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# SOME CONSIDERATIONS ABOUT IT OUTSOURCING PROCESS

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## ABSTRACT

*IT outsourcing is the practice of contracting out the running of a part of an organization computer department. It is not a new phenomenon, but the scale and scope of its occurrence has greatly increased over the last decade. Due to the fact that IT outsourcing has no obviously and quantifiable benefits, most of the business entities choose not to do outsource their IT. The paper is based on the idea of incapability of exact determination of IT services costs. The purpose of this research regards the layout of the current approaches to outsourcing, description of different types of IT outsourcing and their advantages and the analysis of some models which might be used in order to facilitate the IT decision making process.*

## KEY WORDS

*Outsourcing, Information Technology, Information Systems, Application Services Provider, IT Risks.*

## INTRODUCTION

Many managers came to the conclusion that they are paying too much for their information systems, without obtaining important strategic advantages. They adopt either a passive attitude towards the apparition of a new methodology of information systems design, accomplishment and implementation, either an active one, adopting the last technological innovations. The waiting attitude is, however, dangerous, because there is the risk of a continuous delay, and so creating more advantages for the competitors who adopted the new technology. The massive investments in new technologies are not a solution, either, being very costly and implying a complex process of analyses and selection. The designing, accomplishment and implementation of an efficient must not be considered only a technical problem. Contrariwise, these objectives' achievement implies the definition of a clear information system development strategy.

The managers' implication in strategic development decisions regarding the information systems has a general character, and it can be often regarded as an obligation, generating some inconvenience due to the fact that they have to administrate the technology involved. However, the managers must take into consideration some alternatives:

- the total or partial outsourcing of IT services to a specialized company;
- keeping inside the company the IT department, which may be consider either an extra costly body, either a profit-generating one;

- and the setting up of a new own company specialized in IT, having as main goal the finding of additional markets for its services, and earning, in this regard, some of the made capital expenditures.

In 1995 McFarlan and Nolan predicted that organizations are increasingly depending on outside expertise to provide and maintain organizational data-processing resources (McFarlan and Nolan, 1995).

Delivering information services over the Internet, application services providers (ASPs) have become the answer to many organizations when it comes to outsourcing applications.

## 1. IT OUTSOURCING – CORE CONCEPTS

The term “*outsourcing*” appeared not long ago, in the 1990s (Tayntor, 2001). The outsourcing may be defined as a strategy by which a company uses external resources for current activities that, traditionally, involve few people and resources, turning to external services providers. Most of managers appeal to some outsourcing activities in order for their organization to become more efficient by costs reduction and access to new technology, without involving huge resources for research and development.

The outsourcing is still an instable and imperfect imparted concept. The outsourcing research literature has a consensus by considering it as a companies’ movement towards the market which modifies the company’s borders, as it decides on the functional frontier by transferring a part of the inventory to a provider. In other words, the outsourcing can be enclosed without ambiguity in the general framework of the alternative of purchasing or producing.

The total or partial information system outsourcing is, by no means, a new appearance; in other words, it is used a new word for old practices. If in the 60’s, due to the limited number of automated computing systems and experts, the companies were “forced” to turn to external providers, the 80’s were characterized by the evolution of the micro-informatics, which is inserted in the information system function of the company, making it possible to set up its own informatics infrastructure.

An amplitude of the phenomena is, however, not new. This period is favorable for an ample outsourcing movement; first of all, the companies have developed and expended very rapidly. On the other hand, there is the possibility for the companies to over-exploit the outsourcing processes, being forced, afterwards, to reinsert the outsourced activities.

Globally, at the end of last century, the IT services outsourcing has become a consolidated industry with an average turn-over of \$ 100 billion (Gelbstein, 2003). The services range has extended to incorporate both IT traditionally services, on one hand, and, on the other hand, infrastructure operations as:

- The operations and network administration;
- The applications maintenance;
- The client server applications development;
- ERP system implementation and personalization;
- Trade and business electronic applications development;
- The application for services providers;
- Internet hosting and electronic trade.

It should be made the distinction between total and selective outsourcing, which proves that the companies’ dilemma is not about if the outsourcing should be made, but about the way of

administration the information system in order to be able to respond efficient to the existing problems.

Lacity and Hirschhein (2001) differentiate three modalities of information systems' administration:

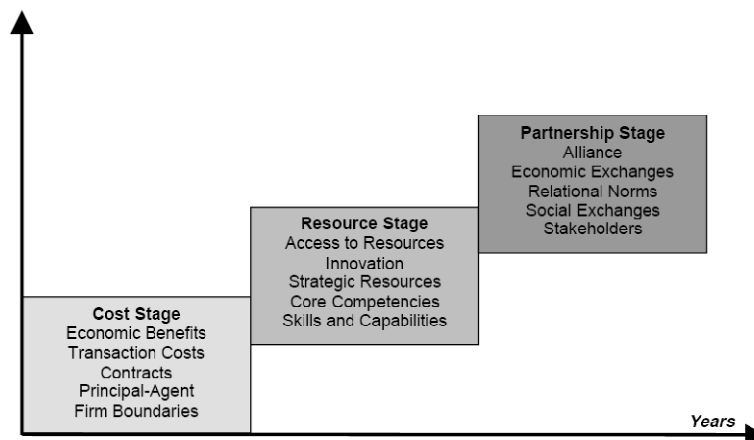
- Total outsourcing: the decision of complete or partial transfer of the information system functions, with a percentage of more then 89% of the total budget;
- Total in-sourcing: in this case, more then 80% of the information system budget is conferred to some internal departments;
- Selective outsourcing: it is about an intermediate situation between the ones mentioned before – when the outsourcing process involves from 20% to 80% of the department's budget.

