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STRATEGIC PERSPECTIVE OF INFORMATION SYSTEMS OUTSOURCING

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Abstract This paper intends to study the different facets of the strategic perspective of information systems (IS) outsourcing, compare strategic IS outsourcing with traditional IS outsourcing and identify research opportunities. IS outsourcing is now an accepted practice and the market is growing regularly. There is a rational approach towards outsourcing with an increasing emphasis for a strategic approach towards IS outsourcing rather than just a cost-cutting motivation. The paper clarifies the definitions of IS outsourcing and strategy, taking into consideration the evolution of the definitions before comparing strategic IS outsourcing with traditional IS outsourcing. The paper is concluded with identification of future research opportunities in the field of strategic IS outsourcing.

1. INTRODUCTION

Information systems (IS) outsourcing is now an accepted practice and the market is growing regularly. The risks of IS outsourcing are fairly well documented. The question now is not whether to outsource or not but rather how to take advantage and balance the different sourcing options (market and internal) for IT services.
There are several models for outsourcing and recently there has been further emphasis on strategic outsourcing as compared to traditional outsourcing for reaping the maximum benefits from outsourcing instead of just concentrating on the cost aspects.
The aim of this paper is to focus on the strategic perspective of IS outsourcing and try to investigate how it is different from supposed "traditional outsourcing". It was found that many terms concerning strategy are often used inter-exchangeably and this conceptual confusion can lead to wrong decision making [Hedlund S., *Incentives and Economics Systems*, New York University Press, 2007].

2. DEFINITION OF IS OUTSOURCING

Outsourcing refers to the use of an external provider of goods or services instead of having recourse to internal resources to provide the same goods or services. As such, outsourcing is a decision concerning the boundary of a firm and this has been a concern since the very existence of firms [Turban E., Aronson J., Liang T., Sharda R., *Decision Support and Business Intelligence Systems* (8th Edition), Prentice Hall, 2008].
Applied in the IS area, the term has the same meaning although different definitions have been given to it by different authors:
- the significant contribution by external vendors in the physical and/or human resources associated with the entire or specific components of the IT infrastructure in the user organization. This definition emphasizes that the role played by the external agent could be significant as compared to the internal provider. It is also mentioned that the external agent could be providing physical as well as human resources. Finally, it is specifically mentioned that the contribution is towards the IT infrastructure.
- the purchase of a good or service that was previously provided internally. This definition attracts attention to the fact that internal provision of goods or services may be replaced by outsourcing.
- the commissioning of a third party (or a number of third parties) to manage a client organization's IT assets, people and or activities (or part thereof) to required results. This

definition is different from others in the sense that it moves from the concept of purchasing to that of managing. It also stresses the fact that a customer may have recourse to more than one provider at a time. It also specifies that IS outsourcing is not only restricted to goods or services but could also include people. Finally, it introduces the notion that outsourcing is performance oriented.
- turning over to a vendor some or all of the IS functions. This definition points out that IS outsourcing could involve total dependence on a vendor. It also shifts the emphasis from goods or services to the broader view of IS function, probably showing the increasing importance of what result is required rather than how to achieve this result.
Several authors have used definitions which suit the purpose of their study. However, it would also seem that the differences in the definitions are related to the evolution of concerns in IS outsourcing practice. Initially, IS outsourcing involved mainly the use of service bureaus and systems houses to provide shared data processing services due to the prohibitive cost of computers. The emphasis moved from the hardware to the software (which though being a product, is often intangible and is better viewed as the service it provides), with the use of contract programmers to develop, customize or maintain application software. Later it became practice to group together hardware and software and to have recourse to total solutions with more emphasis on results rather than on the process of obtaining the results. Recently, the line between IS outsourcing and business process outsourcing (BPO) is even becoming blurred, with some customers being more concerned with the provision of a full business function with a predefined performance rather than going into the details of the IS required to provide the business function [Lucey, T., *Management Information Systems* (9th edition), DP. Publications Ltd, 2004].

