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DEVELOPING A FRAMEWORK FOR MEASURING OUTSOURCING PERFORMANCE

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Introduction

Globalisation has resulted in a more integrated and interdependent world economy, where firms choose to concentrate or disperse value adding activities around the world, according to potential locational advantages (Rundh, 2007, Stonehouse et al, 2005 and Zhao et al, 2006). Outsourcing is, according to Harland et al (2005), 'Sourcing activities externally that an organisation has internal capability to perform'. Outsourcing is growing at an exponential rate, as the increasingly global marketplace sees an array of competitive factors such as cost, speed, quality, volume, flexibility and innovation becoming increasingly important, leading firms to move from transactional outsourcing to using more strategic outsourcing as a means of achieving competitive success. Firms who achieve success in their international business, are those that perceive the changes in the international environment and who are able to develop strategies that enable them to respond accordingly, (Rundh 2007). Their survival is based to a great extent on early identification and analysis of changes in markets and industries in their international market environment.

Managers are increasingly feeling pressure to make the right sourcing decision, as the business consequences can be quite significant (Sanders et al 2007). Whilst outsourcing can result in lowered costs and competitive advantage, poorly made outsourcing decisions can lead to a variety of problems such as increased costs, brand damage, disrupted service, loss of operational knowledge and even business failure. Published failures over the last two years include Mattel's and Toyota's supplier quality and Toyota's ability to leverage its own technological advantage during product development. In addition, not all outsourcing contracts are successful, with many having to rewrite their contracts within the first six months. This, Kavcic and Tavcar (2008) warn, is because outsourcing may be considered part of a contemporary trend in business which values short term gains more then long term performance and stability. Contracting firms and managers need to be aware of outsourcing advantages and risks, as well as the spectrum of contracting outsourcing arrangements.

As organisations outsource larger and more complex processes they require a clear understanding of their corporate strategy, core competencies, risks and costs and the appropriateness of each potential arrangement for meeting business objectives (Sanders et al, 2007, McIvor et al, 2009). It is acknowledged in the literature that process frameworks and effective performance management are critical influences on successful outsourcing and should be linked with the business strategy of the organisation.

It is necessary to develop an outsourcing framework which encourages the user to strategically align the outsourcing initiative with the corporate strategy as well as to evaluate, measure and manage the proposed outsourcing initiative. There are a number of frameworks available in the literature which target different aspects of an outsourcing process. This paper brings a number of these frameworks together, particularly with reference to performance management and metrics. The proposed amalgamated framework attempts to link a firms corporate strategy, the rationale to outsource and associated risks, with the process of outsourcing and its subsequent monitoring and management.

Outsourcing's Evolution in the Global Environment

Outsourcing is a management approach that allows delegation to specialised and efficient external agents, operational and management responsibility for components, processes or services previously delivered by the enterprise. 'In reality, outsourcing is an umbrella term that includes a range of sourcing options that are external to the firm' (Sanders, et al 2007). Whilst outsourcing itself is not new, the range of product and services organizations are being asked to provide, the extent to which outsourcing has become the politically correct response to changing markets and corporate conditions, the extent to which core or close to core are now being outsourced - is new. It is now being used as a strategic weapon or response. As increasing global competition forces organisations to continuously find ways to improve business performance, McIvor et al (2009) believe that outsourcing allows firms to look beyond their traditional boundaries to obtain this performance improvement. Lankford and Parsa (1999) and McIvor et al (2009) see outsourcing as a means of re-engineering the organisation, that is a fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed. In the era of “global market” and “e-economy”, outsourcing is one of the main pillars of the new way to conceive the relationships among companies (Franceschini et al, 2003).

Outsourcing has evolved over the last three decades. Early outsourcing was based more on Williamson’s transactional cost theories (TCA), with the resource based view (RBV) being applied more when making strategic outsourcing decisions. McIvor (2000) considers strategic outsourcing to be when companies outsource everything except those special activities which can bring a unique competitive edge. Lankford and Parsa (1999) classify operational advantages as trouble avoidance whilst strategic drivers of outsourcing seek long term contribution to opportunity maximisation.

Not alone has the criticality of the products being outsourced increased, so too has the nature of the ‘product’ changed to include product manufacturing, product testing, R&D, IT and business process outsourcing (BPO) and customer service. Zhu et al (2001) cite Deaver’s 1997 research, which indicates that the increased level of outsourcing in the USA can be attributed to four fundamental changes in the competitive market environment, these include rapid technological change, the increased risk and search for flexibility, a greater emphasis on core corporate competencies and finally globalisation.

