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A Framework of Total Performance Improvement and Transaction Cost-driven Business Process Outsourcing Strategy

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Abstract

The discussion about outsourcing covers a wide area. The relevant literature refers to a situation which is traditionally well known in theory and practice as a “make or buy” decision. Nevertheless, it is necessary to concentrate on the economic factors of outsourcing decision. Simultaneously, with the evolution of Process Management, and more recently, of “managing organizations as systems,” the efforts of improving performance has been increasingly deemed as a systematic project. In other words, every tiny change in the system may lead to a tremendous effect on the whole part of the organization, which subsequently calls for a far-sighted consideration when it comes to the design of an outsourcing strategy. This paper contains a real and detailed analysis of the outsourcing problem on the basis of its impact on total performance improvement, which derives from the analysis of process management. Besides its generic base, we develop an outsourcing model with design alternatives based on institutional economic theory as well as performance improvement theory and work out an explanatory approach and concrete recommendations for outsourcing arrangements. Therefore, we combine transaction cost economics and efficiency concept. As a result, the managerial applications of both approaches are compatible.

Keywords: Outsourcing, Transaction cost economics, Performance improvement

1. Introduction.
In this era of dramatic technical and market changes leading to increasing business complexity and fierce competition, all the companies are buried to digging out those crucial and decisive factors mostly screening on business success. Subsequently, a quantity of core variables are paid attention to. To be frank, whether the concern is quality, customer focus, productivity, cycle time, or cost, the underlying issue is performance (Geary A. Rummler, Alan P. Brache, 1995). As a matter of fact, the improvement of the performance of business and other organizations has long been of central interest to both managers and management researchers (David Otley,1999). Further, with business process reengineering to some extent reshaping the theory of organizational management, the process management is playing an irreplaceable role during this great changing time and the business steps into a new era of internal process.

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1 This research is supported by the National Science Foundation of China (70271018) and 985 Project of Nankai (950A94505-B13)
change and performance improvement. (Hammer, Micheal, 1996)

In another perspective, however, the industry is seeing a sweeping revolution from outsourcing (Aidan Vimng, Steven Globerman, 1999). Early in 1992, B.Dumaine and J.Labat had illustrated in their article published in Fortune and I paraphrase that according to the new ideas, any work can be peeled off from the firm as long as the firm no longer owns the unique skills, and under such circumstances as the firm needs corresponding products or services, it can attain the goal by external purchasing. Subsequently, AT&T, GE, IBM as well as Shell Oil are continuously peeling off their legal service department, public relation function and general divisions such as pay service, daily expenditure and other services alike.

In the 1990s, outsourcing has experienced great and rapid growth throughout the world (Bryce and Useem, 1998). Outsourcing was ever viewed as a viable means to achieve cost control or economies of scale, and some companies were beginning to incorporate outsourcing as a strategy in business planning. Today outsourcing is a given, with growing popularity as an essential management lever for business innovation, global expansion and competitive advantage (Alexander and Young, 1996). That is to say, Outsourcing has undeniably become a standard business practice across every industry in large to small corporations alike. Gartner forecast the account of outsourcing transaction will wins a growth of 30 percent (Gartner Group, 2003). A survey conducted by Outsourcing Institute demonstrates some primary trends concerned about outsourcing, which are displayed in Table 1

<table>
<thead>
<tr>
<th>Table 1 Several primary trends in Outsourcing field</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Overall, outsourcing is growing faster than the general U.S. economy.</td>
</tr>
<tr>
<td>• Outsourcing in smaller companies ($10 million to $15 million in sales) is rapidly increasing, up 25% from 1999.</td>
</tr>
<tr>
<td>• Areas of expanding growth in outsourcing include administrative support, human resources and new media services.</td>
</tr>
<tr>
<td>• Locating trained, expert talent is a challenge facing the outsourcing industry.</td>
</tr>
<tr>
<td>• Outsourcing is increasingly global. One out of every ten U.S. outsourcing dollars is spent abroad.</td>
</tr>
</tbody>
</table>

Adopted from outsourcing index 2000

This table clearly presents that companies of all shapes and sizes in a wide range of industries value outsourcing as a means to develop new and more efficient business initiatives, products, technologies, operational processes and customer services.

