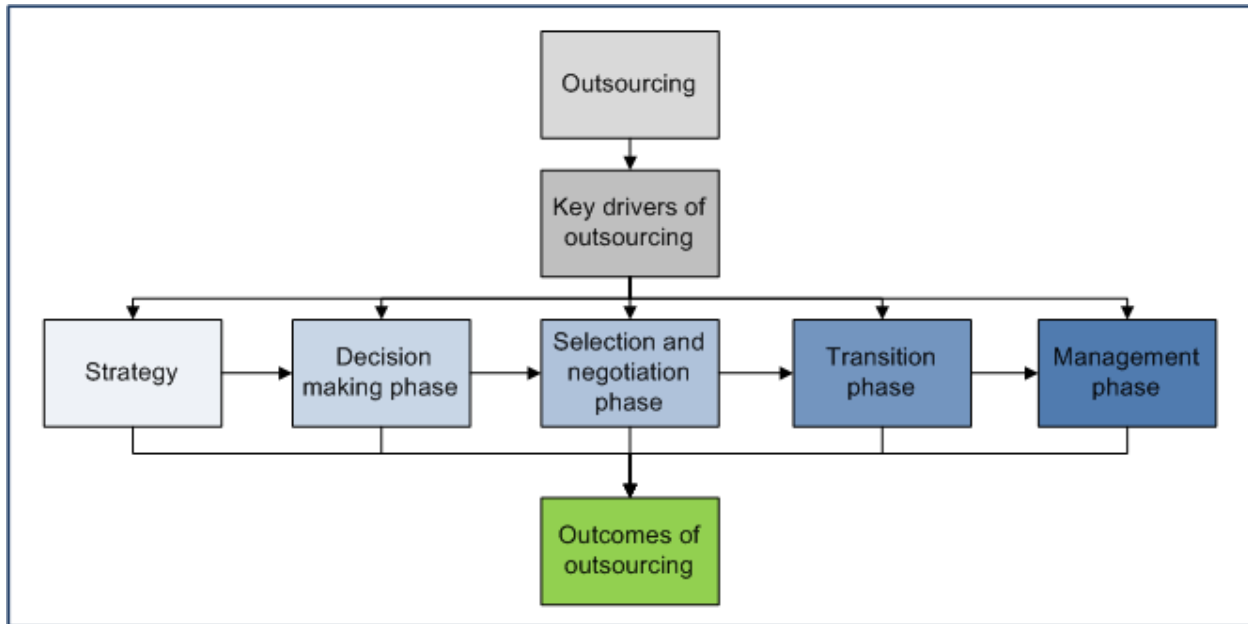


Figure 1.1: Scope of project

1.5 METHODOLOGY

From a theoretical perspective outsourcing projects fails due to poor decision making. The study assumes that management practices and decisions made during the outsourcing process influence the success of the outsourcing project and firm performance. To investigate the assumption questionnaires were distributed to different industries in South Africa. The different companies were requested to illustrate the extent to which outsourcing activities are conducted. This was accomplished using a self-assessment/evaluation scorecard (Appendix B).

A further investigation to determine the extent to which outsourcing improves firm financial performance was carried out. The purpose of this investigation was to answer the underlying question that most of IMPERIAL logistics client's need addressed "Does outsourcing improve financial performance?" This investigation will further support the theory that outsourcing is a strategic tool for improving business performance. The population under study is firms from a wide range of industries; banking, packaging, manufacturing, mining, aerospace etc in different geographical locations. Data was collected using publicly available balance sheets and income statements. The methodology is further discussed in chapter four.

1.6 CONCLUSION

The chapter describes the research objects to be achieved. The chapter identifies the need for research hypothesis to further support the literature and provide a strong argument and reasoning for the outsourcing framework to be developed. The hypotheses are developed and discussed in chapter three. The chapter introduced the research methodology that is further discussed in chapter four. The next chapter investigates the activities critical to the outsourcing process as well as the key drivers.

2 LITERATURE REVIEW

2.1 INTRODUCTION

One of the primary aims of the project is to establish management activities and key factors that add to or affect the outcomes of an outsourcing project. This is achieved through a systematic analysis of the four phases of the outsourcing process. The following chapter gives a clear understanding of the theory behind the outsourcing process. A clear and comprehensive understating of the entire process is necessary to develop a successful framework. Outsourcing is a popular research area. This means that there are many opinions on the subject. This implies that care must be taken before referencing a source. This was achieved by including perspectives and information in which there was clear consensus between authors. The literature also explores the effects of sourcing on firm performance. To identify the effects outsourcing has on firm performance is another objective of the study. Different financial and non-financial indicators are reviewed. The literature also investigates statistical tests available to assist in the selection of the most appropriate test. Being an exploratory project a statistical test is to be used to test the hypotheses developed in chapter 4. Figure 2.1 illustrates the literature breakdown. The purpose of the figure is to map all the areas that are to be discussed in this chapter and to clarify the organization of work.

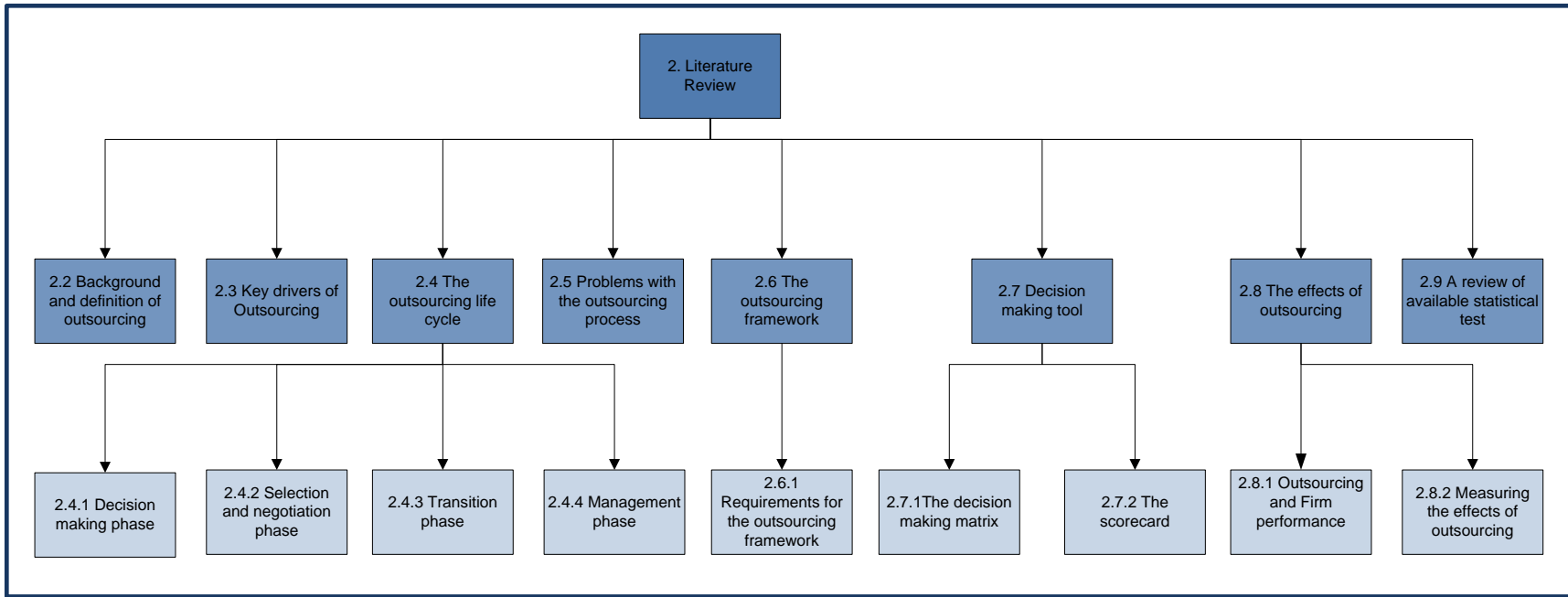


Figure 2.1: Literature study breakdown structure

2.2 DEFINITION AND BACKGROUND OF OUTSOURCING

Definition

Rob Hanfield, (2006) of N.C State University defined outsourcing as “The strategic use of outside resources to perform activities traditionally handled by internal staff and resources”. According to Bilderbeek, (2011) outsourcing is “the management of day to day execution of an entire business function by a third party service provider”. Some authors will argue that the function needs not to have been performed in-house (Bucji, 2001) and some will insist that not the entire business function needs to be out sourced (Structural Cybernetics, 1996;). The different kinds (BPO, IT outsourcing etc) and levels (tactic, strategic and transformational) of outsourcing contribute to the endless debates of what constitutes its definition.

Background and evolution

Outsourcing is not a new concept. It is one of the oldest business ideas (Burholder, 2005). It originated as a practice in the 1950s, but it wasn't till the 1980s it became a strategy adopted by organizations (Hatonen and Eriksson., 2009). Outsourcing in this context consisted of products or components. Today, many changes have taken place in the outsourcing industry, most of which have been evolutionary (Casale, 2011). The strong emphasis on providing efficient customer service, the strategic value of focusing on core businesses and re-engineering have resulted in this evolution (Hill, 1994; Leib, 1992). Table 2.1 depicts the difference between traditional and transformational practices of outsourcing.

Table 2.1: Transformational vs. Traditional Outsourcing

Transformational Outsourcing	Traditional Outsourcing
<p>Business focused</p> <p>Centered on creating value</p> <p>Assists in managing uncertainty</p> <p>Aligns with business processes that revolutionize in harmonization with strategic goals</p> <p>Based on fashioning a network of partnerships in the new connected global economy</p> <p>Business cost and re-engineering facilitate perpetual value creation</p>	<p>Operational focused</p> <p>Centered on cutting cost</p> <p>Assists in establishing controls</p> <p>Aligns with unchanged business processes</p> <p>Based on external (primarily IT) specialist realizing higher performance for the client than internal non-specialist resources</p> <p>Removes non-core functions from the business to provide a one-time discharge on capital</p>

Source: Adapted from “The black book of outsourcing” by Douglas Brown and Scott Wilson

2.3 THE KEY DRIVERS OF OUTSOURCING

Table 2.2 gives an overview of the key drivers of the outsourcing decision established by four previous studies (The outsourcing institute, 1998; Richard Gamble, 2003; Gewalt and Dibben, 2009; Andrew Hewat, 2011). The authors of previously cited studies established a ranking of their own according to the results obtained from the companies surveyed. In this study an overall ranking of the findings was established. Double ranking was used. In each study; ten points were awarded to the top reason for outsourcing identified, 8 points were awarded to the second reason, 6 to the third, 5 to the fourth, 4 to the fifth and 2 to the sixth.

The maximum score in Table 2.2 should be 40; in this case all studies would have identified the same reason to be the top driver of outsourcing. From the table, it is clear that cost reduction (34), access to world class capabilities (30) and focus on core competencies (24) are the top three reasons for outsourcing.

Table 2.2: Reasons for outsourcing – summary of previous surveys

Type of reason	The outsourcing institute, 1998: all industries	Andrew Hewat Iodestar, 2011:wide range of industries	Richard Gamble, 2003: All industries	Gewald and Dibben, 2009: wide range of industries	Score
Cost related	3. Cost related	2. Predictable cost	1. Reduce cost	1. Cost advantage	34
Access to world class capabilities	2. Access to world class capabilities	1. Having access to skilled work force	3. Gain access to world class resources	3. Access to specialized resources	30
Core business focus related	6. Improve Companies focus	3. Focus on core business	2. Improve core focus	2. Focus on core competencies	24
Re-engineering	1. Acceleration of re-engineering benefits				10
Resource related	4. Free up resources for other purposes		4. Free up resources		10
Service/quality related				4. Quality improvement	5
Asset utilization and efficiency related			5. Resources not available internally		4
Problem related	5. Function to difficult to manage or out of control				4

2.4 OUTSOURCING LIFE-CYCLE

In order to build a comprehensive model and identify the activities critical to the success of an outsourcing project, it is necessary to understand the process of outsourcing itself. The process of outsourcing has a clear evolutionary path and a specific process (Everett and Dixson, 2006). Many books and articles have been published on the subject of outsourcing. However, only a few frameworks that describe the overall stages and layout of the outsourcing process exist. Figure 2.2 is an overview of some of the models available.

Source	Decision making phase/Strategy	Vendor selection and negotiation	Transition	Management
Brown and Wilson(2005)	<ul style="list-style-type: none"> • Make the decision to outsource • Define the scope 	<ul style="list-style-type: none"> • Negotiate agreement • Sign contract 	<ul style="list-style-type: none"> • Plan the transition • Budget and forecast cost 	<ul style="list-style-type: none"> • Administrate Cost/Budget • Manage partnership • Integrate delivers • Monitor performance
Click and Duening (2005)	<ul style="list-style-type: none"> • Developing outsourcing team • Analyzing the outsourcing opportunity 	<ul style="list-style-type: none"> • Select correct vendor • Developing contract 	<ul style="list-style-type: none"> • Transition to outsourcing 	<ul style="list-style-type: none"> • Operate
Ronan Mclvor (2005)	<ul style="list-style-type: none"> • Analyze capabilities • Analyze value chain • Develop sourcing strategies 	<ul style="list-style-type: none"> • Analyze relationship • Select vendor • Design and sign contract 	<ul style="list-style-type: none"> • Transition • Establish relationship 	<ul style="list-style-type: none"> • Manage and evaluate relationship
Lever (1997) and Zhu et al (2001)	<ul style="list-style-type: none"> • Planning and discovery • Benchmarking internal service levels • Assessing business impact 	<ul style="list-style-type: none"> • Developing and negotiating vendor contract • Short listing vendors • Developing outsourcing time-line • Developing communication plan 	<ul style="list-style-type: none"> • Preparation for the transfer of resources • Creation of transition plan and checklist 	<ul style="list-style-type: none"> • Monitoring of performance • Post-outsourcing review
Cullen and Willcocks (2003)	<ul style="list-style-type: none"> • Investigate opportunities • Target the functions • Strategize 	<ul style="list-style-type: none"> • Select and negotiate with vendor 	<ul style="list-style-type: none"> • Make the transition 	<ul style="list-style-type: none"> • Manage the project

Figure 2.2: A review of outsourcing life-cycle models

After examining the different models the activities were grouped into the four phases of outsourcing as identified by Griessel (1998:25); decision making phase, Selection and negotiation phase, transition phase and management phase (see Figure 2.2). Within each phase are key deliverables and tasks critical to the success of an outsourcing project. Understanding of each of the phases and associated task will assist companies conducting outsourcing projects. An analysis of the outsourcing process will be conducted with the help of the outsourcing process frameworks mentioned in Figure 2.2.

2.4.1 THE DECISION TO OUTSOURCE

One of the problems with outsourcing is that it has become very fashionable (Faulhaber,2007; Skidmore, 2003). Most authors would agree that despite this popularity outsourcing is not necessarily right for every company nor is it for every process/function in a given company (Maynard,1999; Duening and Click,2005; Burkholder, 2006; AuBchon; Antonucci,1998; Lankford, 1999; Corbett,2004). However, the need to outsource due to the realization of greater business benefits (improve financial, operational, and management performance) has never been greater (Patel and Anon, 2005). Historically, the primary reason for outsourcing has been to reduce operating cost and this remains a primary factor (Gartner, 2007; Fafadia, 2010; Simmons, 2010). Today, leading firms have adopted more sophisticated outsourcing strategies and have been outsourcing core processes such as design, engineering, manufacturing and marketing. “These organizations have benefited greatly from accessing the specialist capabilities of suppliers in a range of business processes” (McIvor, 2000). Outsourcing has become a key element of business performance transformation, which concentrates resources on core competencies and aligns all resource decisions with key business strategy.

With the many advantages of outsourcing it is not difficult for organizations to justify a decision to at least investigate outsourcing opportunities. The most effective way to analyze an outsourcing opportunity is through a systematic process (Duening and Click, 2005). Figure 2.3 is a summary of the outsourcing decision phase. The figure was designed using three sources that outlined key activities of the decision phase (Patel, 2005; Duening and Click 2005, Brown and Wilson, 2005). This process has been designed to integrate and align the decision-making process with long term organizational strategic objectives and near term organizational needs. If handled

systematically, the analysis and selection process can be an effective way for an organization to examine itself.

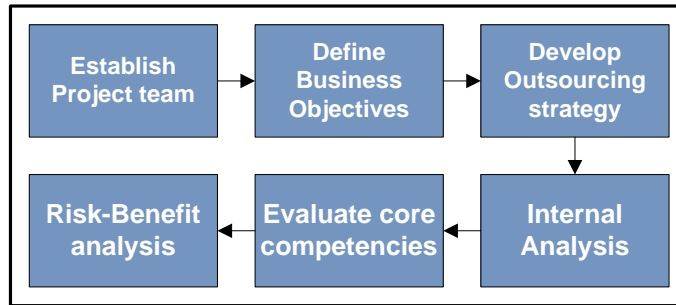


Figure 2.3: A modified decision making phase flow diagram

SELECTION OF PROJECT TEAM

The outsourcing project requires an interdisciplinary approach due to its very nature. Interdisciplinary skills are needed to manage an outsourcing project effectively (Taplin, 2007). Effective management of outsourcing requires a team structure. Figure 2.4 is a recommended outsourcing team structure (Click and Duening, 2005). This structure begins with an executive level steering team that is responsible for initiating the outsourcing project, communicating its links to the corporate strategy and seeing the project goals are being met. It is important for management to set the overall direction for making outsourcing decisions which must be in the context of the organizations' strategic goals.

