CONSULTANCY SERVICES TO ERP SYSTEMS: CASE STUDIES FROM SAUDI ARABIA

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ABSTRACT

Rapid change in business environment have compelled the world class organizations to implement integrated software solution to all their functional processes, the most typical solution is ERP. For this, organizations are striving to hire ERP consultants to line up their resources. However, it is evident from literature that organizations spend a lot of resources on hiring consultants. Likewise, Saudi Companies are also implementing ERP systems for the same purpose and thereby hiring ERP consultants. However, the role of hiring consultants is also crucial in Saudi Companies and they are spending plenty of resources on them. In this paper we have investigated the roles, characteristics, responsibilities, scope of work and identify the reasons for and against hiring ERP consultants specifically in Saudi Arabia. No study has been conducted to investigate the consultants' roles in such systems in Saudi Arabia. For this purpose we have considered two case studies of ERP projects in Saudi Arabian well known organizations Dr. Abdul Rahman Al-Mishari Hospital (AMH) and eXtra an electronic appliances organization, after a thorough literature review.

Keywords: *Internal/External Consultants, ERP, Strategic Guidance, Technical Guidance, KSA*

1. INTRODUCTION

ERP are systems that automate the core corporate activities, such as manufacturing, human resources, finances and supply chain management to facilitate rapid decision making, cost reductions and greater managerial control [1]-[2].

A consultant is someone the host organization hires to perform specific tasks. One of the consultant's main tasks is to advise but he is neither responsible nor has authority or power to take final or critical decisions. The consultant provides the management with solutions tailored to their situation. The management has the right to take their decisions based on or against the consultant's advice [3]-[4].

Many organizations, which aim to get a competitive advantage, have moved from standalone systems to Enterprise Resource Planning ERP systems. This migration has not come without its set of challenges. The need to consultants arises due to the fact that ERP projects are large, complex, risky, and difficult to implement. ERP projects usually involve different departments with ill-defined business problems and/or emerging technologies, therefore consultants are hired to provide technical expertise as well as strategic guidance [5].Tsai et al.[6] noted the significance of IT consultants' role, in particular for companies that do not have the expertise or sufficient in house skills to implement such complex systems.

Approximately 90% of ERP implementations are either late or over budget. Moreover, there are many failure stories that have discontinued their ERP implementation. For instance Sobeys Canadian largest grocery store chain abandoned their ERP implementation after investing 90 million dollars and two years[7].This failure story and many other similar stories are due to many different factors. Therefore companies are encouraged to hire experienced and competent consultants in an effort to minimize the risk of failure. According to[8], US companies spent about 45 billion dollars on IT consulting services in 2004 and expenditures were expected to grow to 58 billion dollars in 2009. This huge amount of money is spent by companies in an effort to decrease the risks associated with ERP systems.

Hence, it is obvious that implementation of ERP systems in organizations is an expensive and complex process in which different factors are involved like complexity and internal employees' lack of experience. Therefore, organizations are hiring external ERP consultants for successful implementation. However, it is also an expensive process and organizations spend enough resources on hiring external ERP consultants. Likewise, organizations in Saudi Arabia are also passing through the same process therefore hire external consultants for ERP system successful implementation. However, Saudi Arabian organizational environments are different due to many unique factors specific to the region. Therefore, we claim that investigation of ERP consultant is necessary in Saudi Arabia to find out those unique factors and to shed some light on consultants' roles and scope of work. For this purpose, we have considered two different case studies from different organization in Saudi Arabia, where we identified different factors, pros and cons of hiring external consultants.

This paper contains a review of the literature on consultancy services. It identifies the needs of ERP consultant and determines the causes for hiring external ERP consultant. Then, it presents the pros and cons of bringing in outside help. Additionally, two case studies from Saudi Arabia AMH and eXtra are presented to study the consultancy services with regard to ERP systems. Finally, a conclusion will summarize the characteristics of consultants and consultancy services offered at local companies.