The amount of money that businesses spend on services continues to grow with the increase in offshoring, (Tate and Ellram 2009). The maturing Information Technology Outsourcing (ITO) and BPO markets offer back office executives tremendous opportunities to drive business value (Lacity et al, 2008). BPO, is the fastest growing sector in India, growing at a compound annual growth rate of nearly 37% (Bharadwaj and Saxena, 2009), sees organisations transfer responsibility for entire functions, such as human resources management, finance and information services to external service providers. This is sometimes referred to as ‘unbundling’ (McIvor et al, 2009). As offshore BPO service contracts now encompass nearly every business function, they require skilful management of people, technology and processes.

There has been a shift in the mindset towards outsourcing of innovation, which according to Baloh et al (2008), is driven by increased competitive pressures as globalisation make the need for innovating with business partners more critical. Organisations cannot, in this age of rapid innovation, simply maintain their levels of skills and competencies. They need to ceaselessly create knowledge, innovate processes and products and learn from their predecessors mistakes and services. Worldwide executives agree that collaborative innovation is indispensible as they realised that they must partner with external entities to source ideas, know how and capabilities’ (Baloh et al, 2008).

<u>Drivers & Rationale for Outsourcing;</u>

It is widely recognized in outsourcing literature that the most often quoted drivers by organisations considering outsourcing are, to enable the organisation to focus on core activities and to reduce costs, providing short-term financial benefits and balance sheet improvements. ‘Focussing on fewer, manageable core activities, organisations lessen the costs and complexity of their own operations’ (Harland et al, 2005). “On average, companies are realizing a 9 per cent cost saving and a 15 per cent increase in capacity and quality through outsourcing” (Embleton and Wright, 1998). Cost savings for *s*mall companies are through economies of scale, whilst large companies benefit by shedding what are usually ill-managed peripherals

As companies globally struggle to cope with rapid technological change, reduced time to market, mass customisation, rising costs, quality and increased competition, they are considering ever more strategic and risky outsourcing initiatives. It is essential that the outsourcing rationale is clearly driven by the firms competitive strategy. Literature recognises the need to develop these rational into outsourcing CSFs or KPIs which can be measured and managed by the organisation. They can be ranked along a continuum of operational to strategic, (Harland et al, 2005, Byoungho, 2004, Lankford and Parsa, 1999, Fill and Visser, 2000 and Lacity et al,2008, Zhu et al, 2001). Lacity et al (2008) believe that while there are a dizzying set of choices in terms of suppliers sourcing locations, service offerings and models of engagement, back office executives must conquer a significant learning curve and build key in-house capabilities in order to successfully exploit outsourcing opportunities, especially as the service providers in India are experiencing staffing, costing and management.

The ICT outsourcing business is gathering momentum, with volume expanding exponentially, with firms expecting immense cost and technological benefits. However, Lacity et al (2008) suggest that the ICT team composition during and after successful outsourcing engagements needs to be considered. Their research indicates that success in outsourcing was accompanied by significant changes to the client's ICT teams and that outsourcing success was positively influenced by strong technical leadership and the introduction of new management roles to the ICT team.

In summary, Lankford and Parsa (1999) believe that the decision to outsource can lead to competitive advantages for businesses but to be successful the decision needs to be an informed one. Good, hard, detailed information in the hands of strong management can help avoid a costly step, one that is not easily reversed. Ultimately, for outsourcing in any form to be successful, quick response times to strategic opportunities and threats are essential. Effective management of the outsourcing relationships is an organizational imperative.

Pitfalls when Outsourcing

Literature highlights the many risks which companies are exposed to when they outsource. The two most common problems are failure to achieve targeted cost savings and /or outsourcing your core competency or something too close to your core competency. 'While cost saving is something that everybody hopes to achieve, many do not" (Embleton and Wright, 1996e). They state that 50% at best break-even, with others finding that it is more expensive. Many companies focus on achieving short term benefits, because they lack a formal outsourcing decision making processes which includes medium and long term cost benefit analyses (Harland et al, 2005). While Cox (1996), McIvor et al (2009) and Lankford and Parsa (1999) agree that it is necessary to formulate and quantify requirements and develop a base line against which all savings can be to measured. This is all the more necessary when companies are outsourcing to get rid of problems (Feeney et al, 2005) or when they have outsourced poorly performing processes without understanding the causes of poor performance (Mc Ivor et al, 2009).