3. STRATEGIC MANAGEMENT CONCEPTS

Strategy is derived from the Greek word “the art of the general” and its practice has its origins well anchored in the military. Businesses started making use of strategy in the 1960s and thus came the term “strategic management”. Strategic management has been defined as “consisting of the analysis, decisions, and actions an organization undertakes in order to create and sustain competitive advantage.” [Băcanu B., *Management Strategic*, Ed. Teora, Bucureşti, 2003].
This definition raises the question about competitive advantage and sustained competitive advantage. Other definitions for these terms are quite explicit. A firm is said to have a competitive advantage when it is implementing a “value creating strategy” which is unique, i.e. not being implemented at the same time by other competitors. A competitive advantage is said to be sustained only if it still prevails after competitors have stopped trying to copy it.
Strategic management involves a series of non-linear and inter-dependent processes of strategy analysis, strategy formulation and strategy implementation.
All the different functional strategies (including IS strategy) rest upon the business strategy, thereby raising the issue of strategic alignment, i.e. the need for IS goals and business goals to be in harmony. Moreover, IS is a bit different in the sense that it can be supporting or even driving the business strategy in the sense that it could be the element causing business transformation.
IS governance is an important component of the IS strategy as it involves the selection and use of organizational processes to make decisions about how to obtain and deploy IS in the organization. It is at this point that IS outsourcing comes into picture as one of the governance mechanisms put into place to procure and deploy all the components of an IS. [Davenport T.H., Prusak L., *Working Knowledge*, Harvard Business Press, 2000].

4. STRATEGIC ROLE OF IS

The 1980s could be considered the golden days of IS – these were the days when the strategic role of IS was being emphasised and IS was being actively recommended as the way to secure competitive advantage, which was believed to be sustainable. Using the five forces model or the value-chain model, it was advocated that the information revolution was affecting competition in three ways:
(1) It changed industry structure – it could affect the strength of the individual five forces in an industry.
(2) It created competitive advantage by giving companies new ways to outperform their rivals either by lowering cost or enhancing differentiation (due to an improvement in the activities in the value chain or in the linkages between the activities).
(3) It spawned whole new businesses often from within a company's existing operations – it could make new businesses feasible, create demand for new products or create new businesses within old ones.
However, the 1990s put more emphasis on downsizing and focus on core competencies. Many organisations thus felt that IS did not necessarily form part of their core activities. Moreover, some claims that information technology alone can be purchased across markets and is thus easily imitable. However they point out that it is in fact the embedding of IS in the formal and informal decision making processes of an organization that are difficult to imitate and thus may have the potential of sustainable competitive advantage. [Wysocki R., *Effective Software Project Management*, Ed. Wiley, 2006]
The above combined with other factors such the need for cash, perception of inefficiency or ineffectiveness of IS department and lack of competency of IS and the effect of the outsourcing decision by Kodak in 1989 popularised the concept of IS outsourcing. It was more and more believed that IS was more of a commodity and could thus be outsourced as other commodities. Current research and practice recognise that IS may be treated as a commodity in some companies whereas in others it may be contributing to a competitive advantage depending on the nature of the activity of the organisation. [Davenport T.H., Prusak L., *Working Knowledge*, Harvard Business Press, 2000]

5. STRATEGY FOR IS OUTSOURCING

Early experiences of customers outsourcing immediately showed that even outsourcing was not an easy task and that it entailed several risks such as [Aronson M., *Bill Gates (Up Close)*, Ed. Viking Juvenile, 2008]:
. Cost savings do not materialize due to hidden costs in the contract.
. Service levels do not meet expectations.
. Locking in with near-obsolescent technology with outsourcing vendor.
. Loss of core competencies of organization.
. Negative impact of morale on staff.
Moreover, it was soon realised that the decision to outsource was very difficult (both technically due to lost skills and financially due to sunk costs) to reverse. Thus, after the initial hype concerning outsourcing in the beginning 1990s, there followed a period where the merits of insourcing were again highlighted with the recommendation to consider outsourcing only if insourcing is not viable.
Nevertheless, it was also realized that the question was not whether to outsource or not to outsource but rather to approach outsourcing in a strategic manner rather than an incremental or "hard learning" manner and to analyse the different IT activities in an organization separately. Several frameworks were also proposed to decide on which IT services to outsource. It is generally agreed that those activities which do not contribute significantly to business positioning should be outsourced directly. However, it is

recommended to insource those activities which are close to the core activities of the organization. For other types of activities, the situation is less clear cut but in general they may be outsourced with a relationship contract or in-sourced in the context of an alliance partner. [Rainer K., Turban E., *Introduction to Information Systems: Supporting and Transforming Business*, Ed. Wiley, 2008]
The complexity of the process of entering and managing a vendor relationship (i.e. proper vendor selection, comprehensive contract and the skills to properly manage the outsourcing relationship) and its contribution to outsourcing failure have also been highlighted [Cameron K. S., *Positive Leadership: Strategies for Extraordinary Performance,* Berrett-Koehler Publishers, 2008].