In the last ten years, the scope and range of services being outsourced are also growing (Currie, 1998), as is illustrated by the promotion of the following:

- Business process outsourcing (BPO), a relatively new concept that implies combining IS outsourcing with support or consulting for the business functions outsourcing refers to.
- Applications service providers (ASP) are also developing – ASPs are third-party service firms that deploy, manage and remotely host software applications through centrally located services under a rental or lease agreement.
- Web and e-business outsourcing, where vendors are contracted to provide web-based applications that enable a firm to enter the e-business era, is another growing area within IS outsourcing.
- Global outsourcing, which consists in developing software in foreign countries with highly-trained computer staff and comparatively very low salaries. India is the world's leader in the field of global outsourcing.

In the recent study Gottshalk P. and Solli-Saether H. (2006) has proposed a three-stage model for the evolution of an outsourcing relationship. They called this a *Maturity Model for IT Outsourcing Relationships* (figure 1). The purpose of the model is both to understand the current situation in the relationship in terms of a specific stage and to develop strategies for moving to a higher stage in the future (Gottshalk and Solli-Saether, 2006).

Figure 1. Stages of maturity in outsourcing relationships.



(Source: Gottshalk and Solli-Saether, 2006: 2005)

The appeal to an outsourcing operation in order to keep up with the technological innovations is often motivated by a financial reason: the companies do not have the capabilities to develop some informatics projects and services.

The process of taking decisions is not a simple one, having in mind the services outsourcing, and the response is often very unconvincing.

The initiative of IT services outsourcing if made, generally, by the general manager, by the council board or by the head of IT department. The factors that stands up for the IT services outsourcing decisions are: high costs of information systems' maintenance, low quality of information systems, out-of-date servers, lack of personal and so on.

## **2. OUTSOURCING DECISION FACTORS**

The factors of outsourcing decisions are:

- The way in which the IT is accounting. If the IT is considered fixed costs, all the other company's departments will perceived these services as being free of charge. The outsourcing might modify these perceptions and might generate some discipline in the IT system evaluation.
- The IT department perceived efficiency. A strict management might often fell that its IT department is not working properly, so it might decide to outsource this function to an external provider.
- The efficiency perceived by the IT department. The research has shown that there id no correlation between the amount of money a company is spending on IT and its profitability. The IT department actions must collaborate with all other departments in order to make the IT systems to contribute effectively to the company's goals.
- The IT department authority within the organization might, likewise, affect the outsourcing decision. The head of the IT department is always against the outsourcing process because it will drive to the loose of its influence in the company and to the loose of some jobs.
- The financial situation of a company might be considered the driving force behind the outsourcing decisions.
- The company structure might affect the outsourcing decisions.
- Culture, both national and organizational, might affect the outsourcing decisions.

The outsourcing factors (determinants) can be classified in two broad categories: measurable and immeasurable. The measurable factors refer to the cost reductions, the productivity, the profitability improvement, and risk control of the outsourced services. The immeasurable factors refer to some aspects regarding know-how, operational flexibility,, access to cutting-edge technology, spread risks, focus on core activities, research and development (R&D) capability, firms' competitive strategies and so on. For the immeasurable factors, it may be possible only indirectly analyze their impact on the outsourcing firms' performance through the measurable factors.

The outsourcing factors are made up of a company's reasons to take a decision towards contracting the IT services with a specialized provider.

## **2. THE EVOLUTION OF IT OUTSOURCING THEORIES**

The strategic importance of IT services outsourcing activity led the managerial and academic literature to focus upon this subject. The main aspects approached are (Barthelemy and Geyer,

2005): (1) motivations of IT services outsourcing, (2) the relationships with the IT services provider, and (3) internal and external determinants' impact on the decision make process.

The IT services outsourcing's study has driven to the new theories development which set up the main outsourcing activities. There are many theories regarding the IT services outsourcing (Gottschalk and Solli-Saether, 2005), from which we will underline only the following:

**The core competencies theory.** A firm's activities classified in main or critique ones and less important ones, may be realized by outsourcing, both inside and outside the company. As many authors wrote, the IOT activities and services from a company are considered main activities, which can be totally or partially outsourced, in correlation to the confidentiality level and the informational system of the firm. Having in mind this, the definition ability of IT demands regarding the outsourced activities and their monitory, is considered a very important activity within the companies (Hancox and Hackney, 2000).

**Resource-based theory.** The IT services outsourcing is a strategic decision, which can lead to an improvement of the informational resources of a company (Grover and others, 1998).