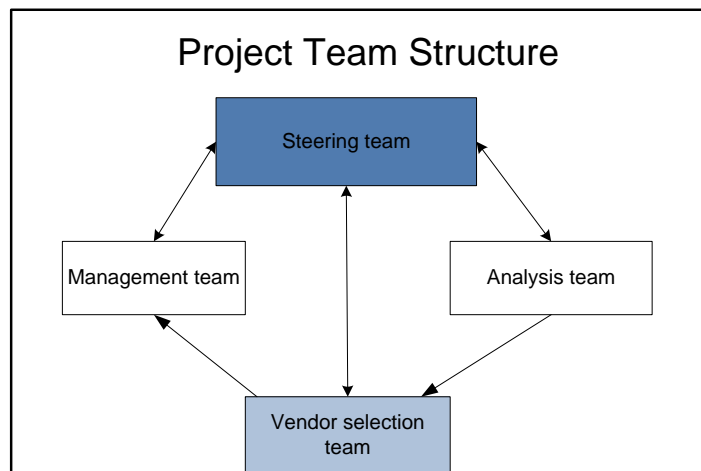


Figure 2.4: A proposed outsourcing team structure

THE IMPORTANCE OF STRATEGY

The nature of the objectives set influence the outsourcing agreement to be made. The setting of correct objectives will ensure that the company's and service provider's objectives are in line. "The absence of objectives will frustrate the ability to test the appropriateness of the proposed course of action and deficient objectives many lead to the adoption of inappropriate course of action" (Barry and White, 1997). The setting of meaningful and measurable objectives is, therefore a critical success factor.

TWO IMPORTANT TERMS

Business strategy: "The first step towards business evolution" (Duening and Click, 2005). Business strategy covers a broader scope that is, markets, business models, competitive approach, business processes, partnerships etc. Companies must implement the business strategy in every decision making process (Patel and Aran, 2005).

Sourcing strategy: Defines who will fulfill various parts of the objectives as defined by the business strategy. The activity could be a project, a service or a process." Business strategy drives outsourcing strategy" (Hewat, 2010).

The business strategy can simply be defined as; what is to be done. "The next step is not to define how the fulfillment of the defined objectives is achieved. Rather, the enterprise would have to identify what sources will fulfill different business process, that is, who will do it" (Patel and Aran, 2005).

"This is an emerging world in which objectives become more important than how to achieve them, and external collaboration is leveraged not only to extend but mostly to add value to the enterprises' business capabilities"(Patel and Aran, 2005). Figure 2.5 "shows an enterprise in the partnership based world where the value chains of external vendors are closely connected to the value chain of the organization" (Duening and Click, 2005).

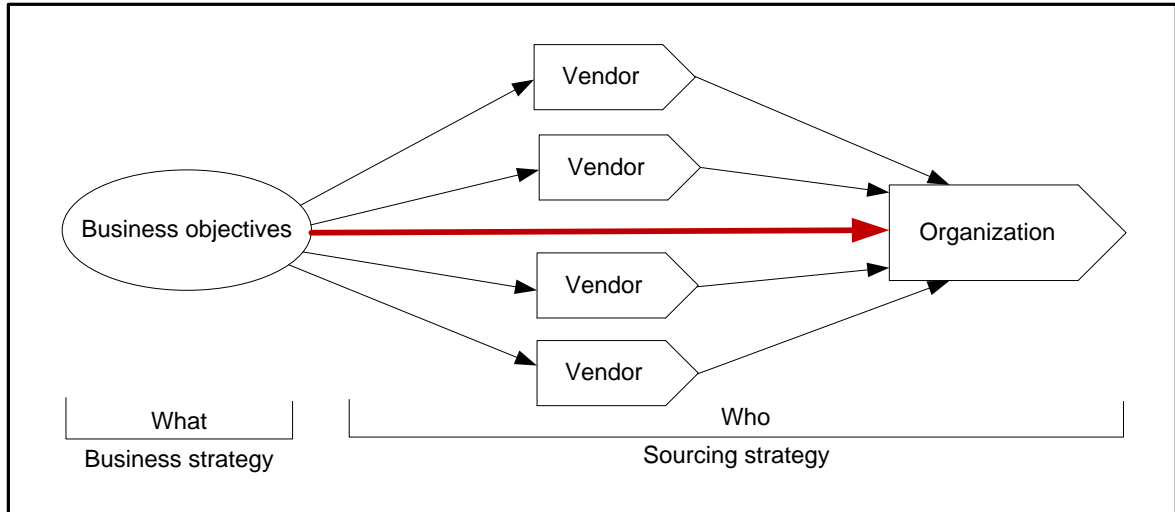


Figure 2.5: Transition from business strategy to sourcing strategy

DEVELOPING THE OUTSOURCING STRATEGY

Before making any outsourcing decision it is first necessary to understand and know the business's core competencies and what gives it a competitive differentiation. Understanding the business core before making outsourcing decision is the first essential step in strategic outsourcing (Hook, 2003; McIvor,2000)

STUDY THE INTERNAL ENVIRONMENT

An organization must first survey its internal operations before selecting the function to outsource (Barry and White 1996). This requires a bottoms up analysis of its resources, capabilities and core competencies.

THE SOURCING STRATEGY MATRIX

Companies use different metrics and decision making models in order to define outsourcing strategies. Although every sourcing strategy exercise tends to be different, common traits and activities can be identified. According to McIvor (2008), when developing an outsourcing strategy understanding of the following three dimensions is critical to the success of the outsourcing project:

- The contribution of the process to competitive advantage
- The relative capability of the process. (how competitive the activity is compared to external markets)
- The potential for supplier opportunism

Figure 2.6, is a simple matrix developed by Mclvor (2008) to help companies decide if outsourcing is right for any process. Similar matrixes with same concept have been developed and used in practice (Gillette's category positioning matrix; Chou, Brun, Gamarra: "Supply chain strategies"; Adam Murry: Costing, outsourcing and Contracts; Jean-Phillpe Massin, 2006. "How to Define a Sourcing Strategy and Appropriate Tactics". Strategic Sourcing Europe).

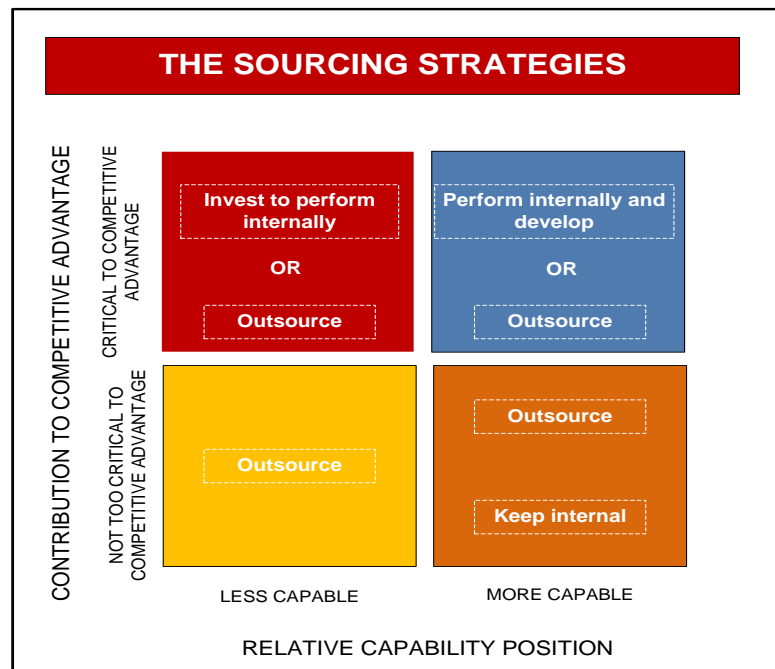


Figure 2.6: The sourcing strategies matrix by Ronan Mclvor

The process may seem tedious and or slow, but the rewards are great if done properly (Karamouzis, 2004). For example¹; Summit Information Systems, a software developer for credit unions, is a success story grown out of this process.” SIS outsourced disaster recovery services four years ago for its data centre. Mr Steinbash, the individual responsible for the processing centre was extremely nervous initially. However, after assessing the core functions of the firm, it became clear that this function was not central to their business strategy and could be performed more efficiently by someone else. Mr Steinbash felt that the firm best equipped to manage disaster recovery systems was Hewlett-Packard, but his biggest concern was a lack of control”--- Steinbashed managed the transition to HP very closely and found that the two organizations had a good sense

¹ "Simple successful Outsourcing" October 1 2005 CIO Magazine

of each other. The need to micro-manage the process eventually disappeared. The process continues well because Steinbush followed the steps for effective outsourcing.

2.4.2 VENDOR SELECTION AND CONTRACTING

Finding the right vendor and developing an appropriate contract are essential to any organizations outsourcing initiative. The concern of giving control overrides the relief of not having the day-to-day operations responsibility. It is therefore necessary to carefully consider the elements of an effective outsourcing contract to help avoid many of the risk that contribute to the failure of outsourcing.

IDENTIFYING AND SELECTING THE RIGHT VENDOR

The identification and selection process has a life-cycle of its own. Though the process is subjective, dependent on how well the buyer and vendor firms relate to one another, it can be conducted systematically. “Large firms such as Xerox that pioneered BPO (Business process outsourcing) have well developed systematic approaches for identifying and selecting outsourcing vendors “(Duening and Click, 2005). Figure 2.7 is a description of the basic steps involved in vendor selection. The diagram was formed using the different outsourcing frameworks identified in Figure 2.1

When the correct vendor is selected from the start, the benefits associated with an effective outsourcing relationship are sooner realized. A systematic process is also more likely to reveal the various alternative vendors in the market and help the buyer distinguish among several service options.

As more and more suppliers enter the market, they are developing means to differentiate themselves. Vendor markets are becoming more dynamic by the day and it is easy for new firms with new innovative approaches to enter these markets; making a systematic selection process very important (Chronis, 2004).

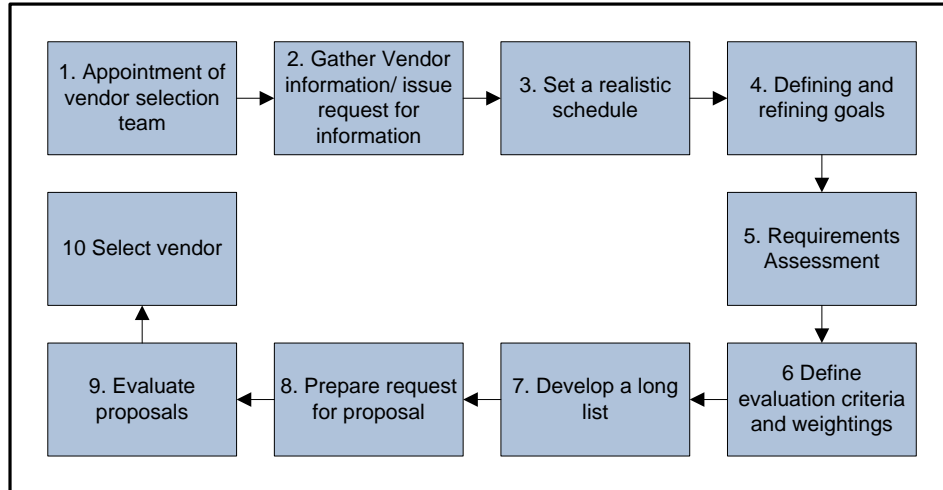


Figure 2.7: the major steps involved in moving from business strategy to partner strategy.

FOUNDATION TASK

Before the designing of the Request for Proposal or the signing of any contracts, it is important for the organization to first understand the type of relationship it wants to achieve over the life time of the contract. “The amount of time it takes to structure a deal depends on the type of relationship being built” (Kopeck, 2004). According to Kopeck (2004), the president of Campass North America, key considerations include the following:

- Pricing: Is the client willing to pay a premium for specialized expertise and business knowledge, or is low cost the primary objective.
- Vendor involvement: Does the client expect a high or low degree of input and advice from the outsourcer.
- Length of relationship: Does the client seek a long-term relationship, or are frequent vendor changes to be expected.
- Number of qualified vendors: Are the services sought by the client highly specialized or widely available.

DESIGNING THE REQUEST FOR PROPOSAL

A Request for proposal is a document that is used by many organizations to receive offers of services or goods from a potential vendor (Tatum, 2003). This is a critical document in the vendor selection phase and must be taken seriously (Murray, 2003; Lackow, 2001). The quality of the vendor selected will have an impact on the outsourcing project. The structure of a RFP will vary depending on the organizations and what they

hope to gain from the response (Murray, 2003). Some generic elements include in a RFP are (Bucki, 2010; Murray, 2003; Brown and Wilson, 2005; Patel, 2005):

- Purpose of document
- Submission details
- Business overview and summary
- Detailed specifications
- Terms and conditions
- Selection criteria

It is a good idea to attach the contract to the RFP (Rosetta, 2004). This is a good negotiation tactic to get the supplier to accept as much as your terms and conditions as possible.

EVALUATION OF PROPOSALS: VENDOR SELECTION

The vendor selection process can be a very complicated and emotional undertaking (Bucki, 2010). Once a good vendor is selected, relationship management will determine the success of the project/relationship (Lackow, 2001). A good and detailed RFP, structured to measure potential providers does not guarantee that the right vendor will be selected. The evaluation and selection process must be objective. People reviewing the proposals and making the decision may have their favorite and this will cloud their judgment (Harder, 2004). The main objective of this phase is to minimize human emotion and political positioning in order to arrive at a decision that is in the right interest of the company.

DEVELOPMENT OF A SUCESSFUL CONTRACT

Successful outsourcing depends on an exhaustive process (Cullen & Willcock, 2005). Companies must understand all risk of the undertaking and be very cautious before entering into a binding agreement. The following are elements essential to an outsourcing contract compiled from six sources (Mehrban,2009; Malarvannan, 2008; Halvey and Melby, 1996; Gamble, 2003; Burge, 2009; Goolsby, 2010):

1. Include **termination clause** for breach of contract: contract should enable a company to identify that a breach of contract is likely to occur. Company must have the ability to take action before a breach occurs and disrupts operations.

2. **Flexibility** (A renegotiation agreement): Allow companies to respond quickly to change. Effectively managing an outsourcing relationship requires both parties to be able to react to change in both their own business and the wider economy.
3. **Resolution procedure:** To minimize threat to operations and fallout between outsourcer and client, an effective dispute procedure is essential.
4. **Regulatory Risk:** The contract should address competition or confidentiality issues. These are a major concern for the client company. A well drafted contract can help address and lessen the risk attached to such concerns.
5. **Responsibility and payment obligations:** A good contract will indicate who will conduct which activities and when the activities must be executed. “The contract should cover key commercial aspects of the deal, ensuring the outsourcing customer will have its requirements fulfilled without incurring additional cost or paying for sever services it does not require.
6. **A solid legal frame work:** Experts have emphasized that there is a lack of continuity after the signing of the deal. This will harm the project from the start.
7. **Assignability clause:** This should be included in the case of a change in ownership. This termination clause will serve to be convenient in the long run.
8. **Benchmarking clause:** This gives the buyer the right to periodically benchmark the provider’s services and price in comparison to other outsourcers.

2.4.3 TRANSITION TO OUTSOURCING

Applying a structured transition is identified as one of the six key success factors for outsourcing (The outsourcing institute, 2010). Success of the outsourcing project is linked to the effectiveness of the transition to outsourcing. It is at this phase where the outsourcing relationship is first tested. The center of outsourcing surveyed 56 buyers. These buyers of outsourced services were buyers who have implemented successful outsourcing strategies, they all agreed that “their transition phase was the point that either threatened to derail their relationship or that allowed for long-term success”. They also agreed that the transition phase was a key indicator of the direction of the relationship.

What does the transition phase involve?

Transition is the process of migrating knowledge, systems and operating capabilities.

Three facets that must be accounted for (The outsourcing institute):

- Technology: “the movement or replication of the required technical environment, includes the setup of all required software, hardware and network processes”.
- Process: This includes the documentation of the current process and transferring of knowledge to the outsourced team members.
- People component: Outsourcing is a people-centric business and not a process-centric event. The management of the human factor is critical to the success of the transition phase.

TRANSITION BEST PRACTICES

A formal process allows organization to pay special attention to the people, process and technologies that are currently being employed and involves a process that is aligned with the needs of the business. Six best practices for outsourcing transitions identified by Sampath Head Business Transitions and Mavle Senior Manager Transitions at Infosys (2010) are:

1. Methodology

In the process of choosing the best-fit service provider, an evaluation criteria to be considered is a methodology for delivering transitions. Methodology is important for the following reasons.

1. It indicated how important a service provider treats the transition phase
2. It is an indication of how well the service provider is likely to work with the buyer and indication of service provider maturity.
3. Level of supplier consistency

Key elements of a good methodology:

- Tollgates and Audits: The development of a series of milestones and success criteria, or phase gates that determine whether the transition team can move forward.
- Ease of implementation: A good methodology is one that is easy to implement and understood by project team.
- Use of tool and techniques, example, project management tools like MS project, project management systems (PMS), risk management tools like Failure Mode Effect Analysis (FMEA), and quality management tools like Six sigma, Pareto analysis are essential.
- Effectiveness of tracking progress

2. Robust planning process

Planning of transition needs to be given attention and time. The following are key activities to be considered: Integrating timelines and expectations, Resource allocation, Success criterion

3. Governance

Failing to organize and implement a governance structure is where a lot of transitions fail. A “no-slack” execution of the governance structure during the transition phase helps ensure continuous alignment of stakeholders to project goals, tracking of status and changes if any. The following are key activities to be considered: Stakeholder analysis, Frequency of communication, Mode of communication

4. Approach to managing risks

Risk needs to be monitored continuously throughout the transition. Risk management involves: Risk Identification, Risk mitigation strategy and Risk tracking.