Now it comes to the potential interaction between process management which aims at performance improvement (Rummler, Brache, 1995) and strategic outsourcing arrangement. Will it result in conflicts when both the revolution take place or where is the best way out of the difficulty of coordination of the two changes at the same time since on the one hand, the demand of process improvement covers the variables which may be altered in the face of outsourcing programmes, on the other hand, an outsourcing project in any field or functions will make effect on the whole performance improvement efforts of the organization? Accordingly, under this circumstances, an integrated framework which devotes to the combination of generic outsourcing concerns and the performance improvement demand is highly favored.
This research takes primary concerns about the request above into account to cater for the purpose of achieving both the widespread benefits simply from outsourcing and the firm’s total performance improvement from the contribution of the strategy. Thus the concept of a framework of business process outsourcing strategy, which is driven by the factors of total performance improvement and transaction cost-driven, comes into being.

Below, in Section 2, we review pertinent literature on performance improvement and outsourcing.

2. Literature reviews.

2.1 General motives identified of outsourcing

Traditionally, outsourcing is an abbreviation for ‘outside resource using’ (Koppelmann, 1996; Quinn and Hilmer, 1994; Zahn et al., 1998). Outside means creating value not within the own company, and means a strategic perspective on external resources (Ulli Arnold, 2000).

Outsourcing has been a strategic management tool for decades during which, there has been an increasing emphasis on buyer–supplier relationships in the academic community and in international business (Macbeth and Ferguson, 1994; Hines, 1996; Olsen and Ellram, 1997; Quinn, 1999; Lamming et al., 2000). To be specific, the importance of investigating the impact of buyer–supplier relationships on corporate efficiency is seen from the fact that a typical industrial company spends 50–85 per cent of its turnover on purchased goods such as raw materials, components and semi-manufactures (Cammish and Keough, 1991; Dyer et al., 1998). This partly explains why business process outsourcing has proved to be a relevant strategic option for companies (Bettis et al., 1992; Hamel and Prahalad, 1994; Dobler and Burt, 1996; Hines and Rich, 1998; Drejer and Riis, 2000).

In detail, the motives of outsourcing can be primarily outline as follows in table 2.1

<table>
<thead>
<tr>
<th>Motives identified and discussed</th>
<th>Relevant research</th>
</tr>
</thead>
<tbody>
<tr>
<td>To reduce operational costs</td>
<td>Lacity and Hirschheim(1993b); Mcfarian and Nolan(1995); Barthelemy and Greyer(2000); Kakabadse and Kabadse(2002)</td>
</tr>
<tr>
<td>To focus on core competencies</td>
<td>Quinn and Hilmer(1994); Saunders et al.(1997); Alexander and Young(1996b); Kakabadse and kabadse(2002)</td>
</tr>
<tr>
<td>To reduce capital invested</td>
<td>Mcfarlan and Nolan (1995); Kakabadse(2002)</td>
</tr>
<tr>
<td>To improve measurability of cost</td>
<td>Barthetemy abd Greyer (2000)</td>
</tr>
<tr>
<td>To gain access to external competencies and to improve quality</td>
<td>Quinn and Hilmer(1994); Mcfarian and Nolan(1995)</td>
</tr>
<tr>
<td>To regain control over internal departments</td>
<td>Alexander and Young (1996a)</td>
</tr>
<tr>
<td>To transform fixed costs into variable costs</td>
<td>Lacity and Hirschheim(1993a); Alexander and Young(1996a)</td>
</tr>
</tbody>
</table>

Plain and simple, outsourcing allows organizations to be more efficient, more effective, and to reduce costs, which outlines the three main motivations of outsourcing.

