Journal of Information Technology Cases and Applications; 2004; 6, 3; ABI/INFORM Global pg. 35

Dimensions of Offshore Outsourcing Business Models

Dimensions of Offshore Outsourcing Business Models

Naureen Khan and Guy Fitzgerald Department of IS and Computing, Brunel University, UK Tel: +44 (0) 1895 274 000, Fax: +44 (0) 1895 251686 Email: naureen.khan@brunel.ac.uk, guy.fitzgerald@brunel.ac.uk

ABSTRACT

This paper discusses some key themes and issues in relation to offshore outsourcing. It provides an analysis of four example UK case studies of firm that have entered into offshore outsourcing deals. Each firm is distinguished by the different approach or business model adopted. These approaches highlight the heterogeneous nature of the offshore outsourcing phenomenon. A framework is then proposed based on the literature and the study which provides four important elements and related sub-factors of interest and importance. This framework is then used to analyse the cases highlighting some of the drivers and risk factors of the models, from the customer's perspective.

Key words: offshore outsourcing; business models; direct outsourcing; joint venture; subsidiary, case study

INTRODUCTION

Companies today are constantly redefining value by reducing costs and raising service quality. This is not new, of course, a previous wave of cost cutting occurred in the early 1990's under the guise of reengineering (Hammer and Champy, 1993). The concept dealt with corporate downsizing and outsourcing operations to local vendors. Outsourcing is a relationship between a supplier and a client in which the supplier assumes responsibility for one or more of the clients IT functions (Rajkumar and Mani, 2001). A similar trend of organisations attempting to reshape their business operations with the objective of reducing costs is now in evidence. Whilst in the past the trend involved outsourcing IT related activities to local software vendors, now firms have begun to outsource to overseas software developers/vendors with significant potential cost savings.

As the term indicates the concept of offshore outsourcing is slightly different from outsourcing as it occurs when the supplier is from a different country than its client. Large companies such as General Electric, HSBC, IBM, and Oracle have already transferred some of their internal services, administrative operations as well as customer relationship management (CRM) work to offshore outsourcing vendors. Staff costs are much cheaper than in the west resulting in cost reductions of up to as much as 90 per cent for some North American and European firms. Also major offshore locations such as India, Philippines and Mexico often have as skilled labour as their counterparts in the West (Financial Times 2003). One recent forecast suggested that the number of US IT jobs going offshore will rise from 27,000 in 2000 to a cumulative total of 427,000 by 2015 (Forrester, 2003). Other industry based research groups have made various predictions for offshore outsourcing: European market will grow by 40 per cent in 2004 according to Gartner (2003) and by 2006 between 20,000 and 25,000 UK jobs will be lost as a consequence of IT work moving offshore

(Ovum 2003). Further, it is predicted that the world's top 100 financial institutions will make annual cost savings of \$138 billion in the next five years by moving operations to offshore locations (Deloitte, 2003).

With the development of communications technology, offshore outsourcing has gained in popularity and "the use of the Internet and other digital technology for organizational communication, coordination and management" has also fuelled interest in offshore outsourcing. Two other key drivers for offshore outsourcing are market entry advantage, due to reduced time cycle, and access to highly skilled professionals (Apte *et al.*, 1997, Rajkumar and Dawley 1997, Sobol and Apte, 1995). However, the offshore model is not without risk, such as, infrastructure problems, cultural barriers, language barriers (verbal and data) and differences in cross-national laws and regulations. Several researchers have analysed the benefits of this model through their work, yet, relatively little emphasis has been given to the underlying risks and ways of overcoming such risks (Apte *et al.*, 1997; Kumar and Willcocks, 1996; Loh and Venkatraman, 1992; Ravichandran and Ahmed, 1993).

The research described here aims to understand these factors through the experiences of four firms using the offshore outsourcing model. The research forms part of an ongoing study into offshore outsourcing from both supply-side and customer-facing perspectives. The firms adopt different strategies and models dependent on their objectives, background and experience, with different benefits, drawbacks, and risks.

The paper begins by presenting an overview of generic literature on IS/IT outsourcing and this is followed in Section 3 with an outline of the research method, data collection and analysis strategy. Section 4 provides brief descriptions of the four case studies followed in Section 5 by a discussion of the business models adopted, the proposed framework for analysis and its application to the cases. Finally in section 6, the paper concludes by summarising the research findings and identifying areas for future research.

RESEARCH CONTEXT: THE EMERGENCE OF IS/IT OUTSOURCING

The term IS/IT outsourcing has gained interest during the last two decades and has continued to evolve with regard to its global adoption and acceptance. Global recession, particularly in the technology sector, has been responsible for large cuts in IT budgets and IS/IT outsourcing has been seen as a strategy to reduce IT budgets, with some significant benefits, although not without risk (Rajkumar and Dawley, 1997, Ravichandran and Ahmed, 1993). The period between the early 1980's-and mid 90's, saw outsourcing as regarded as something of a panacea for the problems of the economic recession, rising costs, poor performance and lack of skilled professionals (Currie and Willcocks, 1998). Outsourcing gathered momentum and various academic studies appeared relating to a variety of key topics, such as the growth in the outsourcing marketplace (Lacity and Hirschheim, 1993); a cross-sectoral approach to outsourcing (Loh and Venkatraman, 1992); managing outsourcing alliances (McFarlan and Nolan, 1995); the evaluation of outsourcing decision (Willcocks *et al.*, 1996); risk assessment and outsourcing (Earl, 1996); measuring user satisfaction (Sengupta and Zviran, 1997); vendor selection process (Mitchell and Fitzgerald, 1997); and taxonomies of outsourcing (Currie and Willcocks, 1998).