Many do not consider the cost of transactions, which increases with the additional complexity in the total supply network (Cox, 1996). For example, Roth et al (2008) highlight that global sourcing is typically accompanied by additional costs for supply chain oversight, logistics, pipeline inventory, and quality management. Their research identified that 'FDA reports of carcinogens, pesticides, bacteria, drugs and heavy metals in imported foods have served as a wake up call to the American populace about the quality risks of global sourcing, especially from China.' Transaction cost theory established four categories of costs which need to considered (Calantone and Stanko, 2007). These include adaption costs, safeguarding cost, measurement and transaction frequency costs. When considering these costs, account needs to be taken of asset specificity, bounded rationality and potential opportunistic behaviour of the supplier. All costs need to be established and benchmarked.

Mistakes in identifying core and non-core activities can lead organisations to outsource their competitive advantages and once organisational competence is lost it is difficult to rebuild (McIvor, 2000, Harland et al, 2005). They remind us that core competencies change continuously, thus companies need to consider their leading edge products, services and processes. Lankford and Parsa (1999) agree, citing the mistaken core competency identification by IBM which allowed the development of Microsoft and Intel. Harland et al (2005) identify the difficult decision regarding how 'close to core' outsourcing should be. Some organisations choose to retain some capability and capacity in house and outsource part of the activity. Companies which over outsource develop competitive disadvantages, where the hollow manufacturing firm has a reduced ability to learn. Each organisation needs to develop guidelines on what is made and what is bought.

Concern is expressed by Harland et al (2005) and McIvor et al (2009) regarding both, the lack of knowledge relating to decision making process on what and how much to outsource, and the use of frameworks to guide organisations making and reviewing the decision to outsource.

According to Feeney et al (2005), it is essential for companies selecting potential suppliers, to begin by assessing their requirements and the level of service they seek. They then decide to either invest in fixing the existing function or establish a long term partnership. It is vital that Client Needs are matched by the Supplier Competencies in terms of operational service needs, service improvement needs and long term visibility needs. In other words, it is essential that the clients rational to outsource is the suppliers core competence (Feeney et al, 2005 and Greaver, 1999).

Literature highlights that new skills and competences are required to formulate and manage outsourcing relationships which are more strategic and collaborative in nature. Failure to manage outsourcing relationships properly, perhaps through service level agreements, may reduce customer service, levels of control and contact with customers. The assessment of costs of 'make or outsource' should include the additional cost burden of managing the outsource relationships' (Harland et al, 2005).

Research revealed the importance of using suitable techniques and metrics when establishing the success or failure of an outsourcing relationship. It is necessary to set performances levels, ensuring that there is no doubt by either party. McIvor et al (2009) found that organisations have had mixed results, with many failing to achieve the desired performance improvements from outsourcing for a number of reasons. It ranges from firms not fully understanding the implications of outsourcing and performance management, to misunderstanding causes of poor performance in their own organisation or with the service providers. Occasionally, service providers are incapable of providing the performance improvements required due to poorly designed processes or idiosyncratic requirements of clients. Frequently there is no link between business strategy of the organisation, outsourcing and performance management.

McIvor et al's (2009) paper concentrates on applying and managing performance metrics to their outsourcing framework. To do this, organisations need to understand the key measures that will indicate performance in a process relative to service providers or competitors - benchmarking. As well as considering costs, the relative performance along a number of other dimensions such as quality, flexibility and service should be considered and they need to be linked to outsourcing goals (rational) and so the corporate strategy. Some argue that organisations should create metrics to measure the quality of the processes for awhile and improve performance internally before outsourcing.

Methodology/ Frameworks for Outsourcing

Following four preliminary qualitative discussions with industry experts, who are major outsourcing managers, there is a need for a framework which integrates all aspects of the outsourcing process with performance measures and metrics. This is consistent with the research conducted by Zhu et al (2001) and McIvor (2000) which proposes that companies are more likely to outsource successful if they plan and apply an appropriate outsourcing framework. A framework consists of a set of logical sequential steps which address the timing and the process of outsourcing. McIvor et al (2009) identify the need to develop a guide for mangers on how to measure the performance of service outsourcing as a research gap. This section summarises a selection of outsourcing frameworks, which have been tested empirically in both the manufacturing and service sectors. The author found that the majority of the frameworks concentrated on a particular aspect of the outsourcing process, with McIvor et al (2009) being the most comprehensive.

