Information Technology Outsourcing Strategies for a Manufacturing Firm

by

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DISSERTATION PUBLICATION SPECIAL NOTE

Due to the sensitivity aspect of some information in this document, the company name and the head quarter company have been renamed as “THE COMPANY” and “THE COMPANY HQ” in the study case of the dissertation.

A Dissertation

Entitled

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By

Yvan Poulin

We hereby certify that this Dissertation submitted by Yvan Poulin conforms to acceptable standards, and as such is fully adequate in scope and quality. It is therefore approved as the fulfillment of the Dissertation requirements for the degree of Master of Business Administration.

Approved:

Keith Cronk Dissertation Advisor	Date
Faculty Reader	Date

The University of Liverpool
2005

CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product that where the languages of others is set forth, quotation marks so indicate, and appropriate credit is given where I have used the language, ideas, expressions or writings of another.

Signed

Yvan Poulin

ABSTRACT

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To outsource or not to outsource its internal IT department? That is the question that many firms have been asking themselves. Outsourcing has been around for more then 20 years in the different manufacturing areas. At first, companies decided to outsource the manufacturing of components in countries which would be bringing cost benefits by reducing the overall cost of their products. With the Internet gaining momentum as a quick and reliable source of information transmission, many manufacturing firms are now evaluating the possibility to outsource their IT functions in order to focus their energy, efforts and capitals on core-competencies thus reducing costs and improving quality of their IT services. From the literature review, we understand that cost reductions could be obtained, but they are usually less impressive than estimated in the preparation of a typical IT outsourcing business case. The overall objective of this dissertation, through the study case of a manufacturing business (THE COMPANY), is to build a framework that will take into account all the elements necessary for a manufacturing firm to accurately evaluate the strategic initiative of outsourcing its internal IT functions in order to achieve not just cost reductions, but improved value for the users performing activities with these technological tools and processes.

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I. INTRODUCTION

Outsourcing and Offshoring are emerging as top key issues of many private and public companies. According to Forrester Research, by the year 2015, 3.4 million jobs, previously based in the United States, will have moved overseas. Even though there is resistance from the public based on the fear of losing their jobs, outsourcing is here to stay.

Outsourcing could be defined simply as: "having an outside vendor to provide a service that you usually perform in-house" [(1)]. The process usually begins with information technology (IT) contracts, but it is quickly followed by a broad range of services such as accounting, finance, customer service, procurement and human resources.

Although many manufacturing companies are evaluating and implementing an IT outsourcing process because of cost reduction promises, very few look further down the road at impacts of a long term outsourcing relationship. Manufacturing firms are not carefully considering the impact of knowledge and skills globalization [(2)]. If problems ever occurred with the outsourcer, would the loss of intellect in this particular field be forcing them to be locked out in a bitter-sweet relation with the vendor? Over the course of strategic thinking, we have to make sure that the decision won't be made by ascertaining what will save most on overhead costs, rather than on what make the most long term business sense [(3)].

The attractive illusion of substantial cost savings can quickly disappoint many executives on the outcome of an IT outsourcing strategy, especially when the planned payback is strictly about cost reductions. According to outsourcing.com, the average cost savings are between 9% to 15% and not the phenomenal prediction of 35% to 50% that many companies are aiming at quickly obtaining by outsourcing their IT portfolio. To build an outsourcing business case strictly on cost reductions will surely lead to failure.

This dissertation will consider, numerous aspects of outsourcing such as advantages/drawbacks of outsourcing, identification of the manufacturing core competencies, drivers, and strategy, outsourcing processes, communication, planning and execution.

II. REVIEW OF LITERATURE

The purpose of this literature review is to gather information and analyze what has been written on the subject of IT outsourcing. This review is also aimed at understanding the best practices of the critical areas and how they could be applied on the specific case of a manufacturing firm evaluating the outsourcing of its IT department.

Even though outsourcing has been around for many years in different markets, the outsourcing of information technology and business processes is still a fairly new business occupation. This literature review is the compilation of a number of documents from different sources such as academic publication, periodicals, thesis, reports and web sites.

The literature is formatted in order of appearance of the different research questions (to be outline in a later section). The heading titles were also selected by keeping in mind the order of the different research topics.

Outsourcing Fundamentals

The outsourcing.com website [(1)] is a good place to start learning about the actual outsourcing process. The focus of the site is to provide guidance on an outsourcing project, but it lacks information of the first and foremost question: “what drives us to outsource?”