As more companies entered into outsourcing arrangements, it was found that external suppliers could provide additional value-added services in the form of improved quality of service, more flexible and responsive design and implementation of IT infrastructures and systems, faster access to highly skilled technical staff, and the effective use of technology to improve business functions. With continued pressures for cost cutting, improved communications, and competitive vendors, it was found that outsourcing need not just be to other local organisation but could be undertaken across geographical boundaries, where the labour costs were even cheaper. Thus "offshore outsourcing" emerged.

In common with other definitions of offshore outsourcing, we define it as 'an activity where client firms outsource IT activities to external service providers in other countries'. This excludes the global internal subsidiaries of client firms. One of the key incentives driving the offshore outsourcing model is low labour cost. Other reasons may include access to a larger IT labour pool in the light of skill shortages in the home country; greater flexibility and agility; potential market entry to the host country; and fewer labour restrictions (i.e. trade union representation) (Apte *et al.*, 1997). Some writers have distinguished 'domestic' versus 'global' outsourcing, which covers US firms outsourcing to non-US vendors (Sobol and Apte, 1995). Others have provided detailed studies of the risks, benefits and conditions under offshore software development (Rajkumar and Dawley, 1997). One study provided a case study on managing the millennium conversion at a major Belgian Bank with an offshore outsourcing supplier (Grembergen, 1999). However, in general there is a shortage of research on this topic (Lacity & Willcocks, 1997) despite the increasing interest in the phenomenon of offshore outsourcing as more firms look for cost savings in their IT budgets.

RESEARCH METHOD

The research study is informed by existing themes and issues which have emerged in IS outsourcing over the last two decades. Although there is relevant literature on core competences of offshore outsourcing, such as (Ravichandran and Ahmed 1993); and Smith *et al.*, (1996) and on problems and issues in offshore development (Rajkumar and Dawley 1997) as yet there are no clear or agreed theoretical or conceptual frameworks of offshore outsourcing, and the area can be said to be in an exploratory stage. As such a grounded theory approach was originally adopted in this study. Grounded theory is explained by Strauss and Corbin (1990, p23) as, "one that is inductively derived from study of the phenomenon it represents. Therefore, data collection, analysis and theory stand in reciprocal relationship with each other. One does not begin with a theory then prove it. Rather one begins with an area of study and what is relevant to that area is allowed to emerge".

We have noted influences on offshore outsourcing business models by the participating firms based on theoretical references to well known strategies (Currie and Seltsikas 2000; Lacity and Hirschheim 1993, Rajkumar and Mani 2001). We further propose to study the key issues influencing the offshore IT outsourcing decisions between the US firms and offshore vendors through case study and desk-based research. The literature initially provided a basis for the interviews in helping to shape questions relevant to the study, which is to identify the key issues and concerns of managers and staff involved in the offshore outsourcing business models. Interviews were undertaken, as an exploratory method for the initial phase of designing the research study prior to developing a set of research questions for further field-work. The method might also be described as evolutionary, as some questions come from literature research, and later they were refined as the initial interview data was analysed.

This study discusses the results of an early phase of the research study by looking at the customer-facing side of offshore outsourcing from the point of view of four case studies firms.

Data Collection and Analysis

Within the research study a number of firms involved with offshore outsourcing have been studied and amongst the factors evolving is that offshore outsourcing is not homogeneous. In this paper four firms have been selected for discussion based upon their approach, as examples of the four different types of offshore outsourcing business models identified in the study. A summary of the four firms is provided in Table 1.

Semi-structured questionnaires (Silverman, 2001) were used when interviewing the respondents. Questions were asked relating to some of the issues identified in the literature but answers were allowed to be open ended in order to facilitate discussion of other issues raised by the participants. The initial questions focused on the interviewees' perceptions of the rationale for choosing offshore outsourcing. The interviewees were mainly with senior level personnel(s) from each firm responsible for the offshore outsourcing decision. The interviews were tape recorded and later transcribed into a narrative containing a chronological order of events (Yin, 1994). The case study companies are now described.

Name	Type of Business	No. Employees	Duration of the contract	Start of the contract
A	E-learning content management company	100	9 months+ 7 months(extra) research on vendor	2001
В	Software development company	28,000	2 years (renewable) contract	2001
С	Accounting and business process outsourcing company	110	5 years contract + open to further renewable option	2002
D	Utility Company	12,000	Not cancelled during the research	2001

Table 1: Details of customers studied for the case study

CASE STUDY DESCRIPTIONS

Company A

Company A is an e-learning company which mainly deals with developing and designing fun interactive elearning solutions for training employees in various industries. They have attempted to transform traditional dry and relatively boring training handbooks and procedures into e-learning training solutions which are flexible in use, well designed, and highly interactive, to make such training programs more interesting and exciting.

The company started in 1994 in response to demand from the retail sector for time and cost effective training of employees. Over the past nine years, Company A has grown in size and success and it now provides both bespoke and generic learning solutions. Their clients include software companies, retail chains, call-centres, and manufacturing companies. They provide learning management solutions (LMS) for some of the biggest brands in the world, such as BP, Sony and Coca-Cola.