6. STRATEGIC IS OUTSOURCING

Strictly speaking strategic IS outsourcing could be defined as outsourcing of IS using a strategic approach. However, there is more to strategic IS outsourcing than just the approach – in fact the characteristics of the relationships itself change completely as described by several authors:
- Short term contracts (typically less than five years) as compared to 10 year contracts in traditional outsourcing.
- Multi-vendor contracts as compared to single vendor contracts in traditional outsourcing.
- Scope of services changing from commodity type (such as maintenance of PCs, network support, etc.) in traditional outsourcing to higher value added services (such as integrated IS development) in strategic outsourcing.
- Focus on win-win relationship with contribution of both partners in strategic outsourcing rather than just cost reduction as in traditional outsourcing.

It is more and more accepted that strategic IS outsourcing will yield more long-term benefits as compared to the short-term benefits of traditional outsourcing.
The definition of core activities has been refined in the context of outsourcing with the recommendation that all services are candidates for outsourcing except those where the organization has got “best-in-world capability”. Nevertheless, real core activities are still better kept inhouse. Other organizations have pushed strategic IS outsourcing even further – they have outsourced what were initially viewed as non-core business functions to partners who have provided the necessary IS and taken control of the redesigned business function altogether and intend to generate revenue by replicating the same success with other customers in the same business [Kidd P. T., *E-business: key issues, applications and technologies*, Ed. IOS Press, 2000].

7. DISCUSSIONS AND CONCLUSION

The literature is almost unanimous on the issue of insourcing core activities although as pointed above, over the years, the definition of core activities has been refined; thereby further reducing this group of activities. Yet, there is no agreement on how to identify these core competencies although some authors have provided means to identify these “best in world” competencies. The fact that an activity identified as core may cease to be core if customers’ requirements change or if competitors develop innovative further complicates matters. [Băduț M., *Informatica în management*, Ed. Albastra, 2003]
Moreover, some outsourcing frameworks had identified reasons for outsourcing of strategic IT activities even though the general recommendation was to insource them:
- Taking over an ailing IT department.
- Benefiting from a fresh input of cash.
- Introduce flexibility by transforming fixed costs into variable costs.
- Facilitate transition when involved in mergers/acquisitions/divestures.

Nevertheless, outsourcing strategic IS activities is risky especially from the innovation point of view.

It is thus felt that there is an opportunity to research on outsourcing of strategic IS activities. Possible research questions could be:

- Is it possible to identify weaknesses in core activities and possible contributions of a potential external partner?
- How could relationships in a strategic outsourcing alliance be managed, especially in a global multi-vendor context and a relatively short contract period?
- How to assess and control risks, especially those related to innovation and long-term competitiveness in a strategic outsourcing alliance

Despite an almost old comment that IS outsourcing research is very much customer-oriented and that there is an opportunity for research on the vendor-related perspective [Turban E., Aronson J., Liang T., Sharda R., *Decision Support and Business Intelligence Systems* (8th Edition), Prentice Hall, 2008], the situation is still very much the same. There is thus ample opportunity in the maturing area of outsourcing research for further research in outsourcing of strategic IS activities from the vendor-perspective, i.e. how can a vendor position itself as a strategic partner whilst reassuring the customer on the risks of such a relationship.

With the market for BPO becoming as significant, if not more than, that of IS outsourcing, it is also worthwhile noting that any decisions concerning IS outsourcing, may need to consider the broader picture of the business process rather than just the IS part although currently, it would seem that BPO is affecting mainly those business activities considered as non-core such as human resource, accounting, etc. [Davenport T.H., Prusak L., *Working Knowledge*, Harvard Business Press, 2000].

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