5. Buyer readiness

Determining buyer readiness should be done during the planning stage. This is more critical when the buyer is outsourcing processes for the first time. The following are key activities to be considered: Management support, Change management, Resource allocation

6. Partnership approach

How the buyer and the service provider teams work during the lays the foundation and tone of the relationship for the duration of the contract. The following are key activities to be considered: Approach to solving issues and Mutual trust.

TRANSITION METHODOLOGIES

In this section are examples of transition methodologies that are used in practice. The two examples were chosen because they have all of the elements required for a good methodology. The examples also show how transition methodology is applied in practice.

Charter Group is a company that offers financial services. Carter group follows a six sigma methodology along with PPMA (Professional Practice Management systems). Figure 2.9 is an example of the transition methodology followed by the Charter Group. According to their executives “We have a highly experienced transition team with strong industrial expertise which gives us the confidence to execute your processes on time and reengineer them during transition”.

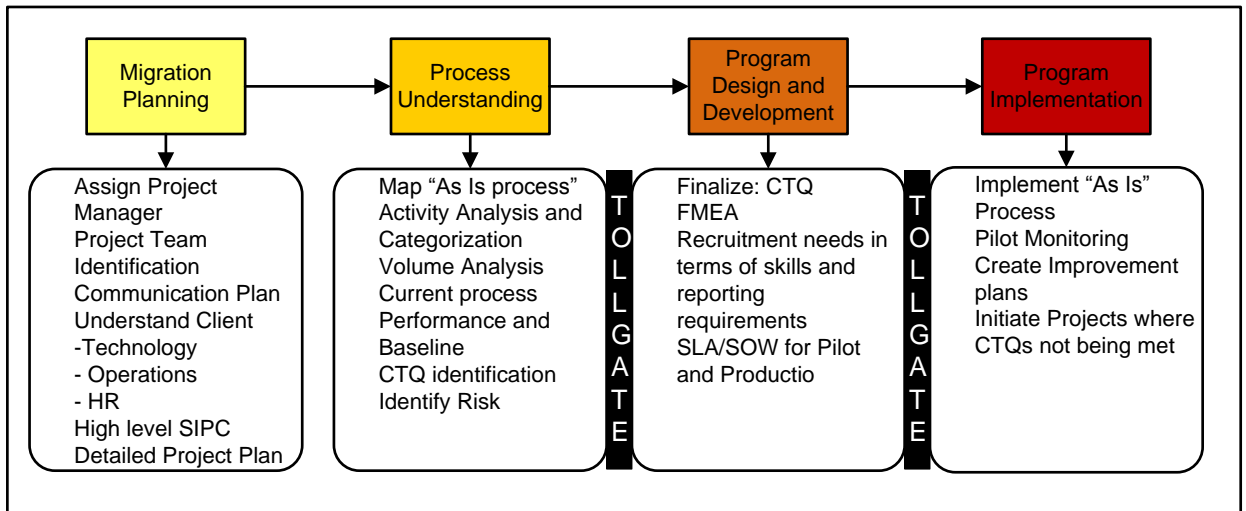


Figure 2.9: an example of the transition methodology followed by the Charter Group

Benefits of this process

- A flawless migration and minimal disruption due to Milestone driven, proven, flexible methodology.
- Identification of Improvement areas in productivity and process reengineering opportunities at the start, use of COPC approach and Six sigma guidelines.

- Complete control of process life-cycle through frequent review and sign-offs with the client.

Many companies use a dedicated transition management team called SMART- Specialized Migration and Review Team. SMART is “an experienced transition team comprising of multidisciplinary expertise in Operations, Quality and Information, Technology and trained Business Process Transition and Project management that assist in integrating all aspects of the outsourcing solution. Examples of companies that use SMART (Global Edge, Kale MPS, Pacific), Figure 2.10 is the transition methodology employed, which takes into account all three phases of the outsourcing services transition; pre-transition, transition and post transition/steady phase.

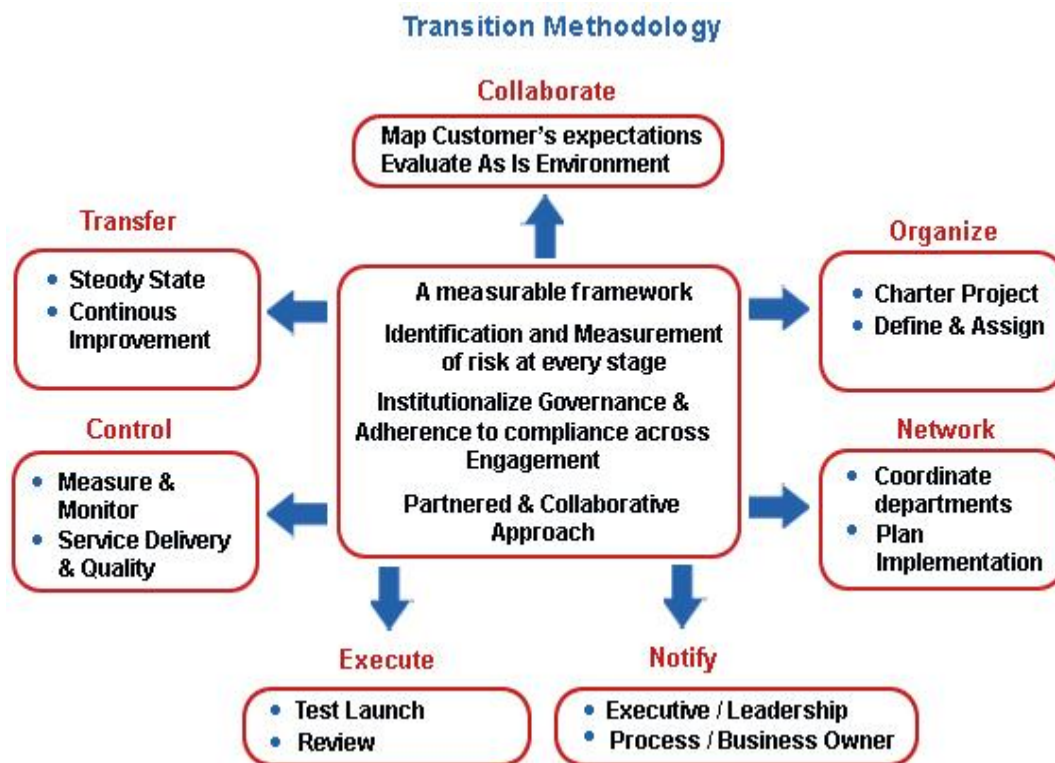


Figure 2:10: An example of a transition methodology

Source: [online]. <http://www.kaboodle.com>

2.4.4 MANAGING THE OUTSOURCING PROJECT

One of the quickest roads to outsourcing failure is to think that because you have outsourced a function, you no longer have to pay attention to it (Doyle, 2004). Companies need a management process for continuously evaluating service delivery

and communication feedback to improve services. Cullen & Willcock, (2005) investigated the key activities for outsourcing success. His study was based on 100 outsourcing cases from 1994-2003. He discovered that there is link between the outsourcing management activities in Table 2.3 and outsourcing success. The different activities were ranked according to the degree of importance to the outsourcing success from the perspective of seven large organizations.

Table 2.3: Outsourcing management activities

Key Activity	Ranking
Invest in the relationship (plan, assess and improve)	5
Meaningful reporting and analysis	4.6
Regular communication and meetings	5
Diligent documentation and administration	4.7
Managing risk and plan contingencies	4.9
Manage issues, variations and disputes ⁴	4.9
Effective continuous improvement and streamlining	4.7
Evaluate and audit supplier (controls, performance, and compliance)	4.3
Evaluate organization both as a customer and contract manager	4.6

RELATIONSHIP MANAGEMENT

Handley and Benton (2009), conducted a study to investigate the reasons behind outsourcing failure. Detailed data from 198 sourcing executives were used to investigate the influence that relationship management processes have on achieving outsourcing results. He concluded that outsourcing management teams should focus on the development of a cooperative and mutually committed relationship with the provider if the organization is to fully realize their performance expectations. “The results indicated that organizations that wish to incorporate outsourcing must invest resources into the development of strong relationship management competence”. As organizations outsource core activities it is important that they are able to successfully coordinate and control outsourced business functions. The NOA (National Outsourcing Association, UK), have included relationship management as one of the key drivers to outsourcing success and essential to any strategic outsourcing program.

MANAGEMENT OF COMMUNICATION

Effective outsourcing requires clients and vendors to have adequate levels of shared knowledge concerning the product and service being provided (Yalaho, Nahar, & Wu, 2002; Sung and Young 2003), these authors investigated the success and failures of

outsourcing projects and concluded that “relational exchange attributes between vendor and clients is essential to successful outsourcing”.

RISK MANAGEMENT

Any organization considering an outsourcing strategy proposition must be ready to risk a little. There are hundreds of terror stories of companies that have nearly gone bankrupt because they failed to plan accordingly (Burkholder, 2005). All risk of outsourcing should be considered before one makes the decision to use a third party. Only when aware of the risk will one be able to develop a satisfactory analysis and service agreement, and arrive at a decision that is justified through the consideration of all factors. “It is better to be prepared in advance for the appearance of hidden cost and the possible occurrence of unlikely events” (Duening and click, 2005).

Each phase of outsourcing has its own risk; project planning and project management risks, supplier selection risks, outsource contracting risks and negotiation risks, transition and start-up risks, outsource contact and supplier performance risks. Risk management is a task that needs to be conducted thought out the projects life-cycle. Outsourcing organizations need to use models to help develop strategies and tactics for assessing and managing project risk. Figure 2.11 shows an example of a risk management model. This is a generic risk management model adapted by IBM Global services. The idea is to evaluate the project’s risks continuously.

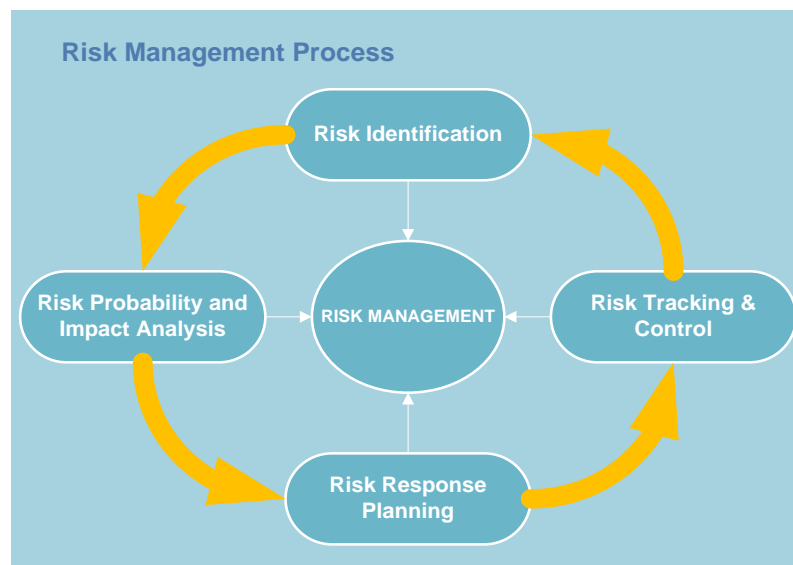


Figure 2.11 an example of a risk management mode

MANAGING OUTSOURCING PERFORMANCE

Benchmarking

The main objective behind benchmarking is to understand and evaluate current position of a business in relation to “best practices” in order to identify areas for improvement. Outsourcing contracts these days include a benchmarking clause. This allows buyer to benchmark the provider’s prices in comparison to other outsourcers (Goolsby, 2010). Buyers use benchmarking as a way of identifying outsourcing financial benefits. The following is an example of a relationship that “Outsourcing Center” studied in 2004-2009 in its annual Outsourcing Excellence Awards Program:

“Cost reduction was the buyer’s objective, but its CEO mandated that no cost-cutting strategy could result in sacrificing the level of production of quality of the work. The company recognized that it would achieve the greatest cost reduction through labor arbitrage in an offshore outsourcing solution. It then conducted a benchmarking study to onshore and offshore outsourcing providers’ solutions to determine their quality and performance benchmarks against their prices”.

Governance

Governance is a structure that is put in place to support day-to-day outsourcing management and decision making. Sourcing managers are to ensure that the relationship is meeting business requirements and responsive to change. Operational manager make sure that milestones and service levels are being met. Gartner research (2004) shows that without a strong governance structure, an outsourcing arrangement will most likely fail within 18 months. In an interview with business weekly, according to Murphy (2004) “Outsourcing relationships that are effective have mature governance practices and greater investment in managing the relationship”. According to Weigler of Sourcing Interests Group (2004), companies do not devote sufficient attention to their own responsibilities, “companies underestimate, understaff, and underfund the roles that manage the outsourcing relationships”. In an outsourcing situation, you need an internal team to manage the relationship and ensure alignment with business goals.

THE OUTSOURCING PERFORMANCE MANAGEMENT FRAMEWORK

Performance management professionals often use the “SMART” method to measure outsourcing success. It is a flexible framework designed to set clear expectations and measure success (Figure 2.12).

Performance Management Outsourcing Framework	
Specific	Ask the “W questions”: why, what, who, when, where and what if.
Measureable	Measure the key performance indicators: cost savings, service improvement and employee satisfaction.
Aligned	Align the performance management effort with internal technology, business strategy and workforce performance.
Realistic	Use the “seven Cs” to set realistic expectations: cost, compromise, control, culture, communication, contingency and compassion.
Trusted	Establish trust by meeting expectations, by willingness to compromise and by being dependable, predictable and ethical.

Figure 2.12: Performance management framework. Source: Adkins, S. 2005

The above framework is one of the few that sets out a guideline for management in the measurement of outsourcing performance and takes into account the activities of each phase.

2.5 PROBLEMS WITH THE OUTSOURCING PROCESS

Although the trend towards outsourcing has increased dramatically over the years some companies still struggle to experience the benefits anticipated from their outsourcing initiatives. A survey of companies and organizations buying outsourcing services revealed that:²

1. Fifty-five percent of the companies reported that they have outsourcing challenges because their companies lack project management skills (i.e., they have no experienced outsourcing governance)
2. Fifty-five percent reported they lack a good process for specifying the work
3. Forty-eight percent said they did not have the right metrics for measuring performance

² Julie Giera, “Outsourcing Management: Align Management Techniques to the outsourcing Model IT View and Business View Planning Assumption,” September 30, 2003, www.forrester.com/Cart?addDocs=32555. Three forrester reports were used to compile this information: the above mentioned report and Stephanie Moore, William Martorelli, Adam Brown, “Midyear 2004 update: North America Off-shore outsourcing” July 14, 2004, also Stephanie Moore. “IT Trends 2004: Offshore Outsourcing,” December 2003

Although there are a number of outsourcing frameworks, only a few companies have taken a strategic approach to outsourcing decisions, with many companies still deciding to outsource based on short-term cost reduction motives (Davision, 2004; Mclvor, 2005; Ford, 1993). To add, Aron and Singh (2005) found out that companies are spending too much time evaluating functions that should and should not outsource. Barthelemy, (2003) found that seven “deadly sins” underlie most failed outsourcing efforts: (1) outsourcing activities that should not be outsourced; (2) selecting the wrong vendor; (3) writing a poor contract; (4) Overlooking personnel issues; (5) losing control over the outsourced activity; (6) overlooking the hidden costs of outsourcing; and (7) failing to plan an exit strategy. Further, a 2003 survey in outsourcing essentials revealed that 58% of buyers responded that successful outsourcing is mostly dependent on selecting the right vendors, 45% agreed that the ongoing management is most important and 38% insists that a properly structured contract leads to a successful deal.

2.6 BACKGROUND TO THE DEVELOPMENT OF THE OUTSOURCING FRAME WORK

The outsourcing framework was developed by researchers to overcome the major weaknesses of outsourcing (Mclvor, 2000). The main purpose of a framework is to make recommendations of what to do and what should be done (Hogwood and Gunn, 1984).

There seems to be an agreement between authors in the literature of the importance of the outsourcing decision and some of the general guidance on the factors that should be considered. That is, cost, risks, strategic approach and supplier relationships (Mclvor et al, 2000). Most Authors do provide factors and issues to consider without proposing a systematic procedure that would guide companies through the process. Jennings, (1997), Quinn and Hilmer, (1994) do provide factors and questions to be considered without proposing a framework.

2.6.1 REQUIREMENTS FOR THE OUTSOURCING FRAMEWORK

This section describes the requirements of the outsourcing framework in order to address the limitations discussed in the previous section. According to Ronan Mclvor et al, (2000) the outsourcing framework must overcome these limitations by addressing the following key aspects of the outsourcing process:

1. Value chain perspective. The outsourcing decision needs to be approached from an activity perspective within the company’s value chain (Porter, 1985)

2. Core competency thinking. Consideration of core competencies in the framework is essential
3. Supply base influences. The framework must consider the impact that supply base has on the outsourcing process. That is development and management of a competence-based supplier network.
4. Performance measurement. Performance measurement is essential for outsourcing success. In outsourcing it is important to analyze performance at the level of the business process (Frei and Harker, 1999).
5. Strategic context. The main driver of an outsourcing decision. Failure to place outsourcing within a strategic context will lead to a “piecemeal” approach.

2.7 OUTSOURCING DECISION MAKING TOOLS

2.7.1 THE DECISION MAKING MATRIX

A decision making matrix evaluates and prioritizes a list of options using a specified criteria. It is applied when one option must be selected and when a decision must be made based on several criteria. A good example of a decision making matrix is the sourcing strategy matrix illustrate previously (see Figure 2.6). A decision making matrix can also be applied in the vendor selection process.

2.7.2 THE SCORECARD

A score card in this context is a tool designed to assist you to understand where you are, what’s working, what’s not working and where to pay the most attention to improve performance. To improve on current processes most companies use the Outsourcing Decision-Making Score card in Appendix A (Brown and Wilson, 2005). The score card ensures that decisions are:

- More inclusive
- More accurate
- More controlled

However this score card is not comprehensive enough and does not include issues rarely addressed in the typical outsourcing process.