Currently, the company has 100 employees of which 30 are involved in e-learning production and 50 work with clients for developing skills and delivering services, with the rest in general administration. However, there are now a growing number of competitors in the market and an ever-increasing demand for quick delivery of bespoke systems, which forms a growing share of the company's business. Continuous demand for their large generic library, coupled with the company's inability to tailor content quickly and cost effectively enough led Company A to consider offshore outsourcing of certain bespoke applications.

Company A already had experience with some local and Eastern European contractors and they were becoming aware from business reports and independent advisors of the benefits of offshore outsourcing. It

was not just the potential cost savings that seemed appealing but also the time difference advantages of the Far East. One particular business consultancy company advising Company A was very important in convincing the senior management to consider offshore outsourcing to India. As a result, the CEO decided to undertake a pilot investigation with some of their generic applications. With this strategic move it was hoped to not only obtain significant cost reductions (company A calculated savings of 30 to 40 percent on development costs), but also to improve their "speed to market".

The CEO and a research team of two, conducted a web search for potential vendors. They then narrowed their search to those vendors who seemed to have experience with providing e-learning or training software. Finally they selected a short list of companies on the basis of their claimed experience of working with offshore clients. This initial research on the vendors was done entirely through websites. Subsequently, Company A undertook a six month period of research on the shortlisted companies including a number of company visits and as a result narrowed the list to four offshore vendors. Two were large multinational vendors, one based in India and the other in the UK. The other two were small vendors with less than 100 employees, both based in India. The CEO of company A met all four vendors and it was decided to test their respective abilities with a prototype project. However, the results were disappointing.

Both the multinational companies produced reasonably satisfactory results but the costs were roughly the same as local contractors. The two small vendors were significantly cheaper but unfortunately the quality was not deemed sufficient to meet the standards that Company A were seeking. The particular project that Company A had in mind was now becoming critical and despite the reservations about quality it was decided to offshore outsource the project to one of the small vendors (referred to here as Inventive). Company A recognised the risks but felt that they could mitigate them by training and good management, whilst still obtaining reduced costs. Partly for this reason, Company A decided to offshore outsource under their own supervision as they felt that this would provide more control of the various risk factors. They did not use intermediaries but managed as much of the process as they could. They employed an experienced, UK based, project manager for the contracted period. In India they entered an arrangement in which they effectively 'contracted' 14 of Inventive's best people to the project including an Indian project leader at the offshore site. They were all working from the vendor's site and were still paid by the vendor. Company A paid a significant sum of money at the initiation of the project for additional training of the staff in terms of quality and standards procedures as this was felt necessary to ensure the requirements of the service. In addition, they devised an incentive scheme to help instil and achieve quality.

As the project progressed, many difficulties were encountered and Company A's management team had to work very hard to overcome these. The problems were mainly because the product development being outsourced was somewhat innovative and experimental. The user specification was very comprehensive and detailed but it needed to be changed and interpreted from time to time, which consumed a large amount of management time. Culture differences and communication problems were also experienced. Even though the vendor site was 5 hours ahead of the UK, it was very challenging for employees of Company A to investigate and review the project and return corrections on the same day, as was required. As a result, Company A had to employ extra people to support and manage the project in the UK. In the end the project was delivered on time and a reasonable quality was achieved but unfortunately most of the reduced costs from the offshore outsourcing were offset by increased management and staff time and costs in the UK.

Upon subsequent investigation it was discovered that neither the agreed up-front training nor the proposed incentive scheme were ever really implemented. This might explain some of the problems encountered and shows how difficult it is to ensure that expected activities actually occur when they are offshore. Further,

and of particular importance, it was felt that the vendor learnt and benefited much more than Company A, from the project. This experience allowed the vendor to understand the pattern and type of work required for e-learning and LMS projects and it enabled them to offer these services to other companies, some who are direct competitors of Company A. Somewhat ironically, the vendor themselves is now seen as a direct competitor of company A.

Thus, Company A was attracted by the significant price competition and this was certainly a major driver in their decision to undertake offshore outsourcing. Even though Company A had the opportunity to outsource work to one of the multinational vendors, with subsidiaries based in India, Company A felt that these organizations were not cost effective and decided upon one of the smaller vendors, despite the identified quality issues. They attempted to mitigate the risks by taking responsibility and closely managing the process and the development. This resulted in unexpected increased local costs and actual costs not dissimilar to the estimates provided by the multinationals. This overall experience for Company A was not judged to be a great success, particularly as the vendor was able to learn so much from the project, and they have not subsequently engaged in offshore outsourcing.

Company B

Company B is a large, well known, IT service provider, employing 50,000 staff in 50 countries and having revenues of around EUR 5 billion in 2003. It has a strong European base and delivers an extensive range of business solutions that address critical commercial and IT related issues for their customers. Company B's list of clients includes ABN AMRO, BNP Paribas, BP, Ericsson, Fiat, Lucent, Philips, Renault, Royal Bank of Scotland, Schlumberger, Shell, Telecom Italia, and Vodafone.

Company B is an independent service provider that provides "design, build, and operate" elements of a business solution to clients. It forged a number of strategic global partnerships and alliances with leading businesses, which gave them an advantage in customizing solutions to meet customer requirements with the latest technology. Much of the work of Company B involves access to their clients' most sensitive financial, proprietary and operational data and they have established a reputation for trust which has proven important for the continuation of their business. Over 50% of Company B's revenues are derived from multi-year contracts and it delivers this within a global framework of three major service lines: consulting, integration, and managed operations.