2.2 Links established between performance and outsourcing.

From the discussion mentioned above, we can propose that outsourcing requires an examination of internal processes, and can result in breakthrough improvements in
performance measures.

Rummler and Brache (1995) put forward a model of three levels of performance to illustrate the key factors in process improvement on the basis of a systematical view of organization, which in a large degree solves the problem and potential conflicts among diversified processes in the project of improvement. The three level model is outlined as organization level, process level as well as job/performer level. The three levels of performance constitute one dimension. The second dimension comprises three factors-performance needs-that determine defectiveness at each level (and the effectiveness of any system):

1. Goals: the organization, process, and job/performer levels each need specific standards that reflect customers’ expectations for product and service quality, quantity, timeliness, and cost.
2. Design: the structure of the organization, process, and job/performer levels needs to include the necessary components, configured in a way that enables the goals to be efficiently met.
3. Management: each of the three levels requires management practices that ensure that goals are current and are being achieved.

Table 3. The nine performance variables

<table>
<thead>
<tr>
<th>Goals</th>
<th>Design</th>
<th>Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>Organization</td>
<td>Organization</td>
</tr>
<tr>
<td>Process</td>
<td>Process</td>
<td>Process</td>
</tr>
<tr>
<td>Job</td>
<td>Job</td>
<td>Job</td>
</tr>
<tr>
<td>Goals</td>
<td>Design</td>
<td>Management</td>
</tr>
</tbody>
</table>

Combining the three levels with the performance needs results in the nine performance variables. These variables, which appear in Table 3, represent a comprehensive set of improvement levers that can be sued by managers at any level.

Subsequently, the concept of total performance offered in this issue is confined to the whole level of three levels of performance. It is an integral part of the performance in a company and can be quantified according to a case-by-case study since the organizations own their own uniqueness and specifications.

Since there is a close link between outsourcing process and the key success factors of a firm in an industry, outsourcing has been deemed as a strategy. (Quinn and Hilmer, 1994) Outsourcing strategy affords a responsibility to serve the total performance improvement of an organization, that is to say, to guarantee the attainment of all the three levels of systematic performance goals.

2.3 A general outsourcing model conforming to improving performance.

We develop a new design of an outsourcing model focusing on a performance concept. It is illustrated in figure 1.
According to the three levels of performance introduced above, the outsourcing is based on the consideration of those detailed factors in three levels of performance. With the determined object, the company hunts for appropriate partner, in other words, supplier to meet the needs identified in each level of performance. This is still a sweeping framework to demonstrate the logic of how an outsourcing strategy come into being. A more precise description will be offered in following part of this research.

### 3. Strategic decisions on outsourcing.

#### 3.1 Institutional economic reference for design alternatives.

Basic design alternatives for the outsourcing decision can be based theoretically on Williamson's institutional economics. Developed on the ideas of Coase (1937) and Commons (1931), he sees three major ‘governance structures’ for economic activities (Williamson, 1985; Arnold, 1998): Markets steer transactions, Hierarchies and structures which are neither clear markets nor clear hierarchies. The in-between governance structures combine hierarchical and market elements and are called hybrids (Williamson, 1991). Hierarchy is directly linked with insourcing. All governance structures with market elements are relevant for the outsourcing design (see Fig. 2). We distinguish between internal and external outsourcing. External outsourcing means spot transactions or long-term relationships with suppliers. Internal outsourcing refers to a higher degree of hierarchical steering (Zahn et al., 1998): by forming independent centers instead of hierarchical departments, the market element becomes relevant within a company (Kruikger and Homp, 1997).
3.2 Risks in outsourcing.  
Lonsdale and Cox (1998) argues that outsourcing decisions are rarely taken within a thoroughly strategic perspective. Hence, many companies adopt a short-term perspective, being motivated primarily by the search for direct cost reductions. For instance, a pitfall relates to human opportunism or bad employee morale. Outsourcing is a sensitive subject that may evoke negative employee reactions in an organisation if it is improperly implemented. An inherent risk is the loss of cross-functional contact. Furthermore, many companies report that contract employees are rarely as prepared as in-house colleagues to go beyond their immediate commitments and take the time to work out ideas that may be of benefit to the relationship as a whole, which more or less destroys the performance of relevant processes. In addition, the company must be aware that the balance of power in the relationship can change during the contract. Henceforth, the company needs to understand the complex nature of competencies in order to identify areas in which lack of in-house resources and capabilities calls for outside assistance. Here, a key point is that the longer the relationship spans, the higher switching costs and knowledge dependency are involved. Finally, the company must make certain reservations that even the most collaborative outsourcing partner may fail to achieve the high standards required. In other words, the company must have a strategic preparedness that enables either substitution of the supplier or insourcing when the contract terminates.