Information technology and systems (ITS) outsourcing has grown to become a multi-billion dollar industry since the watershed event of Kodak outsourcing in 1989. The traditional outsourcing services market has developed into a highly specialized marketplace of ITS services. In the late 1980s, drivers to outsource were cost savings, access to cash and the gain of IT efficiency. Competitiveness, time-to-market, innovativeness, round-the-clock service, agility and finally access to world-class technology and skills were additional drivers identified in the 1990s. [(4)]

Communication

As a contract takes shape, communicating the progress of the deal to the staff and addressing their concerns need to become one of the top priorities. A CIO should make sure to offer his staff regular updates via e-mail and in meetings. LeFave (CIO of Nextel) asked his employees: “If you’re going to be in data center operations, don’t you want to work for a company whose reason for being is data center work?” He told them they’d have more opportunities for training, professional development and advancement if they went to work for EDS. [(5)]

Firms must deal with their staff more considerately when embarking on outsourcing deals or productivity is likely to suffer, according to a recent survey by IT services company Steria. [(6)]

Steria found that 77 percent of employees involved in outsourcing deals felt uncertain about their future position, which led to reduced productivity levels and more mistakes being made in many cases. Almost a fifth of workers complained that they heard about an outsourcing arrangement through other staff rather than through official communication channels, adding to their feelings of insecurity. (6)

According to Dwayne Phillips, author of “How people drive outsourcing process”: “The main problem with outsourcing is communication. Outsourcing projects have an additional set of people -- the outsource developers. More people mean more lines of communication, more opportunities for miscommunication, and more misunderstandings and mistakes. Mistakes are much harder to see and fix in outsourced projects.” (7)

The author also mentioned a few things to watch for with people in outsourcing projects:

- “Work with people who want everyone to succeed.” (7)
- “Never assume that someone else understands what you want.” (7)
- “Keep people focused on the task at hand.” (7)
- “Obtain regular, frequent status information that shows progress on the product.” (7)
- “Use the status information to make timely, intelligent decisions.” (7)

Drivers & Cost Concerns

Results from a survey of more than 900 firms (corporate & IT management) on outsourcing practices showed that their decision was based on outsourcing factors such as: cost/price concerns, personnel issues, risk/control issues, vendor and contract issues and finally strategic advantage. [8]

According to Eugene Gilerson of Wall-Street & Technology: “the common belief is that outsourcing technology efforts offshore cuts cost and therefore makes companies more efficient. However in the long run it makes little strategic sense for most companies to outsource significant portions of their IT projects to cheap-labor countries… With so much of a company’s revenue riding on technology, why should a firm bet on a cheaper technology source halfway across the world instead of its own intellectual resources? … For companies with a focus on products and services, it makes little strategic sense to outsource IT to cheap-labor countries as the lack of innovation may hurt their client relationships and the quality of their product offering in the long term.” [9]

According to a group of Canadian CIOs, outsourcing penetration might not be as significant so far in Canada because of salary discrepancies between the two countries on similar IT positions. An IT Manager in the U.S. is earning as much as 25% higher than a Canadian worker. With such difference in salaries, Canadian CIOs suggest that it might be a key reason why U.S. workers are facing a larger offshore threat than their northern counterparts. [10]

In the article “Business: More gain than pain: Offshoring”, the author discusses the McKinsey Global Institutes study which claims that for every dollar of corporate spending shifted offshore by an American firm generates $1.13 in new wealth for

American economy. McKinsey estimates that around 70% of workers ousted in favor of offshore alternatives find new work within six months. [11] Unfortunately, there are no details regarding the salary fluctuation of those individuals; did they have to accept a significant drop in order to quickly find some new work?

Right now, many CIOs are considering outsourcing significant chunks of their IT to cut costs; improve performance or obtain the scale their companies need to grow. Indeed, organizations around the world spent $180 billion on IT outsourcing in 2003, according to Meta Group, which predicts that this market will grow 10 percent within the next two years. Despite the accrual of experience these numbers would suggest, the decision to outsource remains a difficult one. It alters the relationships between managers and employees, and between business and technology executives. [5]

Global aluminum giant Alcoa plans to outsource 130 jobs, including 70 IT positions, to an India-based services provider as a part of a move to reduce costs. Kevin Lowrey (a spokesman of the company) mentioned that the different business units of Alcoa "want to be as low cost and as effective as they can be", which is the reason for moving them offshore. [12]

Domestic or Offshore Outsourcing Partner?