In the past, Company B had some working experience with local and overseas outsourcing contractors and used these as and when required. However, with recent pressure from clients to be more price-competitive and efficient, the Directors began looking at other options, including offshore outsourcing. The company initially considered its Customer Care and Billing (CC&B) system and service for outsourcing offshore. The system is provided on an ongoing basis through a network of agents and travelling representative consultants, and it was one of these UK based consultants that helped them find a vendor for the project. In fact the service was already outsourced to a UK based vendor but that contract was coming to an end. At the beginning of 2001, Company B's IT budget was cut drastically, which finally pushed them to take this approach, and the entire project was transferred from the existing vendor to an offshore vendor in India. In the build up to the decision, Company B's main concern was that they should not reduce the quality of the change. To address these issues, Company B laid down very strict criteria in the contract, and adopted an experienced third party agent to undertake much of the liaison between the company and the vendor, and to smooth the offshore outsourcing process in general.

At the start of the project, Company B faced some teething problems concerning project costs and deliverable times. This resulted in greater monitoring of the contract and incurred additional costs. Company B also faced some difficulties with the workforce resenting the offshore outsourcing strategy and resisting the relocation of some staff that the project had required. As a result, Company B had to invest significantly in continuous skills updates for their consultants. They also encountered problems with the different cultural norms and work ethic that had to be managed. By adopting a third party agent approach to offshore outsourcing, Company B found that the monitoring procedures increased costs, as additional staff needed to be trained. However, with the assistance of the third party agent, these, and various other problems were eventually overcome and the project was deemed a success after 18 months with estimated cost saving of around 15 percent.

Even though the project was deemed a success, Company B realised that they required the skills and expertise for the support and maintenance of the project, and it was decided that future projects, would be in-house. With the skills that they had developed and learnt from the third party agent, they decided to setup their own offshore centre to execute future development processes of their clients. Data security and integrity were still serious concerns for customers which is also why Company B decided to create its own offshore subsidiary, like many other multinational organizations. This enabled them to address some of the issues directly and maintain control of the offshore outsourcing operations. They also thought that apart from managing its own offshore activities they could offer offshore management activities for their clients, which would become a revenue source.

Company C

Company C is a UK based finance and accounting outsourcing company and a leader in its specialised field. Company C provides support to its customers existing finance function by providing outsourcing services for administrative operations such as Accounts Payable, Accounts Receivable, Inter Company accounting, Fixed Asset accounting, General Ledger, etc., allowing Company C's clients to focus on higher value finance functions, such as controls and decision support.

Company C was thus already experienced with outsourcing and decided to investigate the possibility of benefiting from the significantly lower costs offered by offshore outsourcing. They calculated that they would be able to offer their clients between 30-40 percent cost saving and a return on their initial investment within a year. For example, for data input to databases the company was quoted less than £2 an hour in India, whereas their current costs were over £8 an hour on average, in the UK. Additionally, the quality of the offshore workforce was deemed to be generally skilled and well educated. They decided that the best approach without compromising the quality of their business processes was to set up a processing centre in India and take their entire back office operation, revenue processing and auditing services, to an offshore centre. Company C identified an Indian vendor, experienced in providing finance, accounting and administrative services, as suitable. Company C decided that rather than simply buying services from the vendor they would seek to enter a joint venture with the vendor. This was for three main reasons: first, because of the synergy benefits that were thought to exist and that working together would lead to greater cost savings and economies of scale and scope. Second, such an alliance could provide access and opportunities in important new geographical markets such as India, and its neighbouring countries, which Company C could not obtain on their own. Third, a joint venture was thought to enable Company C to be close to important customers enabling control and responsiveness to its customers' needs. The vendor already had experience of creating its own centre already and so was able to create a new centre for Company C's work relatively quickly and easily. Company C leveraged its partners' local management and project management skills, and knowledge of the availability and pricing of local facilities. Equally

important, as their partner had the local relationships, it reduced the time needed to activate the new facility for Company C.

Company C was able to identify a number of suitable locations with the help of its partner, who also assisted in the final selection. They helped negotiate a rental 40 per cent cheaper than that which had been quoted to the client directly. Company C achieved a number of key benefits from partnering with the local vendor, from the construction of their back-office to a shared centre in India.

This resulted in a lower cost and less risky approach, and the successful completion of the project on time and budget, thus enabling the rapid start-up of operations. It also enabled Company C to focus on other aspects of the transition, such as people, training, and process set-up.

Company C realised that many firms in the market can potentially undertake and benefit from offshore outsourcing, including their competitors, as the transfer of such back office business processes is becoming easier. However, by partnering with the Indian vendor in a joint venture they were able to benefit from not just reduced costs and risks, but also from a high quality software development process. Finally, the increased volume of processing will hopefully enable them to benefit from the new markets identified.

Company D

Company D is a global specialist in water and wastewater operations, products and services. It is one of the world's largest water and wastewater companies, serving around 70 million worldwide. They offer a comprehensive range of services internationally including: providing water and wastewater treatment; the supply of high quality water treatment products and services; water process engineering; the design and construction of major infrastructure; planning and asset management; project management; customer services; and specialist consultancy. The company has approximately 6,800 employees worldwide.