CIMA developed a score card to assist the board of any organization to engage effectively in the strategic process. The score card is based “on the premise that

executive management is responsible for conducting the detailed strategic planning while the board needs to provide effective oversight”. The scorecard gives the board a simple tool that can be used to focus on most important strategic issues and to provide a constructive challenge to management by asking the right, searching questions (Tilley, 2010). In context, the scorecard conveys the point that decisions are not taken in isolation.

2.8 THE EFFECTS OF OUTSOURCING

2.8.1 OUTSOURCING AND FIRMS PERFORMANCE

“Outsourcing has emerged as a management tool that shifts the organizational structure of companies” (Tompkins, 2006). However, according to a Deloitte consulting study, 64% of respondents indicated that outsourced activities were brought back in-house and 44% did not realize cost savings (Handley, 2009). Dun and Bradstreet’s study found that 20%-25% of outsourcing relationships fail within two years and half after within five (Daig et al, 2001). Deloitte conducted another study with 300 business executives. The survey revealed that 34% were satisfied with their provider’s innovation, 75% of the service providers interviewed felt that their clients were “ill prepared for the outsourcing initiative” often lacking a well developed strategy (Handley, 2009). These findings suggest that there is a gap between outsourcing expectations and reality.

When deciding what activities to outsource, it is necessary to analyze the impact of these decisions on the overall organizations and business performance (Arauji et al, 2003). It is therefore important to find out what variables may act as a link between the benefits obtained from outsourcing and firm performance. Various authors have studied the consequences and effects that outsourcing has had on a firm. Studies include: The effects of outsourcing a specific functional division without providing overall vision (Jones, 1993), Hays et al, (2000) examined the impact of outsourcing on the firm’s value without analyzing the results. In a study conducted by Giley and Rasheed (2000), they did not find an outsourcing-performance relationship although “strategy and then dynamism of the environment “were found to be “mediating” factors of this relationship.

An investigation starts with “an initial connection between outsourcing and representative measure of results achieved through cost efficiency or the creation of greater market value” (Jiang and Qureshi, 2005). However, no author seems to have

established a precise relationship between the outsourcing process and the business and organization performance.

2.8.2 MEASURING OUTSOURCING PERFORMANCE

Effects of outsourcing using financial statements

Most research on defining the value and effects of outsourcing on firm's performance has been qualitative, using case studies, interviews and questionnaires. IBM's Research study was the first to apply "rigorous statistical analysis" to measure the impact of an outsourcing agreement. The following financial indicators of a company's performance have been developed from six different sources (Jiang, 2006; Lin and Huang, 2010; Gilley and Rasheed, 2000; Yasin, Kemal and Altinkemer, 2009; Congnizant 2009; Lopez, 2009) all of which studied the financial impact of outsourcing on firm performance.

Important financial indicators

- **Productivity:** Is a measure of the outputs of the organization against its inputs. It includes quantity and/or value of products and services (outputs) measured against the costs incurred or time used through the production of such outputs (inputs). Inputs can include capital, material, tools and employees. (Enabling, 2008).
- **Cash management:** This is the process of collecting, managing and investing cash. According to investopedia, this is a key component of ensuring a company's financial stability and solvency.
- **Market ratios:** Market Value Ratios relate an observable market value, the stock price, to book values obtained from the firm's financial statements. Two types: Price-Earnings ratio, calculated by dividing the current market value of the stock by the earnings per share. Market-to-Book Ratio relates to the firm's market value per share to its book value per share. This ratio indicated management's success in creating value for its stockholders. (price per share/book value per share)
- **Return on assets:** Investopedia explains return on assets as "an indicator of how profitable a company is relative to its total assets. It gives an idea of how efficiently the assets are being used to generate profits. (Net income/ total assets).
- **Earnings before interest and taxes:** This is an indication of a company's profitability before income tax and interest are deducted (Foo, 2009). (Revenue- Operating expenses).

- **Profit margin:** This is a measure of profitability. Calculated as net income divided by revenues or net profit divided by sales. This measure is very useful when comparing companies in similar industries. A higher profit margin indicates that the company has greater control over its cost compared to its competitors (Investopedia).
- **Return on equity:** According to Kennon, (2001) ROE is one of the most important profitability metrics mainly because a business that had a high return on equity is more likely to be one that is capable of generating cash internally. This ratio reveals how much profit a company has generated in comparison to the total amount of shareholder equity (total assets-total liabilities).(Net income/ Shareholders equity). Useful metric for comparison.
- **Inventory turnover:** Reveals how frequently a company's inventory is sold and replaced within a financial reporting period (Bierley, 2008). Calculated as: Sales/Inventory or Cost of Goods Sold/Average Inventory.
- **Profitability:** Measured as the amount of income before tax divided by total revenue. This is used by most banks as an indicator of improved performance.

Qualitative indicators of the effects of outsourcing

The table below gives examples of important performance dimensions used to measure the effects of outsourcing on firm performance.

Table 2.4: Qualitative indicators of the effects of outsourcing

Indicator	Source
Cost related	
Allow resources to focus on core competencies	Gottfredson et al (2005) and Leonard Barton (1992)
Increase economies of scale	Bozarth et al (1998)
Flexibility related	
Allow resources to focus on core competencies	Gottfredson et al (2005) and Leonard Barton (1992)
Improve process responsiveness	Narasimhan and Das (1999), and Weber et al (1991)
Increase supply chain flexibility	Lee (2004)
Increase volume capability	Loh and Venkatraman (1992)
Innovation related	
Access to specific labour and other technology expertise	Bozarth et al (1998), Loh and Venkatraman (1992)
Increase expenditure on Research and development	Hojnik (2005)
Quality related	
Improve product performance design quality	Bozarth et al (1998), Loh and Venkatraman (1992)
Improve conformance quality	Bozarth et al (1998), Loh and Venkatraman (1992)

2.9 A REVIEW OF AVAILABLE STATISTICAL TEST

The purpose of this section is to explore available statistical test and models that will help to determine the various proposed relationships.

2.9.1 REGRESSION

Regression analysis is the most frequently used statistical tool (Rutherford, 2001). Regression allows for the examination of relationships between an unlimited number of independent variables and a dependent variable. In studies involving the effects of outsourcing most authors define the independent variables as factors that influence

outsourcing and the dependent variable is usually a performance measure or an outcome of outsourcing. Most of the studies take on a simple approach by using simple linear regression to determine relationships (Thakur and Farok, 2008). In its simplest form regression analysis involves finding the best straight line relationship to explain how the variation in an outcome (or dependent) variable, Y, depends on the variation in a predictor (or independent or explanatory) variable X (Vinsnes et al, 2001). The linear relationship is described as follows:

$$Y = \beta_0 + \beta_1 X \dots (1.1)$$

However a hypothesized relationship will be as follows:

$$Y = \beta_0 + \beta_1 X + \varepsilon \dots (1.2)$$

Where ε is the error representing other factors that influence the independent variable. In many situations the outcome will depend on more than one explanatory variable. This leads to what is known as multiple regression. Regression analysis allows examination of the relationships between unlimited number of predictor variables. The regression equation will be as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \dots (1.3)$$

$\beta_1, \beta_2,$ and β_3 are called the regression coefficients and estimated from the study data by a mathematical process called least squares. The amount of variation in the dependent variable that is accounted for by variation in the predictor variables is measured by the value of the coefficient of determination, often called R square adjusted. The closer is to 1 the better. If R square is one then the regression model is accounting for all variation in the outcome variable (Altman, 1991; Campbell and Machin, 1993). Other studies utilized more complicated regression models. These include time series models and logistic regression models (Fritson and Wuillenwber, 2006; Frazier et al, 2006)

2.9.2 CORRELATION

Correlation is used to quantify the association between the measured X and Y variables. Linear regression is applied if one variable (X) is likely to precede or cause the other variable (Y) (Motulsky, 1995). In the context of this report correlation is used mostly in research where data has been collected from questionnaires (Hojnik, 2005).

A correlation can be defined as a single number that describes the degree of relationship between two variables (Trochim, 2006). Correlation can be calculated using the following formula:

$$r = \frac{N \sum XY - (\sum X)(\sum Y)}{([\sum X^2 - (\sum X)^2 / N][\sum Y^2 - (\sum Y)^2 / N])^{1/2}} \dots (1.4)$$

Where:

N = number of pairs of score

$\sum XY$ = Sum of the products of paired scores

$\sum X$ = Sum of x scores

$\sum Y$ = Sum of y scores

$\sum x^2$ = sum of squared x scores

$\sum Y^2$ = sum of squared y scores

Source: Selecting statistics

R is a number between -1 and 1. If r is less than zero you have an inverse relationship otherwise you have a direct relationship.

2.9.3 ANALYSIS OF VARIANCE (ANOVA)

Researchers that use this method are interested in whether the mean dependent variable scores contained in the experiment vary significantly (Rutherford, 2001). Analysis of variance (ANOVA) suits most effect conceptions by testing for differences between three or more means (Motulsky, 1995).

2.9.4 WILCOXON TEST

The wilcoxon test applies to two sample designs involving repeated measures, matched pairs or “before” and “after” measures. Some authors use this test to determine the degree of difference in performance between an outsourcing firm and a control group (Fritson and Wullenwber, 2006). The control group is either defined as a non-outsourcing firm during the same time period or as the period prior outsourcing. This method is used as an alternative to the t-test when the population cannot be assumed

normally distributed. Most common use is to determine if there is a difference before and after.

2.9.5 THE T-TEST

The t-test is the most commonly used statistical data analysis procedure for hypothesis testing. There are several types of t-test but, the most common is the two-sample t-test. This test simply tests whether or no two independent populations have different mean values on some measure. For example, compare whether systolic blood pressure differs between a control and treated ground, or between men and women or any other group. The statistics t-test allows us to answer these questions by using the t-test statistic to determine a p-value that indicates how likely we could have gotten the results by chance. If there is a less than 5% chance of getting the observed differences by chance, we reject the null hypothesis and say we found a statistically significant difference between the two groups. Correlation or regression is used to see how two variables vary together (blood pressure and heart rate), the t-test compares one variable (e.g. blood pressure) between two groups. The above mentioned techniques all employ a t-test to check significance of data.

The table on the next page is a summary of the different test and also provides guidance in selecting of the right test.

Table 2.5: summary of available statistical test

Goal	Type of data			
	measurement	Rank Score or Measure	Binomial (two possible outcomes)	Survival Time
Describe one group	Mean, Standard deviation	Median, Interquartile range	Propotion	Kaptan Meier
Compare one group to a hypothetical value	One-sample t-test	Wilcoxon test	Chi-square or Binomial test	
Compare two unpaired groups	Unpaired t-test	Mann-Whitney test	Fisher's test	Log-rank test or Mantel Hantel Haenszel
Compare two paired groups	Paired t-test	Wilcoxon test	McNemar's test	Conditional proportional hazards regression
Compare three or more matched groups	One-way ANOVA	Krusal-Wallis test	Chi-square test	Cox propotional hazards regression
Compare three or more matched groups	Reoeated measures ANOVA	Friedman test	Cochrane Q	Conditional proportional hazards regression
Quantify association between two variables	Pearson correlaton	Spearman Correlation	Contingency coefficients	
Predict value from another measure	Simple linear regression or non-linear regression	Non-parametric regression	Simple logistic regression	Cox proportional hazard regression
Predict value from several measures or binomial variables	Multiple linear regression or Multiple non-linear regression		Logistic regression	Cox proportional hazard regression

Adapted from Intuitive Biostatistics: Choosing a statistical test chapter 37 Harvey Motulsky, 1995

2.10 SUMMARY

This chapter gives an overview of the different outsourcing process frameworks. These frameworks were used to identify the different phases of the outsourcing process. Previous works, finding, case studies and expert's perspectives were used to investigate the critical success factors and activities of an outsourcing project.

The chapter also analyzed best practice techniques that are being employed in practice. These included; a proposed project team structure, the sourcing strategy matrix developed by Mclovr (2000), the Charter Group transition methodology, the SMART transition methodology, the performance management outsourcing framework and the decision making scorecard. An investigation of current literature was carried out to find out why firms do not experience the benefits of outsourcing. The chapter analyses the key problems with the outsourcing process and the current frameworks available to address these problems. It was discovered that lack of a structured process and performance measuring techniques are some of the key problems. Current framework does not provide guidelines rather just tasks to be conducted and most of these frameworks fail to address the entire outsourcing life cycle. These frameworks have a particular emphasis on the decision making phase.

It is assumed that outsourcing improves firm's performance and that firms who carry out the majority of the above mentioned key activities will experience a greater improvement. Different authors have undertaken research to discover the impact of outsourcing on business performance. Most of which however, have failed to find a direct relationship between outsourcing and performance as well as between outsourcing and key drivers. Past research involved an analysis of case studies and it was IBM Global Services that conducted the first quantitative research on the effects of outsourcing. Although their research proved that outsourcing improves firm's performance their findings were limited to the impact of IT outsourcing on business performance.

Statistical test are used to investigate relationships between variables. These tests include; unpaired and paired t-test, pearson and spearman correlation; linear and non-linear regression etc.

3. DEVELOPMENT OF HYPOTHESES

3.1 INTRODUCTION

The previous section reviewed current literature on; the key drivers of outsourcing, the outsourcing process, the outsourcing framework and the effects of outsourcing. Before developing the structured framework to assist managers with making the correct outsourcing decisions, there is a need to further investigate the subject of outsourcing. This chapter will develop a set of hypothesis from the literature to assist with the investigation. There is little practical evidence that following the structured outsourcing processes mentioned in chapter 2 and consideration of the critical success factors improve firm performance. The next sections of the project aim to collect evidence that outsourcing has a positive effect on firm performance and that success of the project is related to key outsourcing activities.

3.2 THE KEY DRIVERS OF OUTSOURCING

From the literature it is clear that cost reduction remains the primary driver of an outsourcing decision. The first hypothesis will be stated as follows:

Hypothesis 1: Cost is the primary driver of the decision to outsource.

The purpose of the above hypothesis is to assist IMPERIAL Logistics in understanding why their firms in South Africa take on outsourcing projects and to compare the result to findings in the literature.

3.3 OUTSOURCING AND FRIM PERFORMANCE

3.3.1 EFFECTS ON OUTSOURCING: A QUANTITATIVE ANALYSIS

Theory suggests that outsourcing is a way of improving a firm's operational efficiency and financial performance, especially in the short-run. Outsourcing firms should experience an immediate cost advantage. Outsourcing firms may also achieve benefits in the long run compared to firms relying on in-house expertise. As a result we expect firms engaging in outsourcing to experience an improvement in performance during the period the outsourcing contract was signed. The second hypothesis is stated as follows:

Hypothesis 2: Firm performance improves as a result of outsourcing.

Outsourcing contracts vary in size and in expenditure. While some firm may choose to focus on a single process another many outsource several business functions. The size

of the deal can have an impact on the improvement of the firm's performance especially in the long term. The third hypothesis is stated as follows:

Hypothesis 3: The extent to which firm's performance improves as a result of outsourcing increases as the value of the outsourcing deal increases.

3.3.2 THE OUTSOURCING PROCESS AND FRIM PERFORMANCE: A QUALITATIVE ANALYSIS

Firms that follow a structured procedure performing all critical and key activities indentified in the different phases of the outsourcing process will receive greater improvement in performance. Firms that have a strategic approach; conduct a thorough identification and evaluation of core competencies; have a structured risk management procedure; have a smooth transition and effective management procedures should receive a greater improvement on business performance. The fourth hypothesis is stated as follows:

Hypothesis 4: success of an outsourcing project is related to the critical activities that must be performed during the different outsourcing phases.

4. METHODOLOGY

This chapter sets out the methodology used to gather and analyze information.

4.1 THE KEY DRIVERS OF OUTSOURCING

Hypothesis 1: In the literature, different reasons for outsourcing were identified. Many authors study these reasons on the Likert scales of importance (e.g. Bhatnagar et al, 1999; Baily et al, 2002). In this empirical study a questionnaire (Appendix B) was distributed to several companies from different industries. Companies were asked to rate seven of the key drivers of outsourcing identified in the literature on a five step Likert scale. The scores of each of the reasons were summed and the key driver of outsourcing for the firms in the sample was the factor that had the largest overall score.

4.2 MEASURING THE EFFECTS OF OUTSOURCING

At the company level the effects of outsourcing are measured using financial and nonfinancial indicators. The analysis is separated into two investigations; a fact based quantitative study and a survey based qualitative study.

4.2.1 EFFECTS OF OUTSOURCING: A QUANTITATIVE STUDY

Sample Selection and data sources

The research is done using multiple case studies representing different industries and geographic locations. 33 outsourcing deals made between the years 2000-2008 were analyzed. Five leading online news sources, ComputerWeekly, ABI/INFORM, The Outsourcing Center, The OutsourcingMag and Outsourcing Alert were used to search and compile all press releases and news on outsourcing deals. A variety of combinations of key words (e.g. outsourcing, deals, contracts, announcements, transaction) were used in the search. A total of 124 outsourcing deals were found. The data was further refined to those companies whose financial statements were available to the public online. Financial information was collected on each company's investor web page. The search was limited to mega outsourcing deals publicly announced and those between the year 2000 and 2008. Outsourcing deals of less than \$10million were not included due to the fact that the impact on firm's financial performance as a result of outsourcing will not be traceable. Companies who had other financial announcements such as mergers around the time the outsourcing contract was signed were excluded from the data.

The name of the outsourcing firm, the year of the outsourcing contract, the expenditure in US\$, the industry the firm operates and the name of the vendor were recorded (Appendix C).