In detail, risks that have been illustrated mainly go as follows in Table 4.

<table>
<thead>
<tr>
<th>Main risks or negative outcomes</th>
<th>Relevant research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependence on the supplier</td>
<td>Alexander and Young (1996b); Aubert et al. (1998)</td>
</tr>
<tr>
<td>Hidden costs</td>
<td>Earl (1996); Alexander and Young (1996b); Aubert et al. (1998); Lacity and Hirschheim (1993a); Barthelemy (2001)</td>
</tr>
<tr>
<td>Loss of know-how</td>
<td>Bettis et al. (1992); Martinsons (1993); Quinn and Hilmer (1994); Khosroupour et al. (1998); Boig et al. (2001)</td>
</tr>
<tr>
<td>Service provider’s lack of necessary capabilities</td>
<td>Earl (1996); Aubert et al. (1998)</td>
</tr>
</tbody>
</table>
Despite all the risks displayed above, Lonsdale and Cox (1998) conclude that outsourcing can offer considerable benefits. Important means of maximising these benefits for the company are to think about the outsourcing process in an inherently strategic manner, to understand the efficient boundaries of its core business, to recognize how power can shift and to consider the effects of supplier failure. Thus it comes to the original intention of this research.

3.3 Outsourcing object from a transaction cost perspective.
Coase (1937) was the first to discuss transaction costs. These costs of making each contract come from such problems as information asymmetry, bounded rationality and opportunism. Such costs arise from activities including evaluating suppliers, negotiation, control function, etc. They appear not only in markets but also in hierarchy. If a company is bound to invent and to operate to control the productivity of the workers, hierarchy costs are inevitable. The basic idea is now to find a governance structure with the lowest costs for each transaction. According to Williamson (1989, 1991), specificity is the most important aspect of a transaction. Specificity refers to asset specificity as well as human capital specificity. Goods and services with high specificity cannot be used in other transactions without huge additional costs. Objects with low specificity can be governed with an external outsourcing design. Low specificity means that little information has to be exchanged with the transaction partner (Ulli Arnold, 2000). External outsourcing partners are able to bundle demand together and to exploit economies of scale. Much information has to be exchanged before, during and after the exchange of goods and services with high specificity. The results will be extremely high market transaction costs. It is not possible to realize large-scale effects because only a few customers exist. It is necessary to establish an internal outsourcing design for these transactions. Goods and services with highest specificity are always based on the company's core processes.