But like other organizations Company D has been under pressure to reduce costs whilst at the same time increasing efficiency and productivity. Some of this pressure came from its competitors who were reducing prices on their products and services. The Board of Directors felt that they could not continue doing business without looking at global options, where more and more in their sector were operating and competing. One of the options they identified was offshore outsourcing and they estimated that it could reduce costs between 25-40 per cent, on existing processes. They decided to offshore outsource the support and maintain of their comprehensive Job Management System (JMS) and relocate the centre to a cheaper location, with cheaper fixed costs. The JMS is used for the raising, scheduling, tracking, recording and monitoring of all work types undertaken by the Network Services, Contracts and Operational Service units.

As they were aiming for long-term benefit, they decided to set up a subsidiary offshore company, and found India to be the most suitable in their analysis. At the beginning of the project, the Board of Directors created a team of three to manage and execute the project, with very strict deliverable deadlines. Although some members of the team had some previous experience working with foreign service providers the setting up of a subsidiary in a foreign country was something completely new. The team was created with high incentives for success at each deliverable but was changed if targets were not met or progress was not made. To get the required human resources, the team partnered with the local company to provide the employees to begin with. However, responsibility for operations was with the Company D team rather than divested to the new company. This was because they wanted to retain control of the project and manage the risk. They also provided guidance on quality standards and management.

JITCA, Volume 6, Number 3

ъ

However, despite their endeavours the arrangement to set up on their own subsidiary took more than a year to complete and good performance from the subsidiary was only really obtained at the end of the second year of the project. Thus, by introducing a strategy based on offshore outsourcing, company D was able to achieve large cost savings as well as providing good customer service to its clients. Offshore outsourcing is credited with enabling the company to reduce downtime by around 40 per cent. This benefit is significant and equates to an average 5 per cent increase in productivity across the company. Avoiding downtime is critical to Company D, not only because of the productivity effects but also because of the revenue impact.

ANALYSIS OF THE CASES

Business Models

From the above descriptions it can be seen that each company has adopted a distinctly different approach to offshore outsourcing and that these represent different offshore outsourcing business models. The four firms were specifically chosen from the wider study to represent these different approaches. The four approaches are characterised as follows:

- Direct Offshore Outsourcing (Company A). This is where a company takes their own initiative, investigates the vendors themselves, makes decisions, and deals directly with the overseas vendor(s), without any intermediary.
- Third Party Offshore Outsourcing (Company B). This is where a company uses the services of a third party agent to advise and handle the work relating to the offshore outsourcing venture. The agent coordinates the company and the offshore vendors.
- Joint Venture Offshore Outsourcing (Company C). This is where the company enters into a joint venture with the offshore vendor which involves some form of sharing of risk and reward, rather than having a simple transactional arrangement.
- Wholly owned subsidiary (Company D). This is where the company takes its own initiative and set-up a wholly owned facility in a foreign country to perform all or part of their requirements overseas.

Hopefully it can be seen, based on the case descriptions, that these are different approaches. The classification made is not completely new; although it was driven from the empirical work, some existing classification exist in the literature that are similar, e.g. (Khan *et al*, 2003). This classification has proved useful for the analysis of offshore outsourcing models and processes and helps to get away from the over-simplification of offshore outsourcing as a single homogeneous model.

Framework for Analysis

Further analysis of the case study companies, representing different business models, is now undertaken, in particular from the perspective of offshore outsourcing decision making. Ravichandran and Ahmed (1993) highlighted three important factors in the decisions making process; technological, geopolitical, and managerial. However, this study was theoretical and not related to practice or case studies. Research based on empirical work, such as Jones (1994), Navarrete and Pick (2002), and Kumar and Palvia (2002), have focused more on communications arrangement and organizational management. In contrast, Sur (1992), and Choudhury and Sabherwal (2003) have looked at the outsourcing processes in the context of control and conclude that in the portfolio of controls in outsourced projects, outcome controls are dominant but vary across projects. Based on this literature and elements found to be important from the empirical study, the authors produce a more comprehensive analysis framework. The four major groupings of significance are identified to be: organizational factors (the initial factor); technological factors (differentiation factor)

geographical/environmental factors (opportune factor) and process factors (success factor). This framework is illustrated and expanded with some of the relevant sub-factors in figure 1.

The geographical/environmental dimension is clearly of great importance when an organisation is deciding which offshore outsourcing business models to adopt and this dimension focuses on these factors and the themes and issues in a broad context. For example, the political stability of a target country is a key factor, plus whether it is likely to remain stable over time. In this regard, it is unwise to sign a contract with a vendor located in a country, which for instance has a politically and economically unstable environment. In addition, the trade policies of different governments may change over time. Similarly, firms need to consider the legal status of contracts they sign, particularly, as overseas vendors may not be governed by any monitoring body, such as, trade descriptions; office of fair trading; equal opportunities, etc. When considering the offshore outsourcing option and on the types of business models, it is important, therefore, to consider the institutions, or lack of them, which govern corporate behaviour. Whilst North America and Europe have large corporate governance institutions and bodies, other countries may not. Also highlighted are of course the resources and expertise of the area, the infrastructure capability, the market, etc.

Organizational factors are also of importance. These are somewhat similar to a 'process' as they are in many ways inseparable from the structure, behaviour and culture of the company in which it takes place. From our research we found that the key initiator for all the three projects, was the advisory board, which consists of a CEO and a financial Director as the chief of the advisory committee. The principal activities include identifying opportunities and threats in the company environment. The capabilities of the implementers, both home and overseas, need to be considered together with the company's strength and weakness, as well as the resources on hand and availability.