To make the study more unique from other previous research, the study analyzed the performance of the different companies three year after the initial sourcing contract was signed and a year before the contract was signed. One year period is too short to capture the full effects of outsourcing as transaction cost may have lowered performance in the year after outsourcing (Jiang, Frazier et al. 2006). Looking at a period of more than three year will reduce reliability of data as we can be less sure that other effects than outsourcing events influence the results.

Model specification

Hypothesis 2: A difference tests was employed to evaluate the effects of outsourcing on firm performance. To perform this test the change in the financial indicators of the outsourcing companies a year before and three years after implementation must be analyzed. To test for the significance of the difference between the two sets of data a parametric t-test and the non-parametric Wilcoxon signed rank test was performed. The

Wilcoxon signed rank test was used to find out if there is a difference between the samples and to what degree. The equation model is written as follows:

$$Z_i^{Difference} = Median(Z_i^{t+3}) - (Z_i^{t-1}) \quad (3.1)$$

Where: i denotes the value for company i in Appendix C, Z is any performance indicator and t is the period in which the outsourcing contract was signed

Performance measures

The most frequently used performance measures from the literature are used in the investigation. These performance measures are most reliable when investigating the financial impacts of outsourcing. Table 4.1 below is a list of the performance measures used in the study:

Table 4.1: Construction of performance measures

Performance measure	Numerator	Denominator
Profitability	Income before tax and interest	Total revenue
Return on total Assets	Net income	Total assets
Return on total equity	Net income	Total equity

Hypothesis 3: To find out if there is a relationship between the value of the outsourcing deal and performance a linear regression analysis will be conducted. The following regression model will be used to determine the relationships:

$$Y_i = \alpha_i + \beta_i X_i + \varepsilon_i \quad (3.2) \text{ For } i = \{Profitability, ROE, ROA\}$$

Where:

Y: dependent variable

X: independent or explanatory variable

In this study, X is the value of the outsourcing deal in US\$ million and Y is the growth rate of performance measure i . α is the intercept, β is the slope for the independent variable X and ε is the standard error.

Using the performance measures in Table 4.1, the growth rate of each of the indicators will be calculated using the formula below:

$$\text{Average growth rate}_i = \sqrt{\frac{\text{performance measure}_i(t+3)}{\text{performance measure}_i(t-1)}} \quad (3.3)$$

Where $i = \{Profitability, ROE, ROA\}$ and t is the year the outsourcing contract was signed.

The study aims to prove that the rate of improvement in performance is directly related to the value of the outsourcing deal. Regression analysis was used to determine the degree to which the two variables are related. Next are descriptions of the regression variables and an explanation of the rationale for including them in the model by providing support from the literature.

Dependent and independent variables

Measures collected from balance sheets and income statement were used to calculate profitability, ROA and ROE (all serve as dependent variables). These are all common measures used in the studies of (Yasin et al, 2009). Regression analysis using financial performance ratios have the advantage that they can capture different aspects of firm performance, and are commonly used in the literature. The amount the company spent on the deal is the independent variable in this scenario. The dependent variables will be generated using equation (3.3) stated above. The study is to test if the magnitude of the growth rate is related to the value of the outsourcing deal.

4.2.2 THE OUTSOURCING PROCESS AND IMPACT ON FIRMS PERFORMANCE A QUALITATIVE STUDY

Critical activities are those activities considered most important and whose level of application/performance has had a positive correlation with overall company performance. Managers have different perspectives as to which outsourcing activities must be performed when conducting an outsourcing project. Theory suggests that outsourcing leads to success in operations. Theory also suggests that the extent of this success is related to critical activities of the outsourcing process.

Data collection

The process involved the construction of an evaluation/self-assessment scorecard in the form a checklist. The scorecard was separated into different sections, strategy, core competencies, risk, design of the contract, relationship, transition and management. These measures where developed from a comprehensive review of current literature

and had been reviewed by other industry experts. Questionnaires (Appendix B) were distributed to industry professionals. Companies were required to confirm the critical activities under each heading that were performed or that are performed when carrying out an outsourcing project. Each company will have a different score on the total activities performed and factors that were taken into consideration. The study assumes that there is a positive relationship between the average scores in each section and the improvement in the firm's performance.

The companies were further asked to rank the effect that the outsourcing initiative had on the company's performance on a five step Likert scale. Different dimensions that companies use to measure performance were gathered from the literature and used to develop the questionnaire. The performance scale is measured relative to how well a specific area in the organization has improved as a result of outsourcing.

Sample size

Questionnaires were distributed to both; clients of IMPERIAL Logistic and selected companies listed on the McGraw-Hill BFA database. Each questionnaire was accompanied by a cover letter explaining the objectives of the survey and instructions. 123 questionnaires were distributed to the South African firms. The companies were given a response time of six weeks. The sample consists of companies in various industries in South Africa.

Statistical test specification

Correlation analysis was used to determine if there is a positive relationship between key outsourcing activities and firm performance.

5. DATA COLLECTION, ANALYSIS AND RESULTS

Before the framework or revised scorecard can be developed it is necessary to test and prove the theories developed from the literature. This is carried out by testing the hypotheses developed in chapter 3. The purpose of this section is to test these four hypotheses.

5.1 TESTING OF FIRST HYPOTHESIS

123 questionnaires were distributed to industry professionals. Each company was given six weeks to complete the questionnaire. Reminder letters were distributed three weeks after distribution to increase the response rate. 21 questionnaires were collected of which only 13 were used in the study. The questionnaires were scanned for consistency to the responses provided. Table 5.1 is a summary of the sample used in the study.

Table 5.1: Survey Statistics

Survey Statistics	
Number of questionnaires distributed	123
Number of questionnaires collected	21
Number of usable questionnaires	13
Mean respondent experience	14 years
Mean firm size	513 employees
Industry Types (% of sample)	
Manufacturing	27.27%
Finance/banking	18.18%
Consulting	18.18%
Aviation/Aerospace	9.09%
Mining	18.18%
construction	9.09%

Reasons for outsourcing

The results of the analysis have been summarized in Table 5.2 Descriptive statistics (means, and standard deviations) have been calculated for each reason.

Table 5.2: Reasons for outsourcing

Reason	N	Average Value	Standard deviation	Minimum	Maximum
Accelerate re-engineering benefits	13	2.307	1.315587	1	4
Access to world class capabilities	13	3.6923	1.1094	1	4
Reduce cost	13	3.4615	1.391365	1	4
Improve performance	13	3.2308	1.363442	1	4
Focus on core competencies	13	3.7692	1.480644	1	4
Function too difficult to manage or out of control	13	1.8461	1.463224	1	4
Reduce risk	13	2.1538	1.214232	1	4
Make capital funds available	13	2	1.290994	1	4

From the table above it is clear that the main reason for outsourcing for the companies in the sample is to focus on core-competencies. Figure 5.1 illustrates these results graphically.

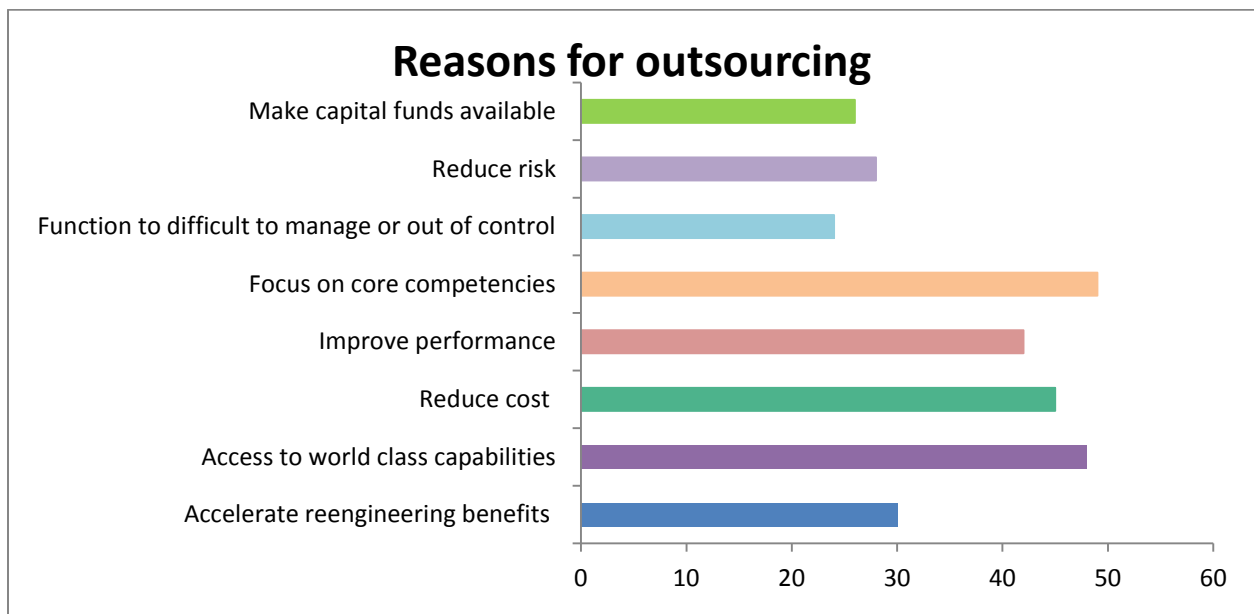


Figure 5.1: Bar chart illustrating key outsourcing drivers for the companies in the sample

The maximum score for each reason for outsourcing should be 65; in this case all companies in the sample would have identified the same reason to be the top driver of outsourcing. From the bar graph, it is clear that focus on core competencies (49), access to world class capabilities (48) and to reduce cost (45) are the top three reasons for outsourcing. The top three reasons are similar to those identified in the literature. However, the rankings differ. In the literature cost was identified as the primary driver for the

outsourcing decision. It would not be wrong to conclude that the reasons for outsourcing are consistent with the literature and the results of previous studies.

5.2 TESTING OF SECOND HYPOTHESIS

The objective of the following analysis is to provide evidence that there is a difference in firm performance before and after outsourcing. The Wilcoxon test described in the literature and in the previous chapter was used to test this difference.

The null hypothesis is stated as follows: There is no difference in performance measure (i) before and after outsourcing, where $i = \{\text{Profitability, ROE, ROA}\}$

The alternative hypothesis is stated as follows: There is a difference in performance measure (i) before and after outsourcing where $i = \{\text{Profitability, ROE, ROA}\}$

The table below is a summary data from the non-parametric t-test

Table 5.3: summary of results from Wilcoxon test

Performance measures	Test Statistic W	Z score	P-value
Profitability	89	102.06	0.1925
ROE	-8	-0.0854	0.5363
ROA	142	97.23	0.0721

The study requires 95% certainty, therefore $\alpha = 0.05$.

The study fails to reject null hypothesis as the p-value >0.05 for all i . An immediate increase in profitability, return on equity and return on assets is not necessary experienced as a result of outsourcing. However, from the data it is clear that there is a greater degree of difference in ROA after outsourcing compared to the other performance measures. However, the above results are not a surprise, as with previous research the financial impacts of outsourcing on firm performance tend to be statistically insignificant. Figure 5.2 is a bar chart that reveals the percentage of the companies in the sample that experienced an increase in performance after outsourcing.

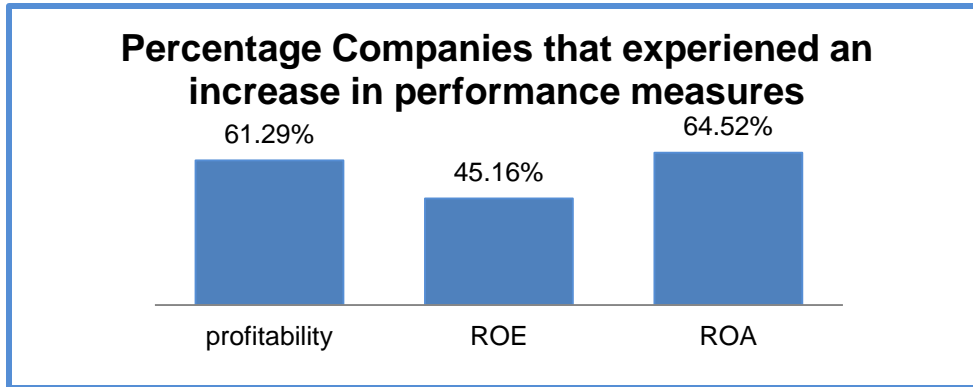


Figure 5.2: Bar chart showing the percentage of companies that experienced an increase in performance after outsourcing

5.3 TESTING OF THIRD HYPOTHESIS

Data analysis was conducted using the statistical software SPSS. The following is a description of the analysis that was conducted in the study to prove hypothesis 3.

PROFITABILITY

Equation (3.2) was used to investigate the relationship between the value of the outsourcing deal and the average growth rate of the profitability ratio. The growth rate was calculated using the following formula.

$$\text{Average profitability growth rate} = \sqrt{\frac{\text{Profitability}_{t+3}}{\text{Profitability}_{t+1}}}$$

Where t is the year the outsourcing contract was signed.

The formula measures the average rate the company's profitability grew three years after the outsourcing contract was signed. Table 5.4 is a summary of the data generated from the analysis.

Table 5.4: Profitability: summary of regression statistics and coefficients

Profitability and value of outsourcing deal	Regression Statistics			
	Multiple R	R Square	Adjusted R Square	Observations
	.377 ^a	.142	.114	.24193
	Coefficients	Standard error	T Statistic	P-value
Intercept	.936	.054	17.205	.000***
B Variable	6.573E-5	.000	2.230	.033*

Table 5.5: Profitability: ANOVA output from regression

ANOVA output from regression					
	Df	Sum of squares	Mean square	F value	Pr(>F)
Regression	1	.291	.291	4.972	.033*
Residuals	32	1.756	.059		

The null hypothesis is stated as: the value of the outsourcing deal has no effect on the average growth rate of the profitability ratio.

The alternative hypothesis is stated as: There is a direct relationship between the value of the outsourcing deal and the average growth rate of the profitability ratio.

The study requires a 95% certainty. This means that 95% of the time, the experiment will produce the similar results. $\alpha = 0.05$. The p-value is 0.033 which is less than 0.05. The null hypothesis is rejected. There is a statistically positive relationship between the value of the outsourcing deal and the average growth rate of the profitability ratio.

The coefficient of determination is 0.142; therefore, about 14.2% of the variation in the profitability growth rate is explained by the value of the outsourcing deal. The regression equation will not be very useful for making predictions since the value of R Square is not very close to 1.

Reliability and Validation

Assessment of the Assumption for Regression Analysis

In a linear regression analysis it is assumed that the distribution of the residuals (error in estimation the dependent variable $Y(Y - \hat{Y}))$ in the population is normal at every level of

predicted Y (dependent variable) and constant in variance across all levels of Y. The charts below (Figure 5.6 (a) and (b)) illustrate the residual plots derived from the data. Figure 5.6 (c) illustrates the normal probability plot and Figure 5.6 (d) shows the scatter plot.

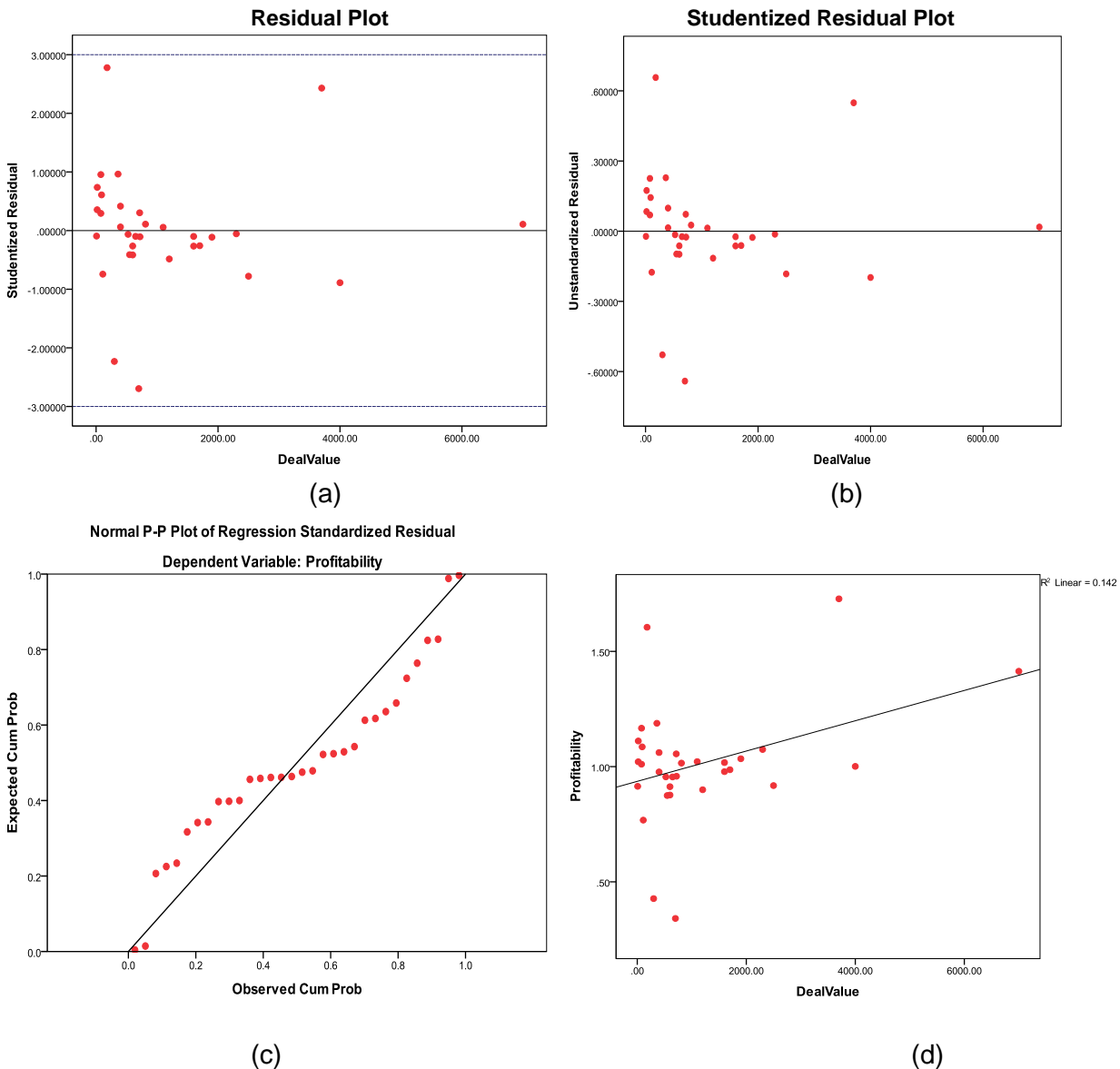


Figure 5.6: Scatter plots form regression analysis (profitability vs value of outsourcing deal)

The residual plot shows a random scatter of points (independencies) with a near constant spread (variance). The studentized residual plot shows a random scatter of points (independencies) with no values going beyond the ± 3 standard deviation reference lines. The normal probability plot of the residuals shows the points close to a diagonal line;

therefore, the residuals appear to be approximately normally distributed. Thus, the assumptions for regression analysis appear to be met.