**Transaction cost theory.** The transaction costs are generated, most of the time, by a lack of a complete contract between the contractors, situation which can lead to multiple negotiations and costs risings within the contract (Williamson 1979). If we connect to the outsourcing research, this theory discloses the rising of outsourcing costs and the evolution of IT field. As the outsourcing transaction cost is bigger, as the whole process is more and more inefficient.

**Contractual theory.** The IT service outsourcing contracts includes the institutional and legal framework for the partners' rights and liabilities. The outsourcing contracts must prevent the risks and opportunism of impracticable contracts. The most common of the IT service outsourcing contracts are: the level of outsourcing, the informatics accessories transfer, the team building-up. The services' prices and their modality of payment, the demands and warranties of the provider, the intellectual property and information security (Lee, 1996).

**The neoclassical economic theory.** The companies rely on IT service outsourcing for cost-cutting reasons through savings in IT services maintenance (Ang and Straub, 1998). The companies will, in this situation, finance their own IT department and functions only if the correlative costs are smaller than the IT provider's costs.

## CONCLUSIONS

The outsourcing is a strategic decision which modifies the company's structure, being one the main engines behind the development of a new organizational framework. From this point of view, many researchers' studies the selection attributes of the outsourced company and the IT services supplied.

Conclusions regarding outsourcing:

- The IT service outsourcing market has been exponentially grown lately, and it seems to keep the same ascending trend in the near future;
- The outsourcing process allows the management to concentrate upon the main aspects of the company's activity;
- Many companies appeal to IT services outsourcing, because they consider this area not being, or should not be their main activity;
- Most of the positive outsourcing arguments fit to the small enterprises activities;
- The way in which outsourcing is used can be looked at similar to the way the management involves in its IT function administration;

- An adequate administration of the outsourcing options can not be realized without a coherent IT strategy, completely integrated into the general goals and strategies of the company;
- A company must perfectly and detailed know the components of its IT function before starting the outsourcing evaluation, because it has to be capable to precisely define its demands in the negotiation process with the IT services provider;
- The first aspect a company must decide upon is what it wants to achieve though the process of outsourcing.
- In Romania the outsourcing research is almost absent if we are to take into consideration the chitty tries of presenting the phenomena.
- Another difficulty consists of the reality that most Romanian companies haven't got an information system's strategy; and, by exception, where there is some implication towards this problem, they are under the responsibility of IT managers, not the general ones. IT department managers describe their day-to-day control of IT services using non-financial measures.

## REFERENCES

- Ang, S., Straub, D.W. (1998), *Production and transaction economics and IS outsourcing: a study of the US banking industry*, MIS Quarterly, Vol. 22, No. 4, pag. 535 – 552.
- Barthelemy, J., Geyer, D. (2005), *An empirical investigation of IT outsourcing versus quasi-outsourcing in France and Germany*, Information & Management, Volume 42, Issue 4, May, pag. 533-542.
- Currie, W.L. (1998), *Using multiple suppliers to mitigate the risk of IT outsourcing at ICI and Wessex water*, Journal of Information Technology, Vol. 13 No. 3, pp. 169-80.
- Gelbstein E. (2003), *Outsourcing*, International Computing Center, United Nations, Encyclopedia of Information Systems, Volume 3.
- Gottschalk, P., Solli-Sæther, H. (2005), *Critical success factors from IT outsourcing theories: an empirical study*, Industrial Management & Data Systems, Vol. 105, Nr. 6, pag. 685 – 702.
- Gottschalk, P., Solli-Sæther, H. (2006), *Maturity model for IT outsourcing relationships*, Industrial Management & Data Systems, Vol. 106, Nr. 2, pag. 200 – 212.
- Grover, V., Teng, T.C., Cheon, M.J. (1998), *Towards a theoretically – based contingency model of information systems outsourcing*, in Willcocks, L.P., Lacity, M.C.(Eds), *Strategic Sourcing of Information System: Perspectives and Practices*, John Wiley & Sons, Chichester.
- Hancox, M., Hackney, R. (2000), *IT outsourcing: frameworks for conceptualizing practice and perception*, Information Systems Journal, Vol. 10, No. 3.
- Hurley, M., Schaumann, F. (1997), *KPMG survey: the IT outsourcing decision*, Information Management & Computer Security, October, Vol. 5, No. 4, pag. 126 – 132.
- Lacity, M.C., Hirschheim, R. (2001), *Global Information Technology Outsourcing*, John Wiley & Sons.
- Lee, M.K.O. (1996), *It outsourcing contracts: practical issues for management*, Industrial Management & Data Systems, Vol. 96, No.1.
- McFarlan, F.W., Nolan, R.L. (1995), *How to manage an IT Outsourcing Alliance*, Sloan Management Review, Winter.
- Tayntor, Ch.B. (2001), *A practical guide to staff augmentation and outsourcing*, Information Systems Management, Vol. 18 No.1.
- Williamson, O.E. (1979), *Transaction-cost economics: the governance of contractual relations*, The Journal of Law and Economics, Vol. 22, No. 3, pag. 236 – 247