3.4 Outsourcing object from a performance system perspective.
From the three level model, we have outlined nine basic variables which can be extended to a wider and more concrete scope. To start with a performance system, the respects that should be pay more attention to includes the inputs, processes and outputs of each sub-system. Meanwhile, a close connection between different parts of the system is supposed to be defined and clearly outlined to avoid the phenomenon of disconnection after an outsourcing strategy is implemented. Disconnection in organization is tremendously harmful not only to the process and function directly contained, but to those parts indirectly impacted by supplier-buyer relation. To be frank, as a system, any organization is possible to suffer a big loss from a tiny leak. Chances are that, a single success of a project of outsourcing does not ensure the success of the whole organization and the members in it. In some conditions when outsourcing brings about profit for one or several certain functions or business, it may be also likely to raise risks and conflicts for other parts of the system. For example, outsourcing in purchasing, when it leaks out detailed and customer-focused goal summarized from marketing and customer service departments, may find itself bogged down in the sea of continuous conflicts even if the purchasing saves time and money or captures a higher efficiency. Here, the management of supplier-buyer relationship attracts much attention from
In addition, the nine variables demonstrated in three levels model supply a good cue to design a proper outsourcing strategy conforming to the performance demands. During the consideration, those variables from three levels with three performance needs are to be analyzed case by case, since every level has its own corresponding goal, design and management problems. Simultaneously, allowing for the difference of industries and organizations, the contexts of those variables vary much from one setting to the next.

The structure for such a discussion here mainly arises from a classification of process, which is the core of total performance improvement (Rummler and Blanche, 1995), but it does not interrupt to make a decision on the basis illustrated above, because they are uniform.

4. Outsourcing strategy model based on the integration of different perspectives

Many authors, other than those referred to so far, have investigated the effects of outsourcing on in-house flexibility and value creation, based on a combination of strategic, economic, technological and human factors (Lei and Hitt, 1995; Brandes et al., 1997; Lonsdale, 1999). However, the literature review suggests that researchers usually apply either a transaction cost perspective or an efficiency perspective on the outsourcing process, without holistically linking the two perspectives. Arguably, this can be explained by the fact that each researcher represents a single school of thought that informs his or her scientific ideas and ideals. A key point of this paper is that transaction cost and performance improvement based on the process improvement must be integrated according to the orientation of a company’s corporate, business and functional strategies. Thus, the following Figure 3 displays the method of fusion. In this model, the perspectives of institutional economy, transaction cost and three levels of performance are put into concentration altogether, which is bound to establish a systematic view as regard to the audit, selection and comparison of outsourcing schemes. It is worth noting that, only those schemes which synthetize all the dimensions above can be deemed as effective as well as valuable due to the system view.

As a matter of fact, the degree of importance and the roles every process or function play in the organization are distinguishing under versatile circumstances. For example, some companies outsource their secondary activities of their value chains, such as information technology, accounting systems and distribution (Cross, 1995; Johnson and Schneider, 1995; Lacity and Willcocks, 1998), while others may focus their outsourcing concerns on such process as recruiting, training, purchasing and so on. According to the general framework provided in this research, the decisive factors making effect on the ultimate decision-making of outsourcing fall to risks analysis and opportunities of total performance improvement, both of which have proved their crucial parts in the operation and development of a company.
5. The design phases of a strategic outsourcing program

A point here still worth noting is that the decision variables rely on the context and scope of the individual company. This means that they must be thoroughly reviewed and adapted by the responsible outsourcing team based on the situational factors. As indicated, an interdisciplinary group of people should be assigned to the outsourcing projects as this will add a wide range of synergistic perspectives to the decision variables, hence facilitating identification and prioritisation.

Johnson (1997) emphasises the importance of integrating a company’s strategic analysis
with the outsourcing process. Specifically, Johnson argues that six phases appropriately define outsourcing:
(1) Strategic analysis. (2) Identifying the best candidates. (3) Defining the requirements. (4) Selecting the providers. (5) Transitioning the operations. (6) Managing the relationship.

The processual view proposed by Greaver (1998) comes close to Johnson’s definition. According to Greaver, successful outsourcing involves seven phases:

Neither Johnson nor Greaver seems to be concerned with the point that any outsourcing relationship is restricted in time. Irrespective of whether the company and the supplier have prolonged the relationship one or more times as a result of successful conditions, the company must guard against the fact that the relationship will inherently phase out at one point in time. Lonsdale and Cox (1998), on the other hand, address this point by suggesting the following six phases:
(1) Assessment of criticality of business activity. (2) Assessment of supply market. (3) Selection of appropriate types of supplier relationship. (4) Supplier selection. (5) Supplier management. (6) Re-tender or return in-house.