2. LITERATURE REVIEW

In this study we will focus on ERP systems and consultancy services. The literature review shows their different roles, characteristics and responsibilities. Then, Consultants' selection criteria and its significance are reviewed. After that, their advantages and disadvantages and their need i.e. if they are needed for ERP implementations are considered. Finally, we will discuss their relationship with the management.

2.1. Consultants' roles and responsibilities

Jang and Lee[3] classified consultants and specified that they should have five different roles Expert (the consultant should provide the skills and knowledge to client), Manager (the consultant requires special skills to manage or control the project), Researcher (the consultant accepts the responsibility for obtaining, analyzing, and interpreting objective data in a scientific manner), Counselor (the consultant requires formal methods and knowledge to client in learning process), and Politician (the consultant should become more politically sophisticated and active in order to increase the success of management consulting projects).

Using the organizational development process, Kolb and Frohman [9] identified seven phases of consulting :(1) scouting, (2) entry, (3) diagnosis, (4) planning,(5) action,(6) evaluation, and(7) termination. They further noted consultant-client relationship, like other human relationships, cannot be reduced to a set of mechanistic rules.

Norbck and kerblomMaster[10] noted that some companies hire external consultants from the beginning to help the company choose a suitable ERP supplier by developing a suitable IT strategy, and studying the company's specific needs; whether it's their need to integrate different business units, integrate geographically separated markets, restructuring the organizations, or their ambition to lead the market. While others could use them to define requirements specifications and data migration, even as others hire consultants to develop, upgrade, and service existing ERP systems. The authors believe that consultancy services are far from over when an ERP system goes live; consulting services are still needed for everlasting improvements.

Nbauer et al. [11] mentioned that most novel ERP implementations make use of existing services and components and integrate them to the ERP. Consequently ERP consultants need to be aware of all services that could be integrated in an ERP system. They should know how closely each fit the client requirements; know its functionality, and quality of services.

Luo and Liberatore[5] mentioned that consultants are hired to provide technical expertise as well as strategic guidance because ERP projects usually involve different departments with ill-defined business problems and/or emerging technologies.

2.2. The Need for Consultants

Ifinedo [12] confirmed through his empirical study that external expertise and internal computer/IT knowledge are significant to the

success of the ERP systems. Tsai et al. [6] noted the significance of IT consultants' role. In particular for companies that do not have the expertise or sufficient in house skills to implement such complex systems. And their empirical study illustrates that higher satisfaction with the consultants' services is better for ERP implementation leading to higher success rate for the ERP project.

In contrast, Koh et al. [13]shed light on successful ERP implementations that did not use any consultants' services. They mentioned under the right circumstances and training ERP implementation can be successful without any consultants' help. It shows that for small-medium (SME) sized business it is possible to achieve successful ERP systems without investing in consultants and limited or no training. The success of the studied case company is based on three key reasons: simplified system design, previous experience with ERP systems, and the support tools offered by the vendor.

2.3. Consultant Selection criteria

Tsai et al. [14] discussed ERP consultant selection and noted how significant it is to implement the project. The ignorance of the various factors of ERP consultant selection will lead to a failure in ERP project implementation.

On the other hand Chuang and Shaw [15]noted that, a consultant's implementation experience and communications skills are slightly correlated with successful ERP system implementation.

2.4. Advantages and Disadvantages of Consultants

Scott and Hascall[16] analyzed the advantages and disadvantages of external consultants and compared them to internal consultants. They noted that external consultant's lack internal expertise. They neither have the knowledge of the organization nor speak the jargon. An external consultant is not as easily accessible to the organization as an internal one. Nonetheless they have the status, power and authority to influence the senior management.

One important point to take into consideration when hiring external consultants was mentioned by Luo and Liberatore[5],which examined the clientand consultants' objectives or goals. The

company's main goal is to improve the performance on different levels while the consultants' may have other goals such as knowledge acquisition and future business growth. To overcome this situation, they showed the importance of coordination in consultant assisted projects to achieve these goals besides the agency theory which tends to focus on outcome based contracts and monitoring mechanisms.

Ifinedo[12] investigated the impact of factors such as top management support, business vision, and external expertise. It was found that all these factors positively influence ERP systems, but the effect of external quality expertise was more important compared to the other factors.