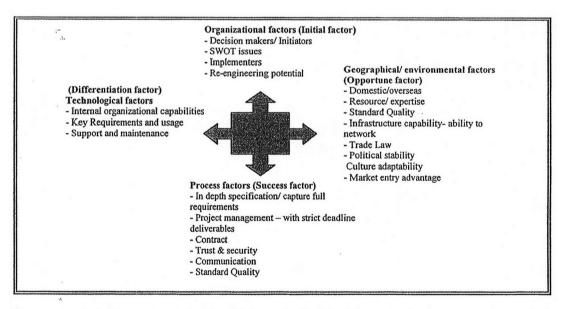


Figure 1: Factors Affecting the Offshore Outsourcing Decision Making Process

JITCA, Volume 6, Number 3

Clearly in the context of IS outsourcing the technological factors of the overseas vendor/partner are critical. These include not just the technology itself but also the skills, the internal organisational capabilities, support and maintenance, etc.

Last in the framework is the process dimension. Before any implementation, it is important to determine whether the resources of a company can be mobilized to accomplish an offshore outsourcing strategy. Indepth specification, strict project management; contract; communication; adaptability, and market stability are few of the issues that need to be assessed.

Applying the Framework

The case studies shows four distinct types of offshore outsourcing business models - each with unique benefits and risks involved. All the four business models were calculated to make the companies successful in their offshore outsourcing ventures. However, the primary goals for the all the four types of models were cost savings and from our research it evolved that each of the models derives different cost saving percentage with different risk associated. For example, Company A used the direct model (the company took their own initiative and investigated the vendors themselves, made decisions, and dealt directly with the overseas firm, without any intermediary) and the company was faced with numerous difficulties and the 'do-it themselves' approach was time consuming. Likewise case study four also faced similar problems, which required substantial time and in-house management resources to carry out a thorough task. Mistakes could easily nullify the cost saving in the early days of the process.

Whereas, in Company C, the strategy to move offshore on a joint venture not only helped the company set up the operation quicker than the other researched case studies but also helped to reduce risk by sharing management authority and value added production to the offshore affiliates. Threat of opportunism from the vendor is also seen as low, as both the party share equal risks, in particular, firms that outsource may find themselves at a disadvantage when the outcome of the development is not satisfactory or where there is disagreement with its vendors. Although previous studies on joint venture shows that process of integrating offshore delivery model is more difficult than setting up subsidiary on its own, this could be tackled easily through restructuring the processes of the organizations. As the organisation relays mission critical information, trust and security are a concern, as suppliers may not maintain confidentiality. Choosing the correct business model becomes a great issue in such cases and as we saw in Company A, their vendor experience of the offshore project enabled them to offer these services to other companies. Similarly, offshoring through a 3rd party agent could also weaken the competitive advantage for these kinds of firms.

Selecting the right business model for the exit phase is equally important as the entry phase of offshore outsourcing. For example, Company A was aware of the geopolitical risk involved with India and Pakistan and wanted to try out before totally committing to the model. Whereas for the other case studies, commitment level was at a higher level and they mitigated this issue by integrating their offshore delivery models with regional and global efforts.

JITCA, Volume 6, Number 3

Tables 2A and 2B provide further analysis based on applying the framework of the four factors in relation to the decision-making process. It is hoped that by studying the framework, clients and service provider can select the most appropriate model suited to their requirements.

FACTORS	COMPANY A	COMPANY B	COMPANY C	COMPANY D
ORGANIZATIONAL FACTOR	- Chairman and Board of Directors were the initiators - Strength is in its unique product - Weakness is lack of manpower	- Board of directors were the initiators - Strength was the knowledge in outsourcing business model - Lack of manpower to do the job	- Chairman and board of directors were the initiators - Strength of company C is service it provide to its client, it is of low risk	 Board of Directors were the initiators Strength is the large number of customers Weakness is the pressure to reduce costs and reallocations of jobs
GEOGRAPHICAL/ ENVIRONMENTAL FACTOR	 Cheaper labour Speed to deliver Quality was poor CEO and other executives lack understanding of culture 	 Cheaper labour Speed to deliver Quality was satisfactory As they were not aware of the culture, and other norms, they went through an agent 	 Cheaper labour Speed to deliver Quality was satisfactory They were not aware of the culture, and other norms, therefore they went through joint venture 	 Cheaper labour Cheaper location, Cheaper fixed costs Quality was satisfactory As they were aiming for long-term benefit, it took them more than a year to make arrangement to set up on their own and execute

Table 2A: Findings from the Case Studies regarding Organizational and Environmental Factors