The alternative hypothesis is therefore valid. However, it is to be noted that though there is a statistically significant positive relationship between the profitability growth rate and the value of the deal, it is a weak relationship.

RETURN ON EQUITY

Equation (3.2) was once again used to investigate the relationship between the value of the outsourcing deal and the average growth rate of the ROE ratio. The growth rate was calculated using the following formula.

$$\text{Average ROE growth rate} = \sqrt{\frac{ROE_{t+3}}{ROE_{t+1}}}$$

Where t is the year the outsourcing contract was signed.

The table below is a summary of the results obtained from the investigation.

Table 5.6: ROE: summary of regression statistics and coefficients

ROE and value of outsourcing deal	Regression Statistics			
	Multiple R	R Square	Adjusted R Square	Observations
	0.5657	0.3201	0.2989	33
Coefficients				
	Coefficients	Standard error	T Statistic	P-value
Intercept	8.77e-01	7.794e-02	11.263	1.14e-12 ***
B Variable	1.689e-0.4	4.351e-05	3.882	0.000488 ***

Table 5.7: ROE: ANOVA output from regression

ANOVA output from regression					
	Df	Sum of squares	Mean square	F value	Pr(>F)
Regression	1	1.9651	1.95511	15.067	0.0004879 ***
Residuals	32	4.1736	0.13043		

The null hypothesis is stated as: the value of the outsourcing deal has no effect on the average growth rate of the ROE ratio.

The alternative hypothesis is stated as: There is a direct relationship between the value of the outsourcing deal and the average growth rate of the ROE ratio.

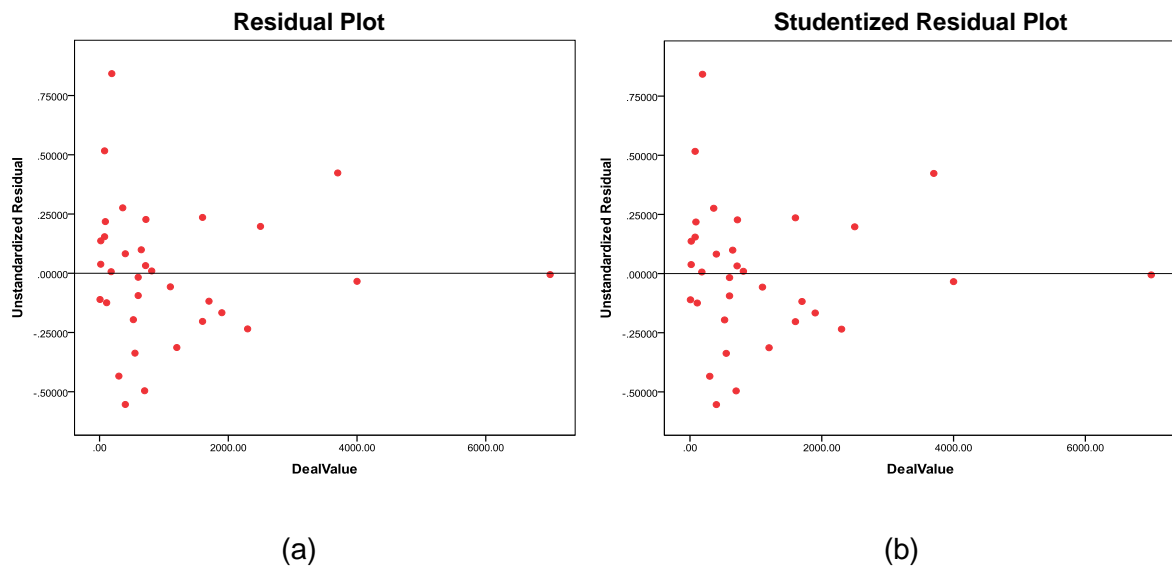
The study requires a 95% certainty. $\alpha = 0.05$. The p-value is 0.000488 with three levels of significance. The null hypothesis is rejected. There is a direct relationship between the value of the outsourcing deal and the average growth rate of the ROE ratio.

The coefficient of determination is 0.3201; therefore, about 32.01% of the variation of the ROE growth rate is explained by the value of the outsourcing deal. Not all variation can be explained by the fitted model.

Reliability and Validation

Assessment of the Assumption for Regression Analysis

The charts below (Figure 5.7 (a) and (b)) illustrate the residual plots derived from the data. Figure 5.7 (c) illustrates the normal probability plot and Figure 5.7 (d) shows the scatter plot.



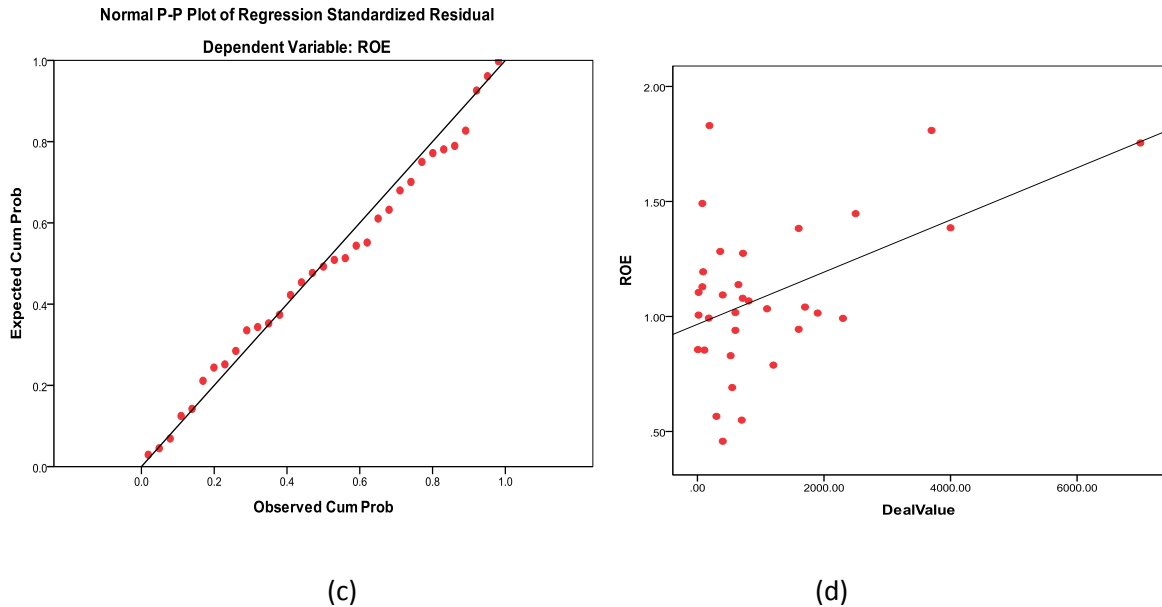


Figure 5.7: Scatter plots form regression analysis (ROE vs value of outsourcing deal)

The data points shown in the residual plot are randomly scattered with an acceptable variance. The studentized residual plot shows a random scatter of points (independencies) with no values beyond ± 3 standard deviation reference lines. The normal probability plot of the residuals shows the points close to a diagonal line; therefore, the residuals appear to be approximately normally distributed. The assumptions for regression analysis appear to be met.

RETURN ON ASSETS

Equation (3.2) was used to investigate the relationship between the value of the outsourcing deal and the average growth rate of the ROA ratio. The growth rate was calculated using the following formula.

$$\text{Average ROA growth rate} = \sqrt{\frac{ROA_{t+3}}{ROA_{t+1}}}$$

Where t is the year the outsourcing contract was signed.

The table below is a summary of the results obtained from the investigation.

Table 5.8: ROA: summary of regression statistics and coefficients

ROA and value of outsourcing deal	Regression Statistics			
	Multiple R	R Square	Adjusted R Square	Observations
	0.4779	0.2284	0.2043	33
Coefficients				
	Coefficients	Standard error	T Statistic	P-value
Intercept	0.98083	0.0635883	15.425	*2.26e-16 ***
B Variable	0.0001092	0.0000355	3.078	0.000488 **

Table 5.9: ROA: ANOVA output from regression

ANOVA output from regression					
	Df	Sum of squares	Mean square	F value	Pr(>F)
Regression	1	0.82242	0.82241	9.4728	0.004255 **
Residuals	32	2.77818	0.08682		

The null hypothesis is stated as: the value of the outsourcing deal has no effect on the average growth rate of the ROA ratio.

The alternative hypothesis is stated as follows: There is a direct relationship between the value of the outsourcing deal and the average growth rate of the ROA ratio.

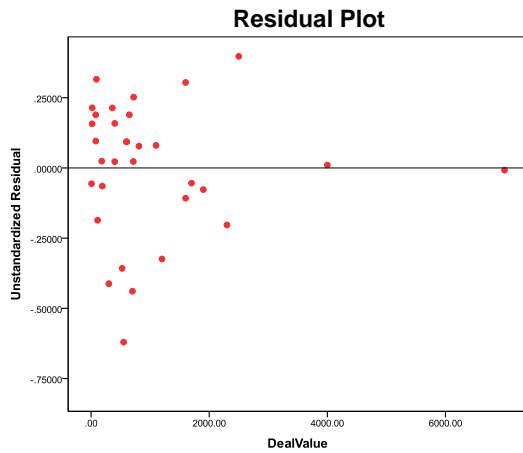
The study requires a 95% certainty. $\alpha = 0.05$. The p-value is 0.004255 with two levels of significance. The null hypothesis is rejected. There is a direct relationship between the value of the outsourcing deal and the average growth rate of the ROA ratio.

The coefficient of determination is 0.2284; therefore, about 22.84% of the variation in the ROA growth rate is explained by the value of the outsourcing deal.

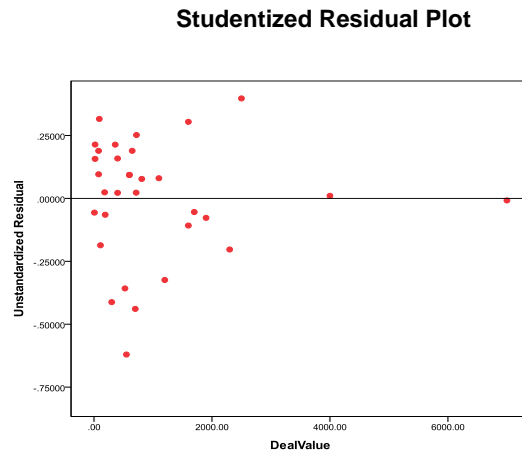
Reliability and Validation

Assessment of the Assumption for Regression Analysis

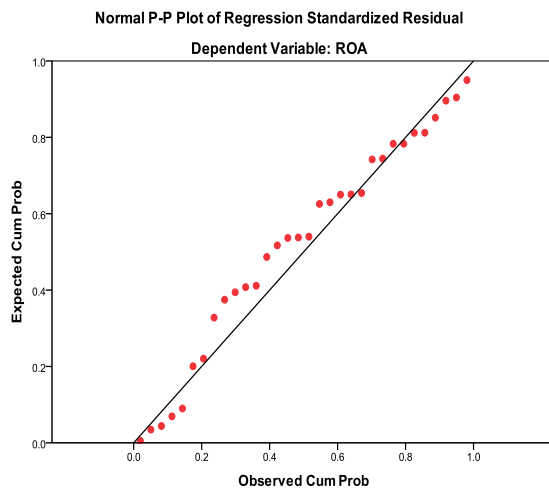
The charts below (Figure 5.8 (a) and (b)) illustrate the residual plots derived from the data. Figure 5.8 (c) illustrates the normal probability plot and Figure 5.8 (d) shows the scatter plot.



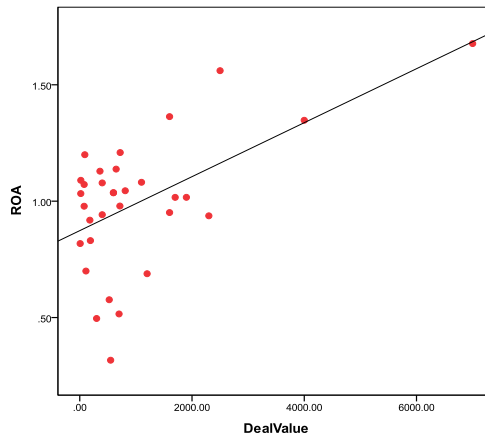
(c)



(b)



(c)



(d)

Figure 5.6: Scatter plots form regression analysis (ROA vs value of outsourcing deal)

The data points shown in the residual plot are randomly scattered with an acceptable variance. The studentized residual plot shows a random scatter of points (independencies) with no values beyond ± 3 standard deviation reference lines. The normal probability plot of the residuals shows the points close to a diagonal line; therefore, the residuals appear to be approximately normally distributed. Therefore the data meets the assumptions for regression.

SUMMARY OF CORRELATION

The table below is a summary of the relationships between the value of the outsourcing deal and the average growth rates of the three selected performance measures.

Table: 5.10: summary of correlation between growth rate of; profitability, ROA, ROE with value of outsourcing deal

Measure	Value of outsourcing deal	Percentage	Ranking
Profitability	0.142	14.2%	3
Return on equity	0.3201	32.01%	1
Return on assets	0.2284	22.84%	2

5.4 THE OUTSOURCING PROCESS AND IMPACT ON FRIMS PERFORMACE A QUALITATIVE STUDY

TESTING OF FOURTH HYPOTESIS

In this section the analysis aims to prove that success of an outsourcing project is related to the critical activities that must be performed during the different outsourcing phases.

Testing Normality of Sample

An assessment of the normality of data is a prerequisite for many statistical tests as normal data is an underlying assumption in parametric testing. Statistical test have the advantage of making an objective judgment in comparison to graphical interpretation which requires experience in interpreting normality graphically. Table 5.11 below presents the results from two well known tests of normanlity, namely the kolmogoroy Simiroc Test and the Shapiro-Wilk Test. Shapiro-Wilk Test is more appropriate for small sample sizes but can also handle sample sizes as large as 2000. For this reason, the Shapiro-Wilk test was used in the study as the numerical means of assessing normality.

Table 5.11: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Flexibility	.259	13	.017	.802	13	.007
Cost	.158	13	.200*	.896	13	.116
Innovation	.487	13	.000	.429	13	.000
Quality	.237	13	.045	.803	13	.007

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

It is clear from Table 5.11 that only the cost variable meets the assumption of normality. If the sig. value of the Shapiro-Wilk Test is greater than 0.05 the data is normal. If it is below 0.05 then the data significantly deviates from a normal distribution.

From the results it clear that the data collected deviates from a normal distribution. Spearman's rank correlation was therefore used to measure statistical dependence between the variables in the sample.

Correlation Analysis

Data was analyzed using the Statistical Package for Social Sciences (SPSS), version 19 for Windows. A correlation analysis was performed to determine the relationship between the activities carried out during the outsourcing process and the effects of outsourcing. Table 5.12 summaries the results of correlation analysis between the elements of the outsourcing process and selected non-financial indicators of company performance for the companies in the sample. The blue area highlights the results with statistically significant correlations.

Table 5.12: Summary of the results of Spearman's rho

		Cost	Innovation	Flexibility	Quality
Strategy	Spearman's rho	.379	-.189	.218	-.269
	Sig. (2-tailed)	.202	.536	.475	.374
	N	13	13	13	13
Core Competencies	Spearman's rho	.018	.299	.154	-.023
	Sig. (2-tailed)	.955	.321	.615	.941
	N	13	13	13	13
Risk	Spearman's rho	.022	-.062	.381	-.024
	Sig. (2-tailed)	.943	.840	.199	.938
	N	13	13	13	13
Contract Completeness	Spearman's rho	-.171	-.297	.148	.134
	Sig. (2-tailed)	.577	.325	.629	.663
	N	13	13	13	13
Relationship	Spearman's rho	.274	.335	-.393	.656*
	Sig. (2-tailed)	.364	.263	.184	.015
	N	13	13	13	13
Transition	Spearman's rho	-.077	-.096	.097	.661*
	Sig. (2-tailed)	.803	.756	.753	.014
	N	13	13	13	13
Management	Spearman's rho	-.123	-.060	.302	.056
	Sig. (2-tailed)	.690	.845	.317	.855
	N	13	13	13	13

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The following comments are made only for statistically significant associations between the elements of the outsourcing process and the effects of outsourcing. A commitment to and investment in the outsourcing relationship is statistically positively associated with the quality effect ($r = 0.656$, $p = 0.015$). The percentage of the variability shared is determined by squaring the correlations and then multiplying by 100. Hence, relationship commitment shares about 43% of its variability with quality. The critical activities conducted during the transition phase are positively associated with improvement in quality ($r = 0.661$, $p = 0.014$) with 43.69% variability.