Chen et al. [17] stated that although usually consultants lack sufficient knowledge about the SME, the managers will not be willing to help. On the contrary internal managers usually are one of the most critical obstacles for consultants. They are usually suspicious which causes a strain in the relationship. Their research suggested that academicians are one of the best candidates for management consultants because their objectivity and their professionalism is recognized by SME managers. Then again from academic point of view workings as consultant enrich their practical knowledge and acquire material for teaching and research.

Norbck and kerblomMaster [10] highlighted that the combination of an unengaged management and an inexperienced project leader, would give the opportunity to IT consultants to take advantage of the situation and use it to their benefit and attaining their own goals. Therefore, the experience and capabilities of management consultants are critical for successful IS implementation in SMEs [2].

Liberatore and Luo[18] studied the effect of client consultant coordination on the project performance, and found that there is a significant effect but the effect is not direct. The client consultant coordination directly affected the trust, requirements uncertainty, and goal congruence which by its turn affected the project performance.

Chen et al. [17] compared between the consultant – organization relationship between SME and large companies. The more fluid the organization structure make the delivery of management consulting solutions more complex and uncertain They mentioned that the negotiation

process for management consultants working with SMEs is more important and challenging than in large companies since the relationship between consultants and owner-managers in SMEs are mostly friendly, informal, and trust-based, compared to the relationships between consultants and managers in large companies, which are mostly contractual, project-based, and formal.

2.5. Measurement method to the consultants' quality of service

Pitt et al. [19] offered SERVQUAL which is a marketing measure and used it to measure the performance of IT services. SERVQUAL has five generic dimensions which are tangibles such as physical facilities and personnel appearance, reliability which means to perform services dependably, responsiveness that is to reply and meet customers' needs on time, assurance the skills and courteousness of employees, and Empathy by understanding and meeting each customer's individualized needs.

3. CASE STUDIES

In this section, a brief background of the two companies and the need for implementing ERP is provided.

Then a case discussion is presented where each company's results are further analyzed. A feedback form was sent to six companies two valid responses were received.

3.1. Dr. Abdulrahman Al Mishari Hospital (AMH) is a private General Hospital. It has been providing Medical Care to its patients for 24 years. AMH received the "Diamond" accreditation which is the highest level of recognition for performance excellence that an organization can achieve in health care from Accreditation Canada's Qmentum International Accreditation [20]. To connect its different departments and provide better quality service to its patients the need for ERP system has arisen.

3.2. eXtra was established in Saudi Arabia in 2003 by United Electronics Company (UEC) to provide customers with electronics and home appliances. eXtra provides after sales services, with its 3 dedicated service centers across the kingdom, It has +7.5 Million shoppers and 22 stores across Saudi Arabia. eXtra ranks first among retail companies in the list of 100 Saudi Fast Growth companies, having

achieved a growth rate of 340 percent during the period 2004-2008, and won first place in the Saudi retail sector category of the Arabian Business Magazine awards forexcellence [21]. They implemented their ERP System to help connect and manage their multi branch expanding company.

4. DISCUSSION ON CASE STUDIES

The questions were asking about the responsibilities of the hired consultants, reasons behind and against hiring them, benefits of hiring them, support type offered to help consultants do their job, and factors considered when choosing one. Choices were based on gathering all the relative points from the literature and articles. But for the question that asks about the factors considered when choosing a consultant the answer choices were a hybrid between points gathered from the literature and relevant points mentioned in SERVIQUAL [18]. Researchers proved that ERP success depends on several factors [5]-[13], for that it is not reasonable to link the success or failure of the ERP system depending solely on consultancy services.

