



Offshore, Outsourcing for Information System Projects, Need Careful Management

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Abstract: Information systems are never created or used. A lot of delivered management information systems are deemed unsuccessful. Relatively little work and comparative percentage are diminutive. Much examination about IS-failure and IS-success has commenced and some has been cited. The use of offshore, outsourcing for information system projects has a number of associated issues which may impact on the success or failure of IS projects in which needs careful managing. Entire failures cannot be mentioned financially but undeniably, two things stand out: firstly, failures are imminent and secondly, they are preventable.

Keywords: Effectiveness, In-sourcing/outsourcing, Offshoring of IT, Process Management, IS Success and Failure, Information System, IS Success Measures and Productivity.

1. INTRODUCTION

By cost effectiveness and improved services, all establishments are presently becoming competitive (Khan, Fitz Gerald, 2004). Outsourcing is supplier-client association in which supplier renders services to multiple IT clients and this ideology tackles outsourcing operations and corporate downsizing regarding local vendors (Rajkumar, Mani, 2001) as cited in (Khan, Fitz Gerald, 2004).

In earlier decade, numerous grounds for outsourcing IT in establishments have been examined. They are to acquire pro outsourcing providers, internal IT management issues, benefiting from reduced expenses somewhere, lessening employees, to emphasise IT as much as other basics like electricity and gas, the ideology that IT has competition has been erased by IT and the disappointment of general managers regarding unworkable management over it and its expenses (Cadle, Yeates, 2008).

For example, the CRM work and internal management to some degree has been shifted to outsourcing vendors by companies like General Electric, HSBC, IBM and Oracle (Khan, Fitz Gerald, 2004). Depending on sufficient business requirement in IT, there is a trend that establishments are influenced by verdicts regarding in-sourcing/outsourcing (Cadle, Yeates, 2008).

Information systems (IS) are never created or used. Majority of delivered management information systems are deemed unsuccessful. Relatively little work and comparative percentage are diminutive. Much examination about IS-failure and IS-success has commenced and some has been cited. But these studies do not show how the structure can be modified by ISP. Entire failures cannot be mentioned financially but undeniably, two things stand out: firstly, failures are imminent and secondly, they are preventable (Fortune, Peters, 2005).

2. Effectiveness and Outsourcing- off shoring of IT

IT, operations and call centre functions are outsourcing assets. Offshore information technology (IT) has boomed presently. Offshore IT has brought cost effectiveness and boosted economies by utilizing IT from remote localities. Outsourcing information is a progressing system. It was predicted by International Data Corporation (IDC) that international IT operations will hit \$1 trillion in sales in 2007 and expand by 7.7% annually (Gilbert, 2003).

To derive an elaborate understanding of offshore IT outsourcing, socio-economic elements will be deciphered by system dynamics modelling. The results will be derived from the association between negative socioeconomic results and IT offshore outsourcing. To find proper IS management structures and IS investment, more investigation is required. Research into this matter will augment management theoretical knowledge and provide data to make accurate IS investments (Knapp, Sharma, King, 2007).



IS experts are getting aware of the bad effects on IS salaries. Major affects regarding their social and monetary conditions are mentioned by them. The information on economics of the salaries of IS technical profession point in favour of these facts. Although, students of an academy are unaware of these impacts, the teachers of an academy are familiar with them. The present graduates will be affected badly by the variation in awareness regarding facts of job availability and wages in IS field. There will be a major reduction in registration IS programs is the current situation prevails on the IS wages for a long run. Further, investigations will warrant these claims. From this investigation, we hope that a base will develop to carry on this study (Knapp, Sharma, King, 2007).

3- Challenges of outsourcing-off shoring of ISP

According to comprehensive evaluations, outsourcing has been influenced by adherence to strategic process management standards like ISO 9000 and software engineering ability (Palvia, 2008). An opportunity to transform an organization by way of partnerships, reduction in cost, leveraging time zone, ability to access advanced technologies, higher capacity on demand and quality are some of the advantages of outsourcing. IT outsourcing opportunity has a good side to it as well, despite the many reported failures and breakdowns to its name. The competitive advantage of an organization in areas like Information Communication and Technology, management capacity and competent staff is damaged by loopholes like malfunctions in past engagements and in the external boundaries of the firm which consequently damages the outsourcing function (Palvia, 2008).

The response of the human psyche to evaluations of the past and the present is one area that has only been remotely understood. Hence, appreciating the process of IT outsourcing decision together with the risky elements faced at every contracting stage is important, since certain risks will always be present with outsourcing. Careful monitoring should be ensured for the process of management, decision making and measurement (Palvia, 2008).

Even though a value neutral but risk changing impact is contained within a large company's IT outsourcing, the value of the firm will be observed to improve with time. Increased risk is likely to influence weak firms, though majority of the firms will experience a decreasing scale of risks.

In an offshoring/outsourcing environment, the consistency of the technology factor and the vendor assessment capability is vital. To ensure this, the outsourcing client should process it, as the frequency of the issue of inconsistency in relation to the goals of the client and the vendor is more towards a rising trend.