Fill and Visser (2000) developed 'a composite approach to the make or buy decision', which manufacturing managers could use to evaluate if outsourcing was the most suitable approach for their company. Their framework was used to encourage managers to appraise the range and complexity of issues that need to be considered when making decisions about outsourcing. They suggested that management decide on the practicalities of outsourcing a manufacturing process by considering the Contextual factors, the organisations strategy and structure , as well as the transaction costs of the process/ product. It combined qualitative and quantitative measures on each of the three factors when deciding to make or buy.

The paper by **Zhu, Hsu and Lille** (2001) describes the steps as four stages of an outsourcing process: planning, developing, implementing and evaluation. They state that it is possible to modify the stages to suit specific industries, using it as a guideline for outsourcing specific business functions.

A four phase model was developed for the heavy industry sector by **Maomme and Hvolby** (2002). This led to the synthesis of a practical framework that links six generic phases of outsourcing to strategic planning. Their four phase model which is centred on customer focus is similar to that developed by Zhu et al (2001). The framework includes key activities with built in performance measures and expected output for each of the phases. Its aim is to facilitate better outsourcing process and management by linking operational and tactical considerations to strategic planning.

To outsource managers need intelligence and managerial guidance. This could come from research but currently does not (**Harland, Knight, Lamming and Walker,** 2005). They developed a framework to encourage managers to appraise the range and complexity of issues that need to be considered when making decisions about outsourcing. This conceptual outsourcing framework considers how the external environment influences a company's policy development, with the subsequent development of the outsourcing strategy. This guides the decision making process for outsourcing, which in turn guides the outsourcing relationship management process.

According to **Marshall, Lamming, Fynes and DeBúrca, (**2007) there is a lack of conceptual models of outsourcing. This paper reviews the literature to discover the iterative steps involved in developing an outsourced model, which they then evaluated against empirical findings. They found that many of the 'four-stage models' lacked the complexity and dynamism need to inform the outsourcing literature. They, like Greaver (1999), found that the outsourcing process is not linear. There is a dynamism inherent in outsourcing processes, where the outcome of one stage in the outsourcing process will affect later outsourcing processes and where findings at one stage of the process may provide an incentive to return to a previous stage for reassessment. They state that previous research does not address the 'contextual setting' of outsourcing, such as the influence of the environment, the history, position and strategy of the company and the influence of groups and individuals within the companies. They developed a model which reflects the dynamic nature of the outsourcing process, whilst also including the contextual factors.

Sanders, Locke, Moore and Autry (2007) developed a multidimensional framework for understanding outsourcing arrangements. They stated that 'making the right outsourcing decision requires a clear understanding of the broad array of potential engagement options, risks and benefit, and of the appropriateness of each potential arrangement for meeting business objectives'. Their research sought to understand the various outsourcing options, their characteristics differences, and how they serve to meet differing business objectives and from this they developed a framework which seeks to clarify the broad spectrum of outsourcing arrangements (relationships) and their inherent risks and advantages.

Based on the data collected in the qualitative interviews, two key categorical dimensions were identified by the executives as differentiating outsourcing engagements and serve as the foundation of their framework. The first, scope of outsourcing engagement, or the degree of responsibility assigned to the supplier. The greater the scope of the outsourced task, the larger the relinquishing of control by the client. The second characteristic is criticality of the outsourced task to the primary activities of the client organisation. Criticality is defined as the extent to which the task in question impacts the ability of the organisation to perform its core competencies. The greater the criticality of the outsourced task, the greater the consequences of poor performance to the client and the greater the requirement for supplier management. They highlight that the risks associated with outsourcing include the ability to retain control, potential for degradation of critical capability, dependency risk, pooling risk (propriety risk & contention risk), hidden costs

McIvor has written a series of articles on outsourcing frameworks. His article, McIvor (2000), develops a practical framework for understanding the outsourcing process. The framework 'proposes a four-stage analysis to assist organisations in the formulation of an effective outsourcing decision'. In other words, should the company make or buy.

The objective of research by **McIvor, Humphreys, McKittrick and Wall** (2009) was to assess the applicability of a number of performance management techniques in the outsourcing process. The framework concentrates on applying performance measures to their four step framework, using methods, systems and measurement developed in operations management literature. They suggest that performance management should be integrated into an outsourcing framework and that to date, while literature states that there should be cost analysis and benchmarking there is little evidence to support this. The importance of understanding outsourcing and performance management in a business services context is emphasised, with the outsourcing framework being adjusted in order to be applied to service outsourcing.