JITCA, Volume 6, Number 3

FACTORS	COMPANY A	COMPANY B	COMPANY C	COMPANY D
PROCESS FACTOR	 Not in-depth spec at the beginning. Due to poor work company A later was very critical of the user specification. Project timescales slipped No strict deadline on deliverables Contract was flexible Trust and security was poor, after the project was over, the service provider became direct competitor of company A 	 In-depth specification Very strict deadline and testing Contract was very tight Very strict code with trust and security issue. Communication was very frequent As company B had past experience on outsourcing, the project mgt was very methodical and strict. 	 In-depth specification Very strict deadline and testing Contract is very flexible Risks are shared equally among the partners. As a result issues like trust and security are of minimal concern to both parties 	 In-depth specification Strict deadline and testing Contract was very tight Communication was very frequent Company D had their team transferred to the subsidiary location to give a proper guidance and training on project mgt
TECHNOLOGICAL FACTORS	Company a deals with unique creativity products which gave them the edge in its business	The work was very sensitive for company B and for its clients. Therefore decided to open its own subsidiary in that market	Although the service (back office processes) are of low risk, they have high return investment. This gives company C an added value in the market. However, as this is a very generic product to outsource, it is a lot harder to survive as the long-term business as many competitors can enter the market.	As company D outsourced one of the core business units offshore, they had to make sure that the project was running satisfactorily and to a standard. Although the incentives for the workers at the offshore centre was higher than internal centres, due currency conversion , company D was still able to reduce cost.

Table 2B: Findings from the Case Studies regarding Process and Technological Factors

JITCA, Volume 6, Number 3

CONCLUSION

Offshore outsourcing is a growing phenomenon driven by cost reduction, reduced time cycle and access to highly skilled professionals. Offshore vendors have invested heavily in technical education and can provide a ready supply of highly skilled programmers at a relatively low cost compared with North America and Europe. Further benefits relate to the ability to complement UK and US time zones enabling round the clock services and improved productivity. Some offshore countries such as India, Philippines, and Singapore have considerably improved their infrastructure, particularly in the area of telecommunications, making the process potentially easier and more reliable. These factors together with some favourable tax incentives provided by certain governments make offshore outsourcing increasingly attractive to western companies. However, despite these potential advantages offshore outsourcing is not a panacea and can be very complex and uncertain.

This paper is based upon an on-going research project and provides a description of four UK based companies undertaking offshore outsourcing projects. These companies were selected from the study to represent an example of different approaches to outsourcing; in fact they represent more than just approaches and it is argued that they are different business models. Different models have been identified and discussed in the literature but these also emerged from the empirical research. The four different models are: Direct Offshore Outsourcing (Company A), Third Party Offshore Outsourcing (Company B), Joint Venture Offshore Outsourcing (Company C), Wholly owned subsidiary (Company D). Other models may exist but these are some that have been identified from the study. The classification of these models proves useful in both theoretical and practical terms. The paper also proposes a four dimensional model or framework to help analyse the issues of offshore outsourcing, particularly in the context of initial decision making. The framework was not only derived from the literature but also from factors identified in the research study. The framework was used to analyse the cases to provide understanding and insight into a rather under-researched area. In theoretical terms, it helps to position offshore outsourcing as a complex area with multiple conceptual elements rather than a homogeneous entity, as sometimes portrayed. In practical terms it provides understanding for commercial decision makers in organisations and help to highlighting the factors involved and thus to select the right options in offshore outsourcing. The right option depends upon many factors, but in particular, the element of risk may be reduced by consideration of the alternative models, for example where risks relating to quality, security, etc. are high these may be mitigated by considering business models that require entering alliances or joint ventures with suppliers. Alternatively Direct Outsourcing may in practice incur unforeseen management and control elements that wipe out the reduced costs. The paper highlights the important factors in such considerations. Limitations of the paper are recognised, for example, although it was intended to concentrate the interviews on senior personnel in the companies responsible for the outsourcing strategy and decision, it is recognised that there are other significant stakeholders that may have different relevant perspectives. As the research is ongoing, it is hoped to include other stakeholders. Further, the models and the framework will continue to be developed, refined and tested, possibly involving cross-country and regional analysis of the key issues influencing offshore IT outsourcing, thus helping to create a more comprehensive understanding of the current global offshore IT outsourcing phenomenon.