Furthermore, to obtain high returns, it has also been observed in many scenarios that the vendors try to take the work of multiple clients (King, 2008). In all cases, the objective should be the maintenance for every CIO, as working in a precise system is now a possibility for organizations with the evolving of technology. This is to ensure that the technological innovations continue improving the system and the service level awareness is maintained together with the independent assessment of the evolving technology (King, 2008)

4- IS Success and Failure

A vital component of outsourcing is that of strategic information systems planning. It is the manner of identifying the targets of organizational computing, followed by determining the applications of the organization that require to be computerized, according to Lederer and Sethi (1992). The authors also stated that in successfully implementing current business strategies, the critical technologies, broad initiatives and specific applications are identified by the strategic information systems planning, where these aspects have a crucial role to play. Salmela and Lederer (1996) listed some SISP benefits amongst which policy, architecture and technology were the significant ones, also capable of being described by it. The benefits enumerated by these authors did not contain critical quality factors as the ISP did not consider it. Moreover, according to a case study report, an information need exists in various parts of an organization. The BSP report contained the detailed analysis stating that to ensure the realization of the information system, a program that managed data and propositions was necessary. The requirement was pointed towards a large relational



database in the conclusion of the BSP analysis. Moreover, several frameworks and methodologies have been developed and implemented in relation to the application of information systems planning. For implementing SISP, Reponen (1994a) suggested a list of frameworks and methods that included Strategic Grid (McFarlan&McKenney, 1983), Business Systems Planning (BSP) (IBM, 1984) and Critical Success Factor (CSF) (Rockart, 1979).

An example of the ISP framework is the Evolutionary Model for Information Management Strategies (EMIS), presented by (Reponen,1987). The flexibility of this model is the prime reason for its selection. Many case studies have been referred to for testing this framework, rendering successful results. Planning various types of information systems for different organizations is facilitated as it has the relevant tools and advice for the process (Finpap/Finboard, 1988; Reponen, 1994a).

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About one third to half of all the systems are unsuccessful according to several reports, as identified by Lyytinen and Hirschheim, (1986) while researchers like Gladden (1982) and Sibley (1986) have reported even higher rates of failure. About 75% of all the system development pursued is either not utilized upon completion or in other cases is never completed as per the survey of Gladden (1982). According to (Lyytinen and Hirschheim, 1986), a significant challenge is presented to the community of information systems due to this. To understand the problem of IS in a much better way, the notion of expectation failure was developed (Lyytinen, 1986, Lyytinen and Hirschheim, 1987). According to the assumption of this concept, failure created problems for some group or some individual and no “general” IS failure exists. Stakeholders are basically the group of individuals implied here and in this respect, two groups namely the external and the internal stakeholders were identified by Ruohonen (1995, pp. 135).

The same “solution” or the same understanding of the organizational “problem” is typically not common amongst different stakeholders (Mitroff, 1983, pp.5). All the entities present inside and outside of an organization, holding some stake in the problem and its solution are basically referred to as stakeholders (Mitroff, 1981, pp.43). The stakeholder’s shared pool of values are referred to in deriving evaluative propensities, representative of expectation failure in the opinion of Lyytinen and Hirschheim (1986). To validate the investments and the efforts in IS, few of the expectations (defined with respect to goals, system needs and design standards), are exclusively designed. Hence, according to the authors, the inability of meeting the expectations of a particular stakeholder group basically implies failure, which does not merely encompass the inability of the system to cater to the requirements. This is because the requirements usually incorporate only a portion of the stakeholder’s concerns. Several IS failures have been labelled so due to not meeting some other crucial requirements, though many of them have actually conformed to the needs.

The most commonly utilized notions of failure are not clearly identifiable and are conceptually weak according to Lyytinen and Hirschheim, (1986). The inability of managing an IS (Sauer, 1993), negative user attitude (Bailey and Pearson, 1983), significant user resistance (Markus, 1983), non realization of the probable IS benefits (Alter and Dinzberg, 1978), non deliverance of a functioning system (Gladden, 1982) and the non utilization of the IS (Lucas 1975) are examples of Information System failure found in literature. Unfortunately, the factors leading to failure are not identified by the anticipation failure and majority of other kinds of Information System failure presented in literature. For this research, the notion of expectation failure appears to be appropriate. This is due to the fact that the expectations from the system can be thought about in detail by planners under this type together with identifying areas of critical importance whose absence might be ranked as a failure.



The difference between reasons of IS failure and types of IS failure might be questioned. The manner in which the limits of the scenario are drawn primarily determines this, where the difference undoubtedly is on relative grounds. However, conceptual difference exists for reason and failure types (Lyytinen and Hirschheim, 1987). In this regard, three yardsticks for differentiating amongst the two have been suggested. Firstly, situations and factors relating to the environment and hence external to the IS are basically the failure reasons. Secondly, no high order reasons can be labelled as the cause of failure which is also assumed to have some priority over failure itself. Thirdly, some “casual” association must be present for failure reasons. By encouraging or influencing situations and behaviours producing failures, they must contribute in producing problems (Lyytinen and Hirschheim, 1987).