It should be noted that all associations are relatively weak, which means that these direct links are also influenced by other factors.

Reliability Test

The questions in the questionnaire represented under the different heading (appendix B) were designed to measure the specific trait as it influences the outsourcing project.

It is possible that some of the respondents may have given answers that did not reflect the true outsourcing process. Due to the awareness that a questionnaire was being answered the respondent may have overestimated certain responses to shed a light on the specific company.

Reliability of the data was assessed according to the degree of consistency on the rankings. The threat to reliability is reduced in the study by ensuring that instructions were unambiguous and simple. IMPERIAL Logistics has knowledge on the performance of the companies that the questionnaires were distributed to. It will therefore be easy to track those companies who over estimated performance.

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. A high alpha value is often used as evidence that the items measure an underlying construct. Table 5.13 is a summary of the reliability test of each of the correlations in Table 5.12. The test assessed the reliability of each dependent variable (Cost, Innovation, Flexibility, and Quality) against the independent variables/factors (Strategy, Core Competencies, Risk, Contract Completeness, Relationship, Transition and Management).

Table 5.3: Summary of Cronbach alpha test

Dependent variable	Cronbach's alpha	Cronbach's Alpha Based on Standardized Items
Cost	0.706	0.764
Innovation	0.746	0.773
Flexibility	0.701	0.760
Quality	0.771	0.803

A reliability coefficient of 0.70 or higher is considered acceptable (Santos, 1999). The alpha coefficients in Table 5.13 are greater than 0.70, suggesting that the items have an acceptable internal consistency. The variable/responses in the survey produced an overall alpha value of 0.714 defending the suitability of using correlation analysis to prove the research hypothesis.

Verification

The low response rate of the questionnaires required a further analysis of the outsourcing process and its effects. The scorecard in Appendix B has a list of activities that are carried out during the outsourcing process. These activities have been derived from the literature. To confirm the theory that performing activities listed is essential and affects the outcome of the benefits of outsourcing a case study analysis was conducted. 36 outsourcing cases were studied. The purpose was to verify the activities listed on the scorecard and to provide support to the theory that was not provided for by the correlation analysis.

Case studies are most appropriate for exploratory and explanatory research, since they are able to capture a greater depth and breadth of detail on the subject's activities (Leidner and Jarvenpaa, 1993). They are particularly powerful techniques to answer "how" and "why" questions. The qualitative approach is particularly suitable for studying phenomena in which little previous research has been conducted and it is not supported by strong theoretical base (Benbasat et al, 1987). Case studies based on interviews and document reviews were used to gain a greater understanding to the reasons why outsourcing projects fail. Construct validity was established by triangulation and chain of evidence. The following are examples of typical cases used in the study;

Case 9

A telecommunications company ended its 10 year IT outsourcing deal five years early. The company outsourced support for IT infrastructure and customer and billing systems at the end 2003 and the deal was signed in 1998. According to an interview “The outsourcing deal which was cancelled, was poorly negotiated and because the two companies failed to invest adequately in managing the relationship disputes that arose from a lack of clarity escalated and caused the relationship to break down five years early.”

Case 15

The collapse of an outsourcing relationship between a retail company and a consulting firm revealed just how spectacularly outsourcing can fail if executed for the wrong reasons. In an interview the company said that “change of focus” was behind the bold move. Major problems right at the scoping stage of the deal contributed to its failure. Detailed knowledge of the project was not acquired at the beginning phases to manage the project effectively.

Case 4

A financial service provider ended its 10 year contract with a consulting firm in less than two years. “The decision to scrap the contract was all about cost savings. The failed contract was not flexible enough to accommodate the changing needs of its customer.”

KEY FINDINGS

Each case described a root cause/s for the reason for failure for each contract. The key findings are summarized in Table 5.14 as follows:

Table 5.14: key findings for the reasons for failed outsourcing contracts

	Reason for failure
Strategy and core competencies related	<ul style="list-style-type: none"> • A vague understanding of business objective • Losing sight of the key objectives of the outsourcing decision • Pressure for managers to reduce cost leading to poor decision making in the early stages • Unrealistic expectations
Relationship/contract related	<ul style="list-style-type: none"> • Poor cultural fit and compatibility of the parties • Poor communication; parties not proactively sharing necessary information • Unclear expectations and objectives were provided to vendor/s • Contract not providing for sufficient flexibility • Business managers' lack of involvement in establishing effective agreements. • A poorly negotiated contract • no investment in the relationship • Suppliers inability to deliver promised service levels
Risk related	<ul style="list-style-type: none"> • Failure to address risk of hidden cost
Transition related	<ul style="list-style-type: none"> • Inability to perform all task listed on the transition plan check list • Failure to meet transition targets due to inadequate resources for necessary for a smooth transition to take place • Confidence lost in supplier's ability to provide efficient service due to lack of structured transition plan/methodology
Management related	<ul style="list-style-type: none"> • Lack of "centralised control" and "adequate governance". • Insufficient benchmarking • Poor governance structure for managing the ongoing relationship

5.5 VALIDITY

QUESTIONNAIRE

The questionnaire was developed from a theory building approach based on the literature and was reviewed by industry experts. This establishes content validity.

FINANCIAL DATA

This data was collected using balance sheets and income statements made publicly available. These statements represented audited data and high level of validity.

5.6 RELIABILITY

Different analyses were performed on the data. Reliability test were performed in each analysis and have been described in chapter five. The findings were compared to similar studies and proved to be consistent to pervious research.

5.7 LIMITATIONS

36% of the respondents admitted that the questionnaire was not applicable to their particular company because they did not employ a structured outsourcing process. This greatly reduced the sample size and hindered the study. Time limited the study as there was not enough time to collect a greater sample and enhance the structure of the questionnaire.

Regression and correlation research demonstrate that it is possible to predict one variable from another. However, two variables can be associated without there being a casual relationship between the variables. Therefore, causal conclusions from correlation findings cannot be made because it is not possible to rule out all alternative explanations for the relationship. The study revealed a positive association between quality and commitment to the outsourcing relationship. There is therefore a relationship between the two variables but, all other alternative explanations for the correlation cannot be ruled out. For every correlation study, there is the possibility that some third variable caused the two variables without there being a causal relationship between the variables. Factor analysis is used to investigate such relationships. Factor analysis was initially carried out and the results revealed a Kaiser-Meyer-Olkin (KMO) measure of 0.445. This meant that the sample size was not adequate enough to deduce conclusions from the analysis. The sampling adequacy should be greater than 0.5 for a satisfactory analysis to proceed.

Most literature and case studies on outsourcing are western literature and cases. However, the outsourcing process is generic and is applicable to different organizations with cultural differences.

6 DISCUSSION OF RESULTS

6.1 SUMMARY OF FINDINGS

Hypothesis 1

Companies outsource for different reasons. The key reason for outsourcing for the companies in the sample was to focus on core-competencies. The top three reasons for

outsourcing found in the study were consistent to those in the literature. However, in the literature cost was identified as the key driver for outsourcing decisions. The first hypothesis states: Cost is the primary driver of the decision to outsource. The study fails to reject this hypothesis.

Cost is one of the main drivers for outsourcing decisions but it is not so for every company.

Hypothesis 2

Outsourcing is a tool used to improve company performance. The study analyzed the financial effects of outsourcing on selected firms.

The second hypothesis states: Company performance improves as a result of outsourcing

64.52% of the companies showed an improvement in return of assets three years after outsourcing and 61.29% showed an increase in profitability ratio. However, only 45.16% of the companies revealed an improvement in return of equity ratio. Improvement in firm performance as a result of outsourcing is not statistically significant.

Hypothesis 3

There is a positive association between the value of the outsourcing deal and the growth in the profitability ratio. Approximately 14.2% of the variation in the profitability growth rate is explained by the value of the outsourcing deal. About 22.84% of the variation in the profitability growth rate is explained by the value of the outsourcing deal and about 32.01% of the variation of the ROE growth rate is explained by the value of the outsourcing deal. It is to be noted that not all variation can be explained by the fitted model.

The third hypothesis was stated as follows: The extent to which firm's performance improves as a result of outsourcing increases as the value of the outsourcing deal increases. The hypothesis is therefore satisfied as noted by the above statements.

It is fairly reasonable to determine the relationship between improvement in financial performance and the value of the outsourcing deal. However it will be prudent to use a larger sample size.

Hypothesis 4

There are many reasons that lead to the failure of an outsourcing contract. The study revealed that these reasons are linked to the outsourcing process. A commitment to and investment in the outsourcing relationship is statistically positively associated with achieving greater quality ($r= 0.656$, $p= 0.015$). The critical activities conducted during the transition phase are positively associated with improvement in quality ($r= 0.661$, $p=0.014$) with 43.69% variability. These results were supported by the findings from the case studies. The major cause of failure for outsourcing relationship was the lack of investment in the outsourcing relationship. This is closely followed by; the failure to meet transition targets due to a poor transition plan; a poorly negotiated contract and failure to meet service level agreements. From the analysis, commitment to the relationship and a well structured transition plan are vital to the success of any outsourcing initiative.

The fourth hypothesis was stated as follows: success of an outsourcing project is related to the critical activities that must be performed during the different outsourcing phases.

Findings from the correlation and the cases defend the above hypothesis. The outsourcing process therefore does matter.

6.2 REVISED SCORECARD

The purpose of the scorecard is to ensure that the activities critical to the outsourcing process have been performed. The revised score card has been attached to Appendix D.

6.3 OUTSOURCING FRAMEWORK

From the above results and a thorough analysis of the outsourcing process and its effects an outsourcing framework to assist managers in making the correct outsourcing decisions has been devised. The framework has been attached to Appendix E.

The framework has been divided into three sections.

The first section is the outsourcing life-cycle. At the different phases, the critical activities have been identified.

At the centre of the outsourcing project is the outsourcing team with top management directing the project. This highlights the need for a strong governance structure to guide both the project and the outsourcing relationship.

The third section is the expected outcome to be received from a successful outsourcing project. Improvement the following areas; cost, innovation, flexibility and quality is to be expected if outsourcing to done correctly.

The framework has the following advantages:

- The framework list activities critical to the success of an outsourcing project
- The framework list techniques applicable to each phase to assist management in process evaluation
- The framework puts an emphasis on the importance of management commitment and relationship management
- The framework highlights the importance of business strategy to drive and lead the outsourcing strategy
- The outcomes provide a set of performance measure to which the effectiveness of the outsourcing project can be measured against.

The ability for the framework to produce positive results has been validated from the analysis in chapter four.

6.4 CONCLUSION

Outsourcing is a tool that if used correctly by management can help the firm improve its performance. However, the question that states: will outsourcing improve the firm performance now and in the future is not a definite yes.

Many factors affect the outcome of any outsourcing initiative. It is therefore important to ensure that a correct structured procedure is performed. Key factors that influence the success of an outsourcing project include; the understanding of business objectives, the development of an effective sourcing strategy, commitment to and investment in the relationship, a well negotiated and completed contract, well defined and realistic service levels, a well thought out transition plan, a good governance structure, well established performance metrics, communication and trust. Many South African companies do not have structured outsourcing procedures in place. In most of these companies the outsourcing decision rests on the shoulders of the individual project leaders who would normally be empowered to make all decisions to ensure a successful (read profitable) conclusion of the project. The managers of these companies believe that to have to pay somebody full time to manage the process and have endless meetings and investigations on the reasons for

outsourcing are counterproductive and reduce the potential gains. It is therefore important to highlight to these firms the importance of the outsourcing process to the success of the project.

6.5 MEETING RESEARCH OBJECTIVES

Outsourcing in practice differs from outsourcing in theory. There are however generic processes and activities that are vital to the success of outsourcing. The study confirmed the need for an outsourcing framework. Many South African companies do not have structured outsourcing procedures in place and do not take the modern approach to making outsourcing decisions. The framework was developed from a comprehensive literature study to address the problem. The framework is based both on research findings and the literature survey. The framework addresses all areas of the outsourcing process and the critical activities.

The scorecard was successfully developed according to research findings. The framework when used along with the self-assessment scorecard should provide management with a powerful tool to which successful outsourcing decisions can be made.

The report achieves its purpose of serving as an enabling tool for IMPERIAL Logistics to educate its current customers and future customers on the effects of outsourcing and the importance of the outsourcing process. This has been achieved by proving the hypothesis derived in chapter three and the comprehensive literature review on the outsourcing process and the impact of outsourcing on firm performance. The study achieved its aim of proving that outsourcing is a powerful tool that can be used to achieve greater business performance.

6.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Factors that influence the outcome of outsourcing performance are highly debatable. Many authors have failed to find direct relationships between performance measure and outsourcing. Outsourcing in theory and in practice is very different. Performing a study on a successful profitable business and learning what they are doing to be profitable is a way in which one can find out if some processes that the firm follow flies in the face of the theoretically proposed actions.

BIBLIOGRAPHY

1. Adkins, S. 2005. *Outsourcing Performance Management*. Media Tec Publishing.
2. Anonymous. 2010. *Six key success factors of outsourcing*. IT Business Edge and Allied Digital Services.[Online].Available:<www.ukrcham.ch/docs/Six_Key_Sucess_Factors_for_Outsourcing.pdf>
3. Anonymous. 2004. Outsourcing performance management. Business week. [Online]. Available: <www.Businessweek.com> [Accessed 21 August 2011]
4. Anonymous. 1998. The Outsourcing Institute's annual survey of outsourcing end users. [Online].Available:<www.outsourcing.com/content.asp?page=01b/articles/intelligence/oi_to_p_ten_survey.html> [Accessed 1 June 2011].
5. Anonymous. 1996. *Structural cybernetics: how to build healthy organizations*. [Online]. Available: <www.ndma.com/products/out.html> [Accessed 1 June 2011].
6. Aron, R., & Singh, J.V. 2005. *Getting off-shoring right*. Harvard Business Review, 135-144
7. Barry, J. & White, R. 1996. *The outsourcing manual*. Gower Publishing Limited, Hampshire.
8. Barthelemy, J. 2003. *The seven Deadly Sins of Outsourcing*. The Academy of Management Executive, 17(2): 87-100.
9. Bilderbeek, P. 2011. *Operational development models: From in-house to BPO*. [Online], Available: <www.bilderbeekconsulting.com/2011/09/operational-development-models-from-in-house-t0-bpo/> [Accessed 3 June 2011].
10. Benbasat, L., Goldstein, K.D., & Mead, M. 1987. *The case study research strategy in studies of information systems*. MIS Quarterly, 369-384.
11. Bergmann, F. 2005. *Translation Workflow, Make or Buy?* [Online]. Available: <<http://www.project-open.com>> [Accesses 21 August 2011].
12. Brown, D. & Wilson, S. 2005. *The Black Book Of Outsourcing*. John Wiley & Sons, Inc: New Jersey.
13. Bozarth, C., McDermott, C. 1998. *Configurations in manufacturing strategy: A review and directions for future research*. Journal of Operations Management, 16(4), 427-439
14. Bustinza, O.F., Arias-Aranda, D., Gutierrez. 2010. *Outsourcing, competitive capabilities and performance: an empirical study in service firms*. International Journal of Production Economics, 126(2): 276-288.
15. Casale, F. 2004. *The sixth annual outsourcing index: buyers ready to spend*. Outsourcing essentials, 1(4).

16. Chronis, T. 2004 . A structured approach to vendor selection initiative. LiquidHub.
17. Corbett, M.F. 2004. *The outsourcing revolution: Why it makes sense and how to do it right*. Dearborn Trade Publishing, Chicago
18. Cullen, S., Seddon, P., & Willcocks. 2005. *Managing Outsourcing: The life Cycle Imperative*. MIS Quarterly Executive, 229-246
19. Diaz-Mora, C. 2008. *What factors determine the outsourcing intensity? A dynamic panel data approach for manufacturing industries*. Applied Economics, 40(19): 2509-2521.
20. Duening, N. 2005. *Essentials Of Business Process Outsourcing*. John Wiley & Sons: Hoboken N.J
21. Embleton, R., & Wright. 1998. *A practical guide to successful outsourcing*. Empowerment in Organizations, 6(3): 94-106.
22. Eriksson, T., & Hatonen, J. 2009. *30+ years of research and practice of outsourcing- Exploring the past and anticipating the future*. Journal of International Management, 15: 142:155.
23. Everett, J., & Dixson, J. 2006. *Determining competencies and managing vendors* [Online]. Available: <<http://www.think180.com>> [Accessed 12 August 2011].
24. Gamble, R. 2003. *Buyers ready to spend*. Outsourcing essentials, 1(4).
25. Gilley, K., & Rasheed, A. 2000. *Making more by doing less: An analysis of outsourcing and its effects on firm performance*. Journal of Management, 26(4): 763:790.
26. Griessel, D.L. 1998. Critical success factors for outsourcing. University of Witwatersrand.
27. Goolsby, K. 2009. *Best practices for risk mitigation in outsourcing transitions* [Online]. Available: <<http://www.outsourcing-center.com>> [Accessed 21 August 2011].
28. Gottfredson, M., Puryear, R., Phillips. 2005. *Strategic sourcing: from periphery to the core*. Harvard Business Review, 83(2), 132-139.
29. Halvery, J., & Melby, B. 1996. *Information technology outsourcing: Process, strategies and contracts*. John Wiley & Sons, New York.
30. Handfield, R. 2006. *A brief history of outsourcing*. [Online]. Available: <www.scm.ncsu.edu/scm-articles/article/a-brief-history-of-outsourcing> [Accesses 3 June 2011].
31. Handley, S.M., & Benton W.C. 2009. *Unlocking the business outsourcing process model*. Journal of operations Management, 27(5): 344-361.
32. Hays, D.C., Hunton, J.E., Reck, J.L. 2000. *Information systems outsourcing announcements: Investigating the impact on the market value of contract-granting firms*. Journal of Information Systems, 14(2): 109-125.