IT executives who have successfully outsourced parts of their companies' services abroad can tell you the road to profitable relations with offshore partners can be painfully bumpy. According to Tim King (VP of Postal Affairs for Group 1 Software) "Either, in the design phase, they just didn't get it, or the cost they delivered was just not up to our standards" [13]. In order to be successful in such project, companies need to: do a self examination, clarify goals and expectations, have a rigorous project management discipline and understand how to best manage communications with everyone involved. Probably the biggest stumbling block to offshore outsourcing is that after all the contracts have been signed, companies abdicate responsibility for projects to the outsourcer. King also mentioned: "Outsourcing strategy is not necessarily to replace jobs but to supplement what we have, to be more cost-effective… our mantra for some time has been to do more with less." [14]

There are some real productivity gains to be realized from 24-hour development cycle enabled by time zone difference, allowing code to be produced over-night in India and presented to the U.S. client for review and integration the next morning. Offshore teams will have no understanding of the internal drivers that make your business unique and valuable, and they need to interface with an internal team that understands your business vision, your customers and your culture. A great tool to enable that is the establishment of a virtual team environment. [15]

The potential of global outsourcing is enormous and if implemented correctly, can dramatically improve an organization's effectiveness. According to the outsourcing institute, on average, companies are realizing a nine per cent cost saving and a fifteen per cent increase in capacity and quality through global outsourcing. [16]

It seems that some U.S. CIOs understood the fact that sending IT projects to another country isn't the only way to keep labor costs in check; they can send IT work to the country. There are many qualified workers outside of big city limits, and by sending work to rural U.S. areas, CIO would be able to utilize lower-cost IT workers the same way they would to India or China. If done right, it can actually be more attractive than offshore for many sensitive or mission-critical initiatives. Finally, why let pieces of America be disadvantaged while building economies offshore? (17)

Companies that outsource IT work outside the US may experience an overall savings rate only half the figure they might be expecting, according to Meta Group. While full-time equivalent labor costs in India may be close to half that of the US, general savings for an offshore outsourcing implementation are likely to be closer to 15%-20% during the first year. Nevertheless, offshore outsourcing is likely to grow 20%-25% in the next two years. According to Meta Group, some of the key risk factors are (18):

- Security and privacy concerns
- Scope creep
- Cultural differences
- Knowledge transfer

<u>Strategic Elements</u>

Within many organizations, the outsourcing decision is being given more consideration because of its strategic implications. Lonsdale and Cox (1997) have revealed that outsourcing decisions are rarely taken within a thoroughly strategic perspective, with many firms adopting a short-term perspective and being motivated primarily by the search for short-term cost reductions. Little to none consideration for the long-run competitiveness of the organization is reviewed at that point. Three key problems are identified [3]:

- No formal outsourcing process
- Limited cost analysis
- Core business definition

On the strategic perspective, it is important that a company understands its mission statement and vision and transform these topics into strategic tasks. A thorough analysis of the competitive environment (internal and external) and their impact on the IT outsourcing will be mandatory before evaluating the outsourcing process. By looking at the SWOT analysis of the company, this should also help us understand if the IT functions outsourcing make sense for the business. [19, 20]

For an organization in which IT is not a core competence/activity, outsourcing IT services or functions is a possible route to cope continuously with the growing technological transitions. While research indicates that there are enormous potential benefits in strategic IT or strategic information systems (IS) outsourcing, forming a relationship with an unsuitable outsourcing vendor could lead to increased business risks.[21]

Businesses have to be careful to not implement desperation outsourcing rationalized under the guise of strategy. Outsourcing can't be an attempt at rectifying larger ills, as once the changes is made, symptoms of the underlying problems will emerge and root causes remain unresolved. (22)

Strategic benefits of outsourcing are: cost reduction, access to superior quality, increased flexibility, focus, leverage and diversification. (23)

It is interesting to read, that 2004 was expected to be the year of the offshore contact center. Manufacturers have successfully operated offshore for years. But contact centers are not factories: they deal directly with your customers. In 20 years, four critical issues have been identified for the optimum performance of a contact center (24):

- Reduce costs without sacrificing sales or services performance
- Managing cultural and language differences
- Accurately estimating and managing offshore costs
- Mitigating economic and political risk

Once IT outsourcing contracts are established and running properly, it's that exact same IT infrastructure that is enabling other business processes to be outsourced as well. Business process outsourcing (BPO) is a means to control massive technology and infrastructure upgrades, and these back-office require constant care and feeding. Beyond cost savings, businesses are finding that the potential benefits of BPO can go deep into operations. The economies of scale that enable providers of outsourced services to cut a client's cost are becoming less important than the economies of skill gained from calling on expertise that can chart the course of least risk. [25]

