

# A STUDY OF INFORMATION TECHNOLOGY OUTSOURCING

Boldea, Ioan

West University of Timisoara, Faculty of Economics, Department of Business Information Systems and Statistics

1 June 2006

Online at https://mpra.ub.uni-muenchen.de/7111/ MPRA Paper No. 7111, posted 13 Feb 2008 07:27 UTC

#### **Ioan Boldea**

Universitatea de Vest din Timișoara, Facultatea de Științe Economice, Timișoara, Romania

# A STUDY OF INFORMATION TECHNOLOGY OUTSOURCING

Key words: information technology, outsourcing, decision, costs

#### ABSTRACT

IT outsourcing is the practice of contracting out the running of a part of an organisation 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.

### 1. **INTRODUCTION**

In our days, companies' managers believes that their information systems costs are higher and higher and do not provide any important strategically advantages. New information technologies are developing quickly throughout the world and at a lower cost. Even though, the existing information systems are quite difficult to be replaced and their sustaining costs improved without reasons.

For solving these problems, IT specialists offer some new proposals and business solutions from which the managers might decide to choose the proper one for their specific situation.

The most significant information systems solutions are:

- Successful business case situations involving new information technologies, which might not be generalized for all companies or for different time perspective;
- Scientific unlamented vicious remarks on the global methodologies of developing and implementing business information systems, followed by practical proposal of replacing the old systems;

• An avalanche of new technical and organizational solutions: Facilities management, Outsourcing, Reengineering, Client-server architectures, Object oriented concept, Groupware, Downsizing, Rightsizing.

Nowadays reality proved that we cannot consider a single best solution among the others, and therefore, the managers often choose to adopt a passive attitude, waiting for a miraculous solution, or to massively invest in new technologies, hoping to gain a technical business advantage in their competition relations.

We can firmly appreciate the existence of a direct relationship between a company performance and the information system quality obtained though increasing the capital invested in this domain.

The conception, development and implementation of an effective and efficient information system should be regarded by companies' managers not only as a technical problem, but also as a consequence of defining the strategy for developing the whole business.

# 2. CONTENT

We define *outsourcing* as the turning over of the responsibility for providing all or part of a service, to one or more external providers. The practice of a company's full time employees providing the IT needs of the business is referred as *insourcing*.

There is no company which truly outsourcers all its IT functions. A part of the IT functions remains within the firm. It is also true that no company insources all its IT functions either. This would mean writing all software in house, owning all telecommunications, which are used and are not pre-paid by the company.

There are four main ways a business may acquire a particular IT service: total outsourcing, contractor teams, hybrid teams and insourcing.

- *Total outsourcing* means that all of a particular IT function, such as telecommunications, data processing, software development or business analysis are contracted out to one or more external contractors.
- *Contractor teams* either consist of employees of an outsourcing vendor or individually hired sub-contractors. These contractor teams are use for one off projects when the required skills are not available in the company.
- Hybrid teams consist of both internal IT employees and external IT contractors. Skills will be transferred from the external contractors to the internal staff and at the completion of the project; the internal employees will have the knowledge to maintain the system.
- *Insourcing* means directly employing all the personal who work in your IT problems.

#### 3. OUTSOURCING PROVIDERS

The outsourcing providers have evolved from three main areas: hardware manufacturers, software companies and internal computer departments. The number and the size of outsourcing providers have been increasing rapidly over the last few years, although the industry is quickly becoming dominated by American outsourcing specialists.

There have been important evolutions within three main directions. Many computer hardware manufacturers, experiencing falling profitability in the highly competitive computer market, have been attracted to the high gross profit margins, which are currently reported in the outsourcing business. Meanwhile, the software manufacturers and vendors have expended their range of supply services so that they can meet all their customers' information technology needs. The third main area from which outsourcing providers originate, is that of internal IT departments. Many solved the problem of how to make their IT department cost effective by making it a separate business entity.

# 4. POTENTIAL BENEFITS OF IT OUTSOURCING PROVIDERS

*Cost savings.* IT providers might achieve economies of scale by consolidating several customers' data processing into one data centre and by sharing the costs of one software license between several customers.

*Access to know-how.* Companies often have problem recruiting and retaining IT specialist with the necessary skills. IT outsourcing may be the only way a company can access the skills that are required to maintain and develop its information system.

*Better services.* Many managers are not satisfied with the level of service they receive from their internal IT department but are not sure what to do to improve it. IT outsourcing can create a customer/supplier relationship where the provider is more concerned with satisfying a customer needs than an internal IT department would be.

*Focus on other aspects of business.* In many businesses, IT is not an integral part of the product but a support function for those areas that do produce the product or service. IT outsourcing means that its provider will look after the day-to-day running of the IT function, leaving the management to concentrate on the core aspects of the business.