Their four step framework begins with an analysis of process importance, and is followed by stage two, a process capability analysis. A range of operations management techniques are used analyse the processes and their costs, to benchmark and assess capability. They identified a number of suitable operations management techniques, which include, for example, cost evaluation, work study observation, bottleneck identification, non value add effort, work flow analysis, modelling techniques, workflow diagramming methods, flowcharting at the sub-process level.

For stage one, the critical success factor (CSF) method is considered useful as it establishes a direct link between outsourcing and the factors that influence business success. They used it to determine key processes that create value, the priority business processes with regard to business improvement and possible outsourcing. However, it is not possible to complete the CSF methodology until the business processes have been identified and mapped out. They used process definition, process and work flow mapping techniques, but difficulties arose when trying to identify the business processes as process specifications were not developed when they crossed functional boundaries.

Stages one and two are complete when the business process are analysed and evaluated, using benchmarking. A three tier benchmarking process was developed, which identified benchmarking indicators at the strategic level, the operational process level and finally the operational sub-process level or key performance indicators. The baseline cost and metrics are now established, which may be used to help when developing the service level agreement (SLA). Future performance measures are also identified.
It is at the third stage, 'selecting the sourcing strategy' that the decision to make or buy is made for each of the process identified and analysed. Using data developed from the previous two stages, a (process) capability analysis is performed.

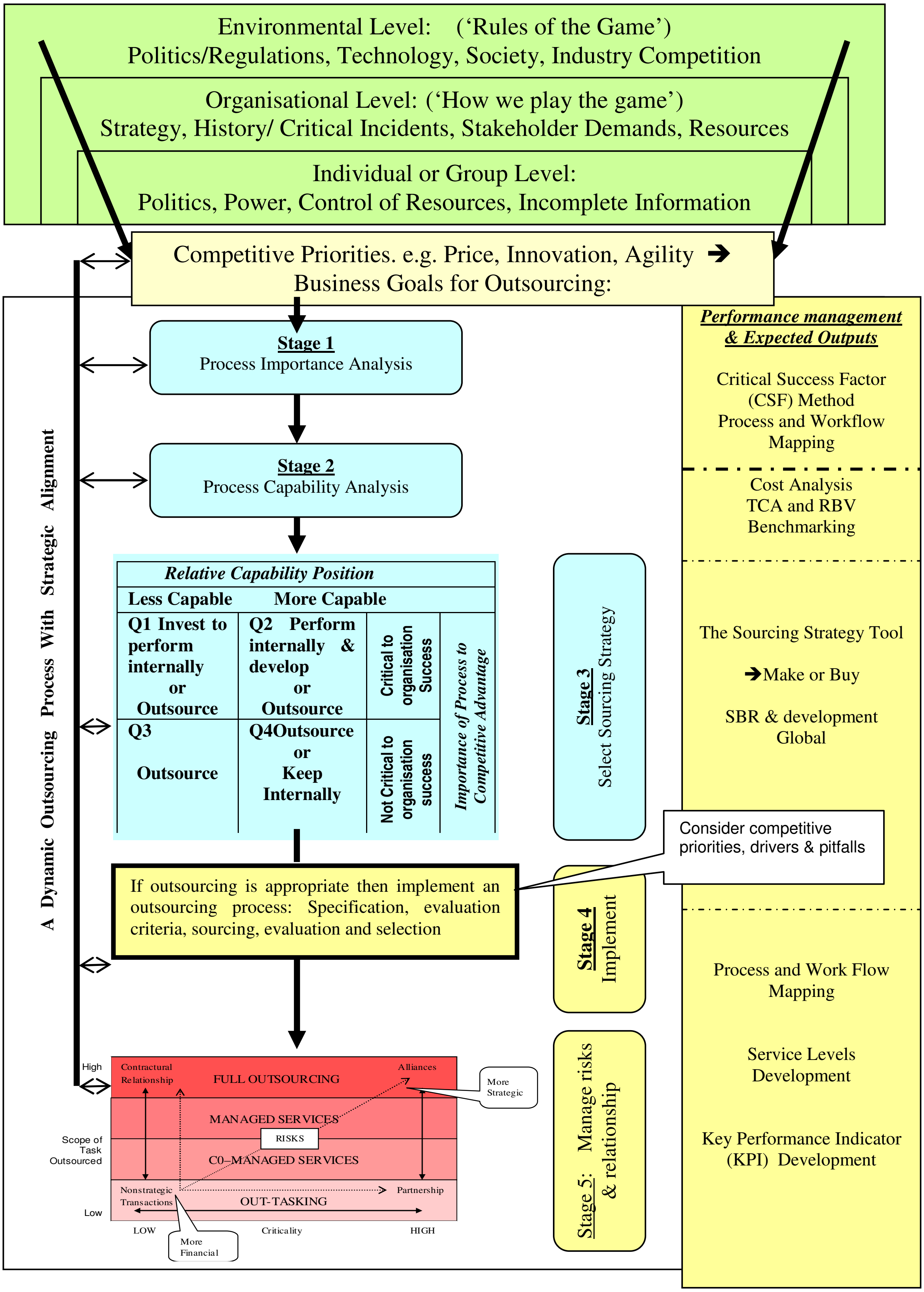
Once the decision to outsource has been made, the final stage four, 'implementing and managing the outsourcing arrangement' begins. They recommend a detailed SLA should form the principle tool for monitoring the outsourcing arrangement, covering issues such as the transfer of staff and assets, price and payment terms, penalties and liability and contract termination. This will require a further iteration of the detailed process analysis and workflow mapping to establish the tasks involved in executing the process and the required levels of performance. Stage four also involves relationship management. This involved identifying what should be measured, and considered the required frequency of measurement, and of reporting. The method of measurement was also specified.