Four main groups of failure reasons were presented by (Lyytinen and Hirschheim, 1978). Table 1 below presents the further sub divisions of these reasons into twelve failure categories. These highlight the main reasons for IS failures although there is considerable confusion in the boundaries existing between them. The reasons of IS failure and the development of the critical IS quality factors may be facilitated by examining the reasons for IS failure in detail.

IS success cannot be explained in a single definition. Understanding IS success may be assisted by the knowledge obtained from IS failure. However, it is not mandatory that the reasons for IS success and IS failure correspond according to the literature on IS success. Between IS success and failure, a quantitative as well as a qualitative difference exists (Lyytinen and Hirschheim, 1987). For instance, success cannot be ensured for an IS by acquiring a more powerful computer which may get rid of a performance impediment. Changes in organizational arrangements and user education may be required for success and the IS may even be abandoned altogether for achieving this. Secondly, formative reasons are more focused upon by failure studies i.e why something occurred while summative evaluations i.e what occurred are the centre of focus for the conventional IS success appraisal (cf. Lyytinen and Hirschheim, 1987) (cf. Lyytinen and Hirschheim, 1987).

Hence, the process of determining the critical quality factors can greatly be assisted by examining the literature pertaining to IS success. To find factors contributing to the success of IS, more than 180 articles published in leading journals were reviewed by DeLone and McLean (1992). An arrangement resulted in the process of this review, suggesting six categories for classifying IS success. These were organizational influence, information quality, user satisfaction, utilization, system quality and individual influence.

Three levels of IS success were defined by Shannon and Weaver in early 1949 when leading the work on communication. The system’s efficiency and accuracy which produced information was defined by the “technical” level, the success of information in communicating the meaning originally intended to come under the “semantic” level while the influence of the information on the receiver was addressed by the “effectiveness” level. The influence extent of information was defined by Mason (1978) as a chain of events occurring at the receiving end of an information system, utilized for identifying the several approaches capable of being employed for measuring output at the influence level. Mason stated this as an extension to the propositions of Shannon and replaced “effectiveness” with “influence”. The application of information, recipient of information and the evaluation of information are included under this sequence of influence events, ultimately triggering changes in system performance and behaviour of recipients.

Another the categorization of IS, the success was suggested by DeLone and McLean (1992): information is produced by the anticipated characteristics of IS upon which the System Quality focuses; the desired characteristics produce the quality of information; the use and user satisfaction is present at the influence level. The interaction between the users, decision makers, information product and recipients is implied by it; the product of information influences a management decision which is basically the individual impact; lastly, the influence of information product on the performance of an organization is the Organizational Impact.



The success of an information system can be measured by an information system report which is the most frequently employed measure of its kind (DeLone and McLean, 1992). The capability of differentiating actual usage (i.e discretionary or voluntary use) from compulsory or confined usage is one of the loopholes identified with this measure. Question regarding who uses the information system comes to the forefront as different types of use have been reported by various authors. However, several interesting conclusions have been drawn in relation to user satisfaction which is another measure of IS success.

The IS use as a means of measuring the IS success becomes less relevant when there is a dire need of an IS; user satisfaction can be used for measuring the success of management interaction with IS (DeLone and McLean, 1992). Several studies on Information System have laid emphasis upon user satisfaction as a assess of success (Hamilton and Chervany, 1981, Guimaraes and Gupta, 1988, Igbaria and Guimaraes, 1994,). The involvement of a particular information system especially led to the suitability of using user satisfaction as a measure according to these studies. In DSS development, the result of user involvement was checked by Igbaria and Guimaraes (1994). A strong influence of user participation on the expected DSS satisfaction and benefit was stated in the research conclusion. Consideration has been given to a sound understanding of the measures of IS success. Many measures of IS success exist according to DeLone and McLean (1992). A clearer picture with respect to the quality factors to be planned during ISP can be achieved by the researcher after studying the interaction along the component of Information System success. The set of quality factors mandatory for the system's success should then be determined by the business and IS planners. The ISP document should incorporate this list as a must.

Conclusion:

To one side from the completely technical project management skills necessary for this type of IS projects/programmer – for example, very extremely developed planning skills- outsourcing/in sourcing affects the individuals drawn in directly. “So someone asked to mange a programme of this type must have highly developed interpersonal skills and also the sensitivity and ability to manage the disparate groups of stakeholders involved: the organization's mangers; the staff, including IT staff, affected and perhaps their trades unions too; suppliers and subcontractors; and a variety of other specialists; HR and lawyers to name a few” (Cadle, Yeates, 2008).

Cost reduction, access to highly skilled professionals and reduced time cycle are factors that drive offshore outsourcing. Compared with Europe and North America, a heavy investment in technical education has been made by offshore vendors, capable of providing a ready supply of greatly competent programmers at a low cost. The capability of complementing the US and the UK time zone are the further relevant benefits, which have enabled improved productivity and regular clock services (Khan, FitzGerald, 2004). However, outsourcing is not the solution can be uncertain and difficult in spite of the potential advantages (Khan, FitzGerald, 2004)

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