As we can see from the above Table 1, in AMH the consultants' had more responsibilities starting from ERP selection to strategic guidance as integrating different business unit where in eXtra the consultants' responsibilities were focused on technical issues. In reasons for hiring consultants their answers were in sync with the previous question's answers AMH mentioned that it needed a fresh view of an institution's operations. On other hand eXtra reasons were focused on the technical side and manpower, but they both wanted to obtain best practices across industries. eXtra's main and only mentioned benefit of hiring external consultants was ROI, while AMH had some strategic gains besides the economical ones. AMH emphasized that they benefited a clear roadmap from the consultant. While both companies offered full top management support. The relationship was friendlier and more trust based in AMH than eXtra and that is expected to be the case since AMH is a smaller business in size. AMH and eXtra required some similar consultants' qualifications such as consultants that had previous experiences with a competitor company and familiar with the most recent software tools. In fact eXtra considered all mentioned factors when choosing a consultant

while AMH chose most of them except for convincing capabilities, skilled courteousness of employees, and understanding and meeting your individualized needs. eXtra was against hiring external consultants because of the time spent on the consultant's learning curve while AMH had trust fears from the consultants' goals that are not aligned with their objectives.

Table 1: Case Studies Responses

	eXtra	AMH
Hired Consultant	Internal & external consultant(s)	Internal & external consultant(s)
Consultants' responsibility	• Development and implementation of ERP system. • ERP system configuration and installation • Data migration and conversion • Performing Gap analysis and related studies	• Development and implementation of ERP system. • ERP package selection • ERP system configuration and installation • Defining requirements specifications • Data migration and conversion. • Studying the company's specific needs, and developing a suitable IT strategy • Analyzing business requirements. • Systems analysis and documentation Strategic guidance • Integrating different business units
Reasons behind hiring external consultant	• To obtain the best practices across industries and functions • To obtain manpower which cannot be spared from day-to-day operations; hiring additional, temporary expertise is less expensive than adding permanent staff	• To obtain the benefits of specialized expertise. • To obtain the best practices across industries and functions • To obtain a fresh view of an institution's operations
Benefits of hiring external consultant	• Increase return on investment (ROI)	• Reduce cost of ERP implementation • Increase return on investment (ROI) • Decrease implementation time • To have a clear road map

	eXtra	AMH
In order for the consultant to do his job effectively; you offered the following	• Full top management support • Offering outcome based contracts and having monitoring mechanisms in place • A clear and detailed set of documented business objectives and a business case for the ERP project were agreed upon	• Full top management support • Offering outcome based contracts and having monitoring mechanisms in place • A clear and detailed set of documented business objectives and a business case for the ERP project were agreed upon • The high level objectives were communicated then the relationship between the management and consultant was friendly, less formal and trust-based
factors considered when choosing a consultant/consultant firm	• Educational qualification; university-level educationin fields such as information technology, business information systems or management information systems. • Previous ERP software experience/ training • Successful past experience with a competitor organization • Communication and presentation skills • Responsiveness i.e. reply and meet customers' needs on time • Convincing capabilities • skilled courteousness of employees • understanding and meeting your individualized needs • Familiar with the most recent software tools • physical facilities of the firm or/and personnel appearance of consultants	• Educational qualification • Previous ERP software experience/ training • Successful past experience with a competitor organization • Communication and presentation skills • Responsiveness • Familiar with the most recent software tools
Reasons against bringing in outside help	• Difficulty of Finding the right consultant • Time spent on the consultant's learning curve to the organization's business case	• High Cost • Difficulty of Finding the right consultant • Biased Decisions; to a specific vendor • Poor trust of the consultant's objectives and its alliance to the company's objective

5. CONCLUSION

ERP consultant is an IT specialist who is hired by a company to guide and give technical and/or strategic advice based on his knowledge and experience. He analyses their situation and needs and find the most applicable solution. Our Research is done to conduct in depth study for the consultants' roles and responsibilities and study the reasons behind and against hiring them. Our Study used two companies from Saudi Arabia eXtra and AMH as Case studies. Both companies used the help of ERP consultants while eXtra focused on the technical side, AMH used some strategic guidance as well. By using two companies we cannot generalize our findings for consultant's role in ERP systems for all Saudi Arabian companies. As we conducted our study in two small organizations, therefore our study findings may not be suitable for big organizations even in Saudi Arabia. Therefore, it would be a good contribution in the future, if the same issues are considered in big organizations.

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