33. Hewat, A. 2010. Outsourcing: What is it and what are the options. Lodestar.[Online]. Available: <lodestar.net.au> [Accesses 27 July 2011]
34. Hill, S. 1994. *Logistics takes a new road*. Manufacturing Systems: 28-32
35. Hindle, T. 2008. *Core Competence*. The Economic Guide to Management Ideas and Gurus [Online]. Available: <http://www.economist.com> [Accessed 26 July 2011].
36. Hogwood, B., & Gunn, L. 1984. Policy analysis for the real world. Oxford: Oxford University Press.
37. Hook, L.2003.Strategic outsourcing for competitive advantage. Kairos Group International. [Online]. Available: <www.kairosgroup.com/webnew.htm>
38. Jennings, D. 1997. *Strategic guidelines for outsourcing decisions*. The Journal of Strategic Change, 6: 85-96.
39. Jiang, B., Frazier, G., & Prater, E. 2006. *Outsourcing effects on firms' performance*. International Journal of Operations & Production Management, 26(12): 1280-1300.
40. Jiang, B., & Qureshi, A. 2005. *Research on outsourcing results: Current literature and future opportunities*. Management Decision, 44(1): 44-55.
41. Jones, D., 1993. *Costs are as well as benefits from outsourcing*. Financial Technology International Bulletin, 10(10), 5-6.
42. Kern, Y., & Willcocks, L.P (2001). *The relationship advantage: Informantion technologies, sourcing, and management*. Oxford, Oxford University Press.
43. Khalfan, A. 2003. *A case study analysis of business process outsourcing projecy failure profilr and implementation problem in a large organization of a developing nation*. Business Process Management, 9(6): 745-759.
44. Kroes, R. & Ghosh, S. 2010. *Outsourcing congruence with competitive priorities: Impact on supply chain and firm performance*. Journal of Operations Management, 28: 124-143.
45. Lackow, H.M. 2001. IT outsourcing trends. New York: The conference Board.
46. Leidner, D.E., & Jarvenpaa, S.L. 1993. *The information age confronts education: case studies on electronic classrooms*. Information Systems Research, 4(1): 24-54.
47. Leinfuss, E. 2004. *Why management, management, and more management are the key to successful outsourcing partnerships*. Outsourcing essentials, 2(2).
48. Leonard-Barton, D. 1992. *Core capabilities and core rigidities: a paradox in managing new product development*. Strategic Management Journal, 13(8): 11-125.
49. Lieb, R.C. 1992. *The use of third-party logistics services by large American manufactures*. Journal of Business Logistics, 13(2): 29:42.
50. Linda, R. 2006. *The Mangers Step-By-Step Guide to Outsourcing*. McGraw Hill: New York

51. Loh, L., Venkatraman, N. 1992. *Determinants of information technology outsourcing: A cross-sectional analysis*. Journal of Management Information Systems, 9(1), 7-24.
52. Marshall, D., Lamming, R., Fynes, B., & Burca, S. 2005. *The development of an outsourcing process model*. International Journal of Logistics Research and Applications, 8(4): 347-359.
53. Mehrban, M. 2009. Outsourcing arrangements in the current market. [Online]. Available: <www.financerworldwide.com/article.php?id=3824> [Accessed 21 August 2011].
54. McIvor, R., Humpherys, K., Wall, P. & MCKIHRICK, A. 2009. *A study of performance measurement in the outsourcing decision*. Research executive summaries series, 4(3):1-13.
55. McIvor, R. 2008. *What is the right outsourcing strategy for your process?*. European Management Journal, 26: 25-35.
56. McIvor, R. 2000. *A practical framework for understanding the outsourcing process*. Supply Chain Management: An International Journal, 5(1): 22-36.
57. Menard, S. 2010. *Logistic Regression: From Introductory to Advance Concepts and Applications*. SAGE Publications: USA.
58. Micheal, J. 2007. *Outsourcing: Design, Process and Performance*. Cambridge press:: Cambridge Uk
59. Miles, J., & Shevlin, M. 2001. *Applying Regression and Correlation*. Athenaem Press: Gateshead UK
60. Narasimhan, R., Das, A. 1999. *An empirical investigation of the contribution of strategic sourcing to manufacturing flexibilities and performance*. Decision Sciences, 30(3): 683.
61. Patel, A. B. 2005. *Outsourcing Success The Management Imperative*. PALGRAVE MACMILLIAN: New York.
62. Porter, M.E. 1985. *Competitive advantage*. Free Press, New York.
63. Quinn, J.B., & Hilmer, F.G. 1994. *Strategic outsourcing*. Sloan Management Review, 43-55.
64. Rottman, J., & Lacity, M. 2004. *Proven Practices of IT Offshore Outsourcing*. Cutter Consortium, 5(12): 1-27.
65. Rutherford, A. 2001. *Introducing ANOVA and ANCOVA a GLM Approach*. Athenaem Press: Gateshead UK.
66. Sampath, N., & Mavle, A. 2010. *Transition best practices* [Online]. Available: <<http://www.infosys.com>> [Accessed 24 August 2011]
67. Santos, A., & Reynaldo, J. 1999. Cronhach's *Alpha: A tool for assessing the reliability of scales*. Journal of Extension, 37(2)

68. Sung, K., & Young, S.C. 2003. *Critical success factors for IS outsourcing: Implementation from an inter-organizational relationship perspective*. Proceedings of the 11th European Conference on Information Systems, Naples, Italy, 16-21
69. Thakur, P., & Farok. 2008. *Impact of offshoring and outsourcing of core activities on performance: An examination of clinical trials*. Rutgers University.
70. Yalaho, A., Narhar, N., Kakola, T., & Wu, C. 2002. *A conceptual process framework for IT-supported international outsourcing of software production*. Proceedings of the IEEE EEE05 International Workshop on Business Services Networks BSN'05, Hong Kong, 3-13.
71. Yasin, O, et al. 2009. *Impacts of information technology (IT) outsourcing on organizational performance: A firm level empirical analysis*. Fairfield University.

APPENDIX A: Example of A outsourcing Decision-Making Scorecard

Institutional Setting

1. Is this a functional part of our core competence? Yes No
2. Does this service need to be provided on a continual basis? Yes No
3. Do we have in-house expertise to provide this service? Yes No
4. Do we have available staff to provide this service? Yes No
5. Can we legally outsource this service? Yes No

Risk

1. Would loss of content of this service harm the organization? Yes No
2. Would loss of expertise have a negative impact? Yes No
3. Is the quality of service delivery a concern? Yes No
4. Would the response time to situational problems be reduced? Yes No
5. Would current contract performance be negatively impacted? Yes No

Goals and Objectives

1. Can the goals of the service be clearly defined? Yes No
2. Are the goals for this service long-term? Yes No
3. Can the achievements of these goals be objectively measured? Yes No
4. Are the objectives measures currently in place for the service? Yes No
5. If the goals and objectives are not achieved, will this have a
Negative impact upon the company Yes No

Provider evaluation

1. Are there known external providers for this service? Yes No
2. Do the missions and strategic goals of the providers align with
our company's mission and strategic goals? Yes No
3. Are the providers known to have the capacity to provide this service? Yes No
4. Has the company had previous relationships with providers of the service? Yes No
5. Are the providers known to deliver high quality services? Yes No

Source: Brown and Wilson. 2005. *The Black Book of Outsourcing*

APPENDIX B

QUESTIONNAIRE

PURPOSE

The purpose of the questionnaire is to determine what factors drive the outsourcing process and if there is a link between the management practices of the outsourcing process and the performance of the firm. The questionnaire may need to be filled in by more than one person in the industry as it contains different aspects of the outsourcing process.

INTERVIEWEE DETAILS

ROLE IN COMPANY:

YEARS OF EXPERIENCE:

LEVEL:

COMPANY DETAILS

SIZE (NUMBER OF EMPLOYEES):

POSITION IN INDUSTRY:

INDUSTRY TYPE:

SECTOR IN INDUSTRY:

STATISTICAL ANALYSIS

What function/s does your company outsource?

Weight the following factors according to the influence it has on the outsourcing decision relative to the other factors (1=low, 9=high) (removed from study as many companies did not answer the question correctly).

FACTOR		1	2	3	4	5	6	7
Uncertainty	1							
Loss of control	2							
Loss of core competencies	3							
Employee unhappiness	4							
Difficulty in reversing	5							
Risk of failure	6							
Fear of losing control	7							

Weight the factors that encourage your decision to outsource? (1=low, 5=high)

FACTOR	RANK
Accelerate reengineering benefits	
Access to world class capabilities	
Reduce cost	
Improve performance	
Focus on core competencies	
Function too difficult to manage or out of control	
Reduce risk	
Make capital funds available	

SELF-ASSESSMENT SCORECARD

THE OUTSOURCING PROCESS

	YES	NO
Strategy: establishing goals and objective		
The current approach to outsourcing is strategic		
Is there a structured process for indentifying outsourcing opportunities		
Objectives and goals were determined to drive the strategy		
Care was taken to ensure that the strategy was in line with corporate objectives		
The strategy was developed around the core competency		
Techniques on how to measure the achievement of these goals were established		
Benchmarks/models were used to establish goals		
Present and future requirements of customer needs were understood		

	YES	NO
Core competencies		
All core and non-core activities were identified by the evaluation team		
All core competences were assessed for potential improvement of performance		
The team understood the capabilities of the core activities		
Care was taken to consider capabilities that might be important in the future		
there suppliers that could perform some core function better but we still did not outsource		
Contributions to the competitive advantage of each core activity was understood		
The functions outsourced are not considered critical to the success of the business		
The company only outsources non-core functions		
Care was taken to ensure that the outsourcing decision was consistent to the overall corporations competitive and operations strategy.		
The extent to which the outsourcing decision will impact the future strategic options and or alternatives was fully evaluated		

RISK	YES	NO
There a structured risk management process		
All risk of outsourcing were identified		
The impact the risk will have on our customers was evaluated		
The potential negative consequence of losing our internally capabilities to perform and hollowing out was considered		
The evaluation team evaluated the risk to our intellectual property		
The risk for opportunism from vendors was considered		
The risk of external supplier shrinking in their responsibilities was considered		
A mitigation strategy for each risk established		

CRAFTING THE DEAL (design of the contract)	YES	NO
A systematic approach to identifying and selecting the right vendor for the project was conducted		
A vendor selection and contractual team were established		
All customer service requirements were determined		
The long-term strategic interest of the buyer and vendor were taken under consideration		
Service and performance levels were clearly stated in the contact		
The contract contains a well defined penalty clause and performance rewards and benefits		
The contract included clauses intended to make switching or re-internalizing the activity easier should the relationship fail.		
The contract clearly defined a dispute resolution process		

RELATIONSHIP	YES	NO
We have a long-term commitment to the relationship		
The supplier provides superior performance and cannot be replaced		
The relationship with our supplier is viewed as a partnership		
Senior management seeks to develop a relationship with the provider and their management team		
There is a sharing of risk and benefits		
We make investments that are unique to our relationship with the provider		
We share detailed and valued information with our provider to enable them to improve their planning and operations		
There is frequent communication		
Joint continuous and collaborative improvement efforts are conducted		
The provider is heavily involved in new product and service development		
We involve the supplier in our strategic planning process		
Dispute resolution is open and constructive		

TRANSITION	YES	NO
Employees and personnel were informed about the outsourcing decision in advance		
The project had full support from the employees affected		
A transition/implementation team was established to conduct the process		
A timeline for all outsourcing activities was developed (meetings, deadlines, employee transition)		
The timeline was distributed to all employees involved		
A detailed transition plan with details of all functions that must be performed to accomplish successful transition was constructed		
A step-by-step procedure on how to handle every task associated with the outsourcing process was included in the transition plan document		
Employees transition and separation plan was taken into consideration		
The impact on non-outsourced functions was taken into consideration		
A transition check list was developed that included all items in the transition plan		

MANAGEMENT	YES	NO
A post-outsourcing review was constructed		
A review of pre and post outsourcing cost was measured		
An Evaluation of supplier performance was conducted		
Performance measurement techniques of the impact of the outsourcing decision were established		

OUTSOURCING EXPECTATIONS AND PERFORMANCE

OUTSOURCING PERFORMANCE	YES	NO
Has exceed or met expectations of total annual cost		
Has exceeded of met expectations of quality performance		
Has exceeded of met expectations of flexibility		
Has exceeded of met expectations of reliability		

Listed below are several dimensions that companies use to assess competitive advantage. Please rate each item according to the effect that outsourcing has had on the item during the past three years. (1- Great negative impact, 2- partial negative impact, 3- unchanged, 4- partial improvement, 5- great improvement)

MEASURE	EXTENT OF EFFECT
Cost	
Labour productivity	
Inventory cost	
Capacity utilization	
Production/manufacturing costs	
Innovation	
Number of innovations	
Differentiation from competitors' product technology	
Expenditure on research and development	
Flexibility	
Ability to adjust capacity and/or volume	
Ability to customize products/services to meet customer specifications	
Number of product/service features or options	
Quality	
Product/service performance	
Reliability of product/service	
Resolution of customer complaints	
Product durability	
Other	
Market share	
Access to people with experience	
Freed up resources for other purposes	
Focus on core business activities	
Skills acquired from other companies	

APPENDIX C

Sample data of outsourcing deals

Savvis	Easyjet	Airline	300m	2006	5
HP, IBM, Wipro, EDS and Convisnt	General Motors	Automobile	7bn	2006	5
EDS	Rolls Royce	Automotive	1.7bn	2000	10
IBM	Deutsche Bank	Banking	\$2.5bn	2002	10
Accenture	Barclays	Banking	648m	2004	6
IBM	Lloyds Banking Group	Banking	810m	2004	7
HP	Bank or Ireland	Banking	600m	2003	5
TCS	Nielsen	consulting	1.2bn	2007	10
IBM	Unilever	Consumer products	1.6bn	2005	10
Xerox SBS	BBC Technologies	Entertainment and leisure	3.7bn	2004	10
IBM	West Pac Banking	Finance	2.3bn	2000	10
CSC	Old Mutual	Financial services	275m	2005	7
IBM	TD Banking Group	Financial services	720m	2003	7
EDS	Bank of America	Financial services	700m	2006	6
Vendor	Company	Industry	Amount US\$	Year	Period
CSC	Newport Mining Co.	Mining	180m	2006	7
IBM	Hess Operations	Oil company	7.3m	2007	5.5
Accenture	Sainsbury	Retail	1.9bn	2000	10
Computacenter	Marks and Spenser	Retail	19m	2007	3
Cable & Wireless	Morrisons	Retail	110m	2007	3
Xansa	Tesco	Retail	18m	2007	3
Xansa	Boots	Retail	90m	2002	7
TCS, Wipro	Target	Retail	400m	2008	
IBM	American express	Service	\$4bn	2002	7
BT	Unisys	Technology	190m	2007	6
IBM	Vodafone	Telcom	600m	2007	5
IBM	Nokia	Telcom	360m	2004	5
IBM	Telstra	Telcom	1.1bn	2006	6
Nokia (NSN)	Bharti Airtel	Telcom	400m	2006	3
CSC	Motorola	Telcom	1.6bn	2003	10
Xerox	Siemens	Telcom	78m	2001	5
Accenture	British Telcom	Telcom	548m	2005	10
CSC	Nortel Networks	Telcom	3bn	2000	10
IBM	Ericsson	Telcom	78m	2003	5

APPENDIX D

THE SCORECARD

STRATEGY EVALUATION	Yes	No
The outsourcing team structure has been developed with executive management driving the process		
Corporate objectives have been understood		
The sourcing strategy is in line with the overall corporate strategy		
Techniques on how to measure the achievement of the outsourcing goals have been established		
Sufficient time had been allocated to the benchmarking of goals and objectives		

CORE COMPETENCIES EVALUATION	Yes	No
All core and non-core activities have been identified		
All core and value adding activities have been assessed for potential improvement		
Contribution to the competitive advantage of each core activity has been understood		
Benchmarks/models were used to establish goals		
Care was taken to ensure that the outsourcing decision was consistent with the overall corporation's competitive and operations strategy		

CRAFTING THE DEAL	Yes	No
All customer service requirements have been determined		
The long-term strategic interest of the buyer and vendor were taken under consideration		
Service and performance levels have been clearly stated in the contract		
The contract contains a well defined penalty clause, flexibility clause, benchmarking clause, termination clause and performance rewards and benefits		
The contract clearly defines a dispute resolution process		

RELATIONSHIP EVALUATION	Yes	No
Investments made are unique to the relationship with the provider		
Detailed and valued information is shared with the provider to enable them to improve their planning and operations		
There is regular communication and meetings		
Joint continuous and collaborative improvement efforts are conducted		
Dispute resolution is open and constructive		

TRANSITION	Yes	No
The project had full support from the employees affected		
A timeline for all outsourcing activities was developed (meetings, deadlines, employee transition) and has been met		
A detailed transition plan with details of all task that must be performed to accomplish successful transition has been constructed		
Impact on non-outsourced functions has been taken into consideration		
Management support, Change management and Resource allocation have been considered and care taken to ensure all factors have been performed effectively		

MANAGEMENT	Yes	No
Performance measurement techniques to assess the impact of outsourcing decisions were established		
Constructive post outsourcing review has been established		
A risk management plan that includes; risk identification, planning, mitigation, risk tracking and control has been drawn		
Allowance for sufficient benchmarking of supplier performance and pricing		
Detailed documentation and administration		

APPENDIX E

THE OUTSOURCING FRAMEWORK

