

IT INVESTMENT DECISION MAKING COMPLEXITIES IN JORDANIAN BANKING

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Abstract

Developing countries are an under researched area in terms of their IT investment decision making. In particular, Jordan as a country is one of the areas where no interpretive case studies have been undertaken to investigate this area of information systems. The banking is one of the largest commercial IT investors in Jordanian economy, therefore it provides a good insight into the IT investment decision making. The current paper explores the case of a Jordanian bank, using actor network approach to frame the discussion about the IT investment decision-making. The data collected was through 17 interviews of key stakeholders. The key findings of this work are that although there are formal IT evaluation plans they are not always used in practice. The study highlights the importance of informal evaluation that of “gut feeling” and experience of executives which plays a significant role in the decision making process.

Keywords: developing countries, IT investment decision making, actor network theory, Jordanian banking case study.

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1.0 INTRODUCTION

Information Technology (IT) and associated Information Systems (IS) are increasingly viewed as a key resource in obtaining strategic advantage (Gunasekaran, Ngai, & McGaughey, 2006; Lubbe & Remenyi, 1999). This move is therefore associated with an increased spending on IT (Z. Irani & Love, 2002; Remenyi & Sherwood-Smith., 1999). The concern for technology use in organisations seems to have shifted gradually from a general awareness of the role of IT to the actual achievement of business advantage (Olugbode, Richards, & Biss, 2007). An important issue associated with the increasing amount of funds being invested in high technology is the justification for making such investments. There are studies providing evidence of the increasing interest in the process of IT investment decision-making (Bannister & Remenyi, 2000; Farbey, Land, & Targett, 1999b; Sharif & Irani, 1999). IT investment is often seen in the literature as essential but expensive and complex; and it often involves many stakeholders and considerable risks.

The importance of IT evaluation has long been recognized, but understanding how and why decisions surrounding the selection of IT are influenced by the pre-evaluation process in the Jordanian banking sector and the relationship of that process with decision outcomes remains a problem that challenges executives and IT

professionals in their decision-making regarding the level of IT that they should adopt and accommodate (Radhakrishnan, Zu, & Grover, 2008; Sharma, Bhagwat, & Dangayach, 2008).

To reduce the complexity of the IT investment decision making process, studies place much emphasis on technical requirements, while paying insufficient attention to the interactions between individual and organizational characteristics as important determinants of the decision-making process in IT investment (Da Silveira, 2001). Others argue that executives do not know how IT investment decisions should be made and on what basis; they do not know how to measure business performance; nor do they know how much should be invested in IT investment (G. Walsham & Sahay, 2006). While the number of studies on IT evaluation has been influential (Zahir Irani, 2002), several divergences between the IT investment evaluation literature are evident, in particular that the entire decision-making process is barely discussed in the issue of IT investment research. Rather, IT evaluation has captured most of the attention. Thus, the entire decision-making process and the IT evaluation process are to be given more attention and importance in this paper, so that they can be better identified and appreciated, since organisational potential may not be defined at the evaluation stage alone. Laudon and Laudon (2006) support this by arguing that decision-making and IT investment evaluation should be investigated jointly.

The general purpose of this paper is to close a gap in knowledge by generating new knowledge and understanding of the decision-making structures and procedures adopted by Jordanian banks in making IT investment decisions, since limited attention has been given to this topic, particularly in the Jordanian Banking Sector