Development of the 'Measured Outsourcing Framework'

Whilst Busi and McIvor (2006) list TCA, RBV and strategic alignment as some of the underpinning theories to outsourcing, they observe that knowledge generation is skewed towards a practioners perspective and requires longitudinal action research which investigates theory application. This, they say would allow a better understanding of the challenges associated with outsourcing implementation and management.

This paper adapts and integrates a number of outsourcing frameworks and theories as it moves to develop a 'measured outsourcing framework'. It is said that a framework is not complete if you cannot measure the success of failure of its implementation. Thus the model will adopts McIvor et al's (2009) model as a starting point for performance management techniques. This longitudinal outsourcing study will seek to address the identified gap in the literature, 'how to overcome performance measurement and management challenges inherent in the nature of service outsourcing'. This gap has also been identified by service industry outsourcing managers, as they ask question, 'how can we measure and manage globally outsourced service performance?' The model below is developed by adapting and integrating a number of empirically tested outsourcing frameworks and aims to address a gap in the literature. In developing the model, the author is very aware of the need to take account of the rational for outsourcing, the potential pitfalls, along with TCA and RBV theories when developing performance metrics.

The model begins with an adaptation of the framework developed by Marshall et al (2007) - see the green shaded areas. By including and adapting Marshall et al's three forces into the conceptual model below, the model aims to addresses the need for clear measured linkages between all stages of outsourcing. The rational is that the competitive environment, influences the firm's competitive priorities and thus its outsourcing goals. The drivers for outsourcing should be considered when developing measures to evaluate the processes, the sourcing strategies and the relationship, closing the gap identified by McIvor et al (2009).



The processes identified by McIvor et al (2009) in stages 1, 2 and 3 and the operations management performance management techniques are adopted as is. However stage 4, implement and manage the relationship, represents two distinct stages in an outsourcing process. This division allows the outsourcing managers to give more consideration, firstly to the procurement and transfer processes and secondly to the relationship management and its identified risks (Saunders et al, 2007). It will also allow for the development and use of more appropriate metrics.

A key feature of Marshall et al's framework was the dynamic nature of the process. Its inclusion in this conceptual model demonstrates the iterative nature of an outsourcing process and the necessity for strategic alignment throughout the process, linking the external environment to the outsourcing decision.

Future work

The next stage is to take the literature and present the conceptual 'measured outsourcing framework' to two groups of practicing managers. The first focus group, which will take place in August 2010, will be of managers from global firms from the manufacturing and service sectors, who have direct responsibility for developing and managing outsourcing initiatives. These findings will be presented at the LRN conference 2010.

The purpose of this primary research is to evaluate the model, which has been derived from the literature. In particular, the evaluation will consider the applicability of the model to different sectors, taking account of any operational constraints. This will inform whether subsequent stages of my research should be sectorally based or whether a cross section of industries can be included.

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