This research takes its starting point in the three generic phases (1) start-up, (2) operations, and (3) maintenance in order to emphasise the holistic perspective applied on the process as well as the influence of production and operations management. By synthesising the key elements of the outsourcing programme there developed a Strategic Outsourcing Programme (SOP) which consists of four coherent phases: (1) identification and assessment, (2) audit and approval, (3) project execution, and (4) performance management (J. Momme, H.H. Hvolby, 2002). In practice, the four phases are both sequentially and laterally connected, which implies that they are to some extent performed in parallel.

Based on the literature review and the analysis of total performance, risks and transaction costs and so on, I argue that the entire outsourcing process from an operational view can appropriately be viewed as five generic phases as follows:
1. Identification & assessment.
2. Strategy design & approval.
3. Project execution and transfer.
4. Performance management and improvement concerns
5. Post-project appraisal

For each of these phases, a varying number of key activities with related performance measures and expected output are identified (that is to say: decision variables). The five phases and the decision variables are mainly synthesised from the four strategic phases of SOP, our integrated model of five steps that links total performance thinking and outsourcing and the risks ideas. The conceptual idea of the framework derives from the research of Laudon and Laudon (K.C. Laudon, J.P. Laudon, 1998) on open systems modeling. Laudon and Laudon refer to the order management process at Procter and Gamble after redesign. Via breaking down the order management process into concrete steps or activities and their core processes, analysts could design specific performance measures and set improvement targets. This implies that the synthesis combines the exploratory integration and the case study and action research programme. The main result of the synthesis is shown in Fig 4.
The five-phase depicts the processual correlation between the phases and the decision variables, giving several examples for each set of decision variables. Hence, it shows an extract, and is not exhaustive. It is emphasised that the decision variables depend on the context and scope of the individual company. This means that they must be thoroughly reviewed and adapted by the responsible outsourcing team based on the situational factors.

Despite the work loads clearly outlined in every phase, the internal logical relationship is that, phase 1 is based on the risks and motives identification which is demonstrated above, phase 2 is a process of routine management, phase 3 mentions contracts negotiation and order issues which can be found in a large number of researches and bypassed here, phase 4 is mainly regard to the performance references which is also discussed previously. And the last phase is about the appraisal of a outsourcing project. In this research, total performance and transaction cost are not only motives but also expected outcomes so that they are plausibly contained in the measurement of the project.

6. Conclusions and outlook.
On the basis of literature reviews and elaborate analysis, we may naturally draw the conclusion illustrated in this research. Firstly, the although current researchers are more likely concerned about only one aspect of the motivation of outsourcing, it is also sound to say that some motives are crossed to function as the strong power driving the companies to be on the way of outsourcing or non-outsourcing. Secondly, an integration of two or more factors leading to outsourcing makes it easier to cater for the system view of organization, which plays a crucial part in the process improvement. Accordingly, a bridge is set up here between performance improvement and outsourcing. In addition, those risks which may expose before,
in and after the process of outsourcing project execution can never be ignored due to its impassable position to the success of an outsourcing strategy.

However, only few researchers endeavor to develop a practical framework at the activity/experience level, and those who do tend to publish their results in comprehensive books that place a disproportionate workload on practitioners (Bragg, 1998; Wasner, 1999). Some research suggests that the present results need to be supplemented by a technical management system that helps a company to segment and risk-assess the total supplier base and to integrate product modularization with the sourcing process (Momme et al., 2000). These main attributes of the technical management system are significant because neither all types of suppliers nor all products are equally appropriate for outsourcing. Collectively, these findings make up the scientific contribution; referred to as a conceptual framework for outsourcing. Future research should demonstrate how each of the performance level and cost-reduction concerns explicitly influence the phases/decision variables of outsourcing. Besides, the interconnections between the internal and external workflow interfaces should be visualised. Further, the theoretical and empirical substantiation called for further research, pursuing the development of such a framework.

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