Organizational Impacts of Outsourcing

The impacts of outsourcing on organizational modes are [26]:

- Level of integration → low
- Impacts on the firm → low
- Time horizon →short
- Control over activities → low
- Startup time & costs → low

The top three major changes that affect the work today are [27]:

- IT (makes work more portable)
- Communication (tele-working enables to move work oversea)
- Organizational change

These three forces have led to a period of aggressive organizational change throughout the world, but unfortunately, in many firms, understanding these concepts stop at the process of cost cutting. Shareholders are still putting pressure on managers to reduce costs, and as a result of that situation, more and more outsourcing projects are being studied. Companies should consider hiring an outside company that is an expert at providing the services that is, for them, essentially a distraction from their primary business. Keys to successful outsourcing are [27]:

- Strategic analysis
- Selecting the providers
- Managing the relationship

The results of a company's outsourcing decision appear to be a very good choice on one level. Development is still going on, and the CFO can confirm that less cash is being spent than before. However, the business owners are very unhappy with productivity 3 to 4 times lower and the total value added by IT now a fraction of what it used to be. "It's not that the work is better or worse; it's the time that it takes to communicate with a team of individuals half a world away". [28]

Vendor Selection & Relationship Management

"Establish vendor evaluation criteria. Such criteria should focus on the most critical needs, prioritized by importance to determine appropriateness of proposed vendor solutions. A vendor evaluation team is established, comprised of representatives from the various business areas that will be impacted by the new solution (including end-users)."[29]

"Formal methods can be adopted for vendor choice to make the process objective and effective. The evaluation criteria can be prioritized based on its impact on the identified key business drivers as well as the organization's short-term and long-term goals for outsourcing. Weight can then be assigned to each of the criteria as part of the analysis process based on the findings from the RFP responses, site visits as well as the customer references." [30]

"Managing successful relationships requires a new breed of managers. Outsourcing success depends a lot on general management skills rather than technical or operational skills." [31]

- "Negotiation skills: To negotiate on a day-to-day basis to keep the services provided in line with the services required." [31]
- "Communication skills: Outsourcing managers are basically a bridge between the organization's business needs and the providers' services. Communication becomes the essence of a successful outsourcing relationship." [31]
- "Business skills: To continually understand the changing business needs and aligning the services as per the business objectives." [31]

This literature represents an overview of outsourcing and is not extensive. Much of the literature is presented and developed in answer to the research questions. So as not to be repetitive, this literature is not presented here in the literature review.

III. METHODOLOGY & THEORETICAL ORIENTATION

The overall methodological approach to be used will be based on a qualitative analysis of different sources gathered over the literature review applied on a study case of a manufacturing firm. Finally the analysis will lead to the construction of an outsourcing action plan under the form of a business case strategic framework and a balanced scorecard.

A key foundation to successful outsourcing is a clear understanding of the IT outsourcing concept. Once the basic is understood, the applicability of outsourcing to a company can be investigated. A careful analysis of the company strategic vision will lead to the review of key outsourcing drivers that should be aligned to support this vision. With this knowledge an outsourcing strategy can be crafted to propose the outsourcing of internal IT functions. All along the path of this analysis, we'll keep track of three surrounding elements:

- The importance of communication in the outsourcing process
- The monitoring of the progress
- The performance evaluation of target versus current condition

Those elements were selected because they aren't one-time achievement goals; they have to be kept in sight during the whole process. According to David Foote, president of IT advisory and research company Foote Partners: "Outsourcing project success requires self-examination on the part of the client company to clarify goals and expectations, rigorous project-management discipline, and an understanding of how best to manage communications with everyone.”

Research Questions & Elements to Analyze

It is the intention of this dissertation to analyze the strategic processes of manufacturing firms deciding to outsource their IT functions.

In order to address this aim, numerous aspects of outsourcing will be investigated such as advantages/drawbacks of outsourcing, identification of the manufacturing core competencies, drivers, strategy, outsourcing processes, communication, planning and execution.

Achievement of the aim will require:

- Understanding of the manufacturing core competencies and the role of IT in the company strategy.
- Study case of a manufacturing company assessing the possibilities and strategies to outsource its IT services.
- Creation of a template that will guide a manufacturing firm through the outsourcing process of its IT functions.