JITCA, Volume 6, Number 3

· 4 ·

REFERENCES

- 1. Apte, U. M., Sobal, M. G., Hanaoka, S., Shimada, T., Saarinen, T. and Versalainen, A. P. J. (1997) "IS outsourcing practices in the USA, Japan, and Finland: A comparative study", Journal of Information technology, Vol. 12, pp 289-304.
- 2. Celner, A., Gentle, C., Lowes, P., and Nikolic, P., (2003)"The offshore Imperative- a white paper "Deloitte Consulting in 2003
- 3. Choudhury, V and Sabherwal(2003), "Portfolios of control in outsourced software development projects," journal of information system research, Vol 14, no 3 September
- 4. Codling, P., Jordan, J., Miller A., O'Toole, G., Sargeant T., Small, H. (2003) "Market Trends 2003", Ovum Holoway research
- Currie W.L & Seltsikas P., (2000), "Evaluating the Application Service Provider (ASP) Business Model". Executive Publication Series CSIS2000/004, Centre for Strategic Information Systems, Department of Information Systems and Computing, Brunel University
- 6. Currie, W and Willcocks, L (1998), "Analysing four types of it sourcing decisions in the context of size, clients/ supplier interdependency and risk mitigation", Information System Journal. Vol. 8, pp 119-143
- 7. Earl, M. (1996), "The risks of outsourcing IT", Sloan Management Review, Vol. 37, (3), pp 11-20
- 8. Grembergen, V.W,(1999), "Managing the millennium conversion at a major Belgian Bank with offshore outsourcing: implications for organisations still struggling", Journal of information Technology Cases and Applications(JITCA),Q2, April
- 9. Hammer and Champy (1993), *Reengineering the Corporation: A Manifesto for Business Revolution*, Harper Collins Publishers, Inc., NY
- Jones. C. (1994)"Evaluating software Outsourcing Options: do your software operations add value?" Information Systems Management Fall 1994, pg 28- 33
- 11. Karamouzis, F and Terdiman, R (2003)"Offshore Sourcing Goes Mainstream" Gartner Report
- Khan. N., Currie, W, Weerakkody. V., Desai, B. (2003) 'Evaluating Offshore IT Outsourcing in India: Supplier and Customer Scenarios'. Proceeding of the 36th Hawaii International Conference on System Sciences (HICSS); The Big Island, Hawaii.
- 13. Kumar, K and Willcocks, L. (1996), "Offshore outsourcing: A country too far?", Proceeding of the fourth European conference in information systems, June, Lisbon.
- 14. Kumar, N and Palvia, P.C (2002), "A Framework for Global IT Outsourcing Management: Key Influence Factors and Strategies" Journal of information Technology Cases and Applications (JITCA), Q1
- 15. Lacity, M.C and Hirschheim, R. (1993), "Information systems Outsourcing: Myths, Metaphors and realities", Wiley series in Information Systems
- 16. Lacity, M.C and Willcocks L.P (1997), "The Sourcing and Outsourcing of IS: Shock of the new?", Strategic Sourcing of Information Systems: Perspectives and Practices. Wiley series In Information Systems, pp.1-41
- 17. Loh, L and Venkatraman, N (1992) "Determinants of information technology outsourcing: A cross-sectional analysis", Journal of management Information systems, Vol. 8; pp 7-24
- 18. McFarlan, W.F., Nolan, R (1995), "How to mange an IT outsourcing alliance", Sloan management Review, Vol. 36,(2), pp 9-24
- 19. Mitchell, V and Fitzgerald, G (1997)"The IT outsourcing marketplace: Vendors and Their Selection", Journal of Information technology, Vol. 12 (3) pp 130-148
- 20. Moran, N (2003), "Looking for saving on distant Horizons" Financial times 2nd July.
- 21. Navarrete, C.J and Pick, J.B(2002), "Initial Selective Information Technology Outsourcing: An Exploratory Study of Cases Of Large Organizations In Mexico", Journal of information Technology Cases and Applications(JITCA), Q1

JITCA, Volume 6, Number 3

- Rajkumar, T.M and Dawley, D.L (1997), "Problems and issues in offshore development of software", Strategic sourcing of Information systems: perspectives and practices, Wiley series In Information systems, pp 369-386
- Rajkumar, T.M. and Mani, R.V.S.(2001), "Offshore software development: The view from Indian suppliers," Information Systems Management, Spring 2001, pp. 63-73
- 24. Ravichandran, R and Ahmed, N. (1993), "Offshore Systems Development", Information and management, Vol. 24, pp 24-40
- 25. Ross, C.F. and Orlov, L.M. (2003)"Apps Outsourcing Best Practices" Forrester Research reports. June 2003
- 26. Sengupta, K and Zviran, M (1997),"Measuring User Satisfaction in an Outsourcing Environment", IEEE transactions on engineering Management, vol. 44, (4), pp 414-421
- 27. Silverman D., (2001), Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction, 2nd ed. Sage, London
- 28. Smith, M.A., Mitra, S. & Narasimhan, S (1996), "Offshore Outsourcing of Software Development and Maintenance". Information and management, Vol. 31, pp 165-175
- 29. Sobal, M. G. and Apte, U.(1995) "Domestic and global outsourcing practices of America's most effective IS users", Journal of information Technology, Vol. 10, pp 269-280
- 30. Strauss, A and Corbin, J.M (1990), "Grounded theory research: procedures, canons, and evaluative criteria", Human Sciences Press, Inc., 1990
- 31. Suh, R (1992) "Guaranteeing that outsourcing serves your business strategy" Information strategy: The executive Journal
- 32. Willcocks, L., Fitzgerald, G., and Lacity, M (1996), "To outsourcing or not? Research on economies and evolution practices", European Journal of information systems, Vol. 5,(3), pp 143-160
- 33. Yin, R.K. (1994), Case Study research Design and Methods, Second Edition, Sage Publications, London.

Naureen Khan is currently doing her PhD at Brunel University in Department of Information systems and computing. Prior to this she was employed as a research assistant on the BC-ASP project funded by the Engineering and Physical Sciences Research Council. She has also worked in the health sector with NOVARTIS as a market researcher at CIBA Vision Sector, in Bangladesh. She has presented her work at international conferences: Hawaii conference in system sciences, European conference in Information systems and the American conference on Information systems. Her doctoral work is on business value from offshore outsourcing business models

Guy Fitzgerald is a Professor of Information Systems at Brunel University. Prior to this, he was the Cable and Wireless Professor of Business Information Systems at Birkbeck College, University of London. And before this he held positions at Templeton College, Oxford and Warwick University. He has also worked in the computer industry for many years with companies such as British Telecom, Mitsubishi and CACI, Inc. International, in a variety of roles, including those of programmer, systems analyst and consultant. His research interests are concerned with Information systems and Information management and he has published widely in these areas. In particular his research has been concerned with the effective development of information systems and methodologies. He is Editor of the Information Systems Journal from Blackwell Scientific and Editor of the Information Systems Series of texts from McGraw-Hill.

JITCA, Volume 6, Number 3