*Increased control of information technologies.* Outsourcing can increase senior management's control of IT because they can stipulate in the contract exactly what is and is not to be implemented.

*Flexibility*. Outsourcing enables the company to change the size of any IT function more quickly and easily than if there is an internal IT department (especially in the case of acquiring a new subsidiary or initiating a new project).

Interim solution. IT outsourcing can be a useful interim solution to the problem of a change in technology. Many companies who are planning to change their basic IT

philosophy from mainframes in a data center to distributed processing using a network will outsource their data centre operations.

#### 5. POTENTIAL DISADVANTAGES OF IT OUTSOURCING PROVIDERS

The IT providers have a strong market position. A company that outsources becomes very dependent on the goodwill of the provider. There is what Williamson (1979) calls the *Threat of opportunism*. By this, he means that there is a possibility that the IT provider will use its position of power over the customer to increase its revenue exclusively.

*Difficult to reverse the decision.* One the company has outsourced, it is very difficult to bring the IT function back in-house. All the skills, experience and know-how will have been transferred to the provider. The time and expense required to rebuild an internal IT department from scratch are very high.

*Higher costs in the long run.* Outsourcing can cost much more than initially estimated, even more than keeping the IT in-house, because the IT provider may charge the company extra for every service over the amount agreed in the contract.

*Security versus confidentiality.* Many companies fell unhappy giving access to sensitive data to an outside organisation and so reject the idea of outsourcing.

#### 6. FACTORS WHICH AFFECT THE DECISION OF IT OUTSOURCING

Accounting treatment of IT. The way in which IT costs are treated for accounting purposes can affect the outsourcing decision. If IT costs are charged directly as fixed overhead, the individual areas of the company will perceive IT services as costing nothing. This will lead to requests for systems whose benefits do not exceed their cost because the users see only the potential benefit, not the potential cost. Outsourcing can change this perception and increase discipline in evaluating proposed IT systems.

*Management perception of information technology.* Whether or not an IT function is perceived to be a core competence of the business or differentiates the product from those of competitors is a key factor in the outsourcing decision making process. Unfortunately, there will usually be some disagreement when trying to classify IT functions in this way as it is not easy to determine what a company's core competencies are or should be.

*Perceived efficiency of IT department.* The management's perception of the IT department's efficiency can be a major contributing factor to the decision of outsourcing. Every company has a different IT structure and requirements, so it is impossible to compare like with like or say that one IT department is better or worse than another. Research has shown that there is no relationship between the amount a company spends on IT and its profitability. The key to success is to ensure that IT effectively contributes to the pursuit if the goals of the organisation.

*Financial position of the company.* A company financial situation may be the driving force behind the decision to outsource. A firm which has not the financial possibility to acquire some efficient IT resources will take the decision of outsourcing of all or some of its services to an IT provider.

*Organisational structure*. Organisational structure can affect a company's decision to outsource. A centralised IT department is much easier to evaluate than if each area or subsidiary provides its own IT. An outsourcing provider would typically achieve efficiency through centralising the IT function, which would in turn make the transition period more traumatic.

*Culture.* Culture, both organisational and national, can affect the outsourcing decision. Organisation culture can not only affect the decision of outsourcing, but also the ease with which an outsourcing contract could be implemented.

# 7. A ROMANIAN CASE STUDY

For exemplification, we have chosen Reiffeisen Bank Romania. Raiffeisen Bank Romania and IBM Romania has signed an outsourcing contract for the bank information, computer and telecommunication systems. The 5 million Euro contract, has been signed initially for a three-year period, with an extension clause.

The IBM Romania takes up the following responsibilities: post-buying operations, IT installation operations, IT re-configuration, IT preventive servicing, IT malfunction service, IT relocation activities, IT training for the final system users.

The bank strategy is one of outsourcing some of its main IT activities in order to gain a market competitive advantage. In order to achieve this advantage, the maintenance costs of the IT system should be reduced at least by 40 percent.

The IT systems outsourcing to IBM Romania allows Raiffeisen Bank to concentrate its capacities on traditional banking activities for an improvement in client satisfaction through better standardized delivered services, flexibility and dynamism in the bank market approach and operation optimizing.

#### REFERENCES

1. Grover V., Teng I. (1993), The Decision of Outsource Information Systems Functions, Journal of Systems Management

2. Halpes M. (1993), How to Enter Outsourcing, Computerworld

3. Lacity M., Hirscheim R. (1993), Information System Outsourcing: Myths, Methaphors and Realities, Chichester, Wiley Publishing, UK

4. Martinsons M. (1993), Outsourcing Information Systems: A Strategic Partnership with Risks, Long Range Planning, Vol. 26<sup>th</sup>, no. 3

5. Savery M. (1994), A Strategy of Information Technology Outsourcing in the United Kingdom, Oxford Academic Press

6. Information Technology Review, (1991, 1992, 1993) Price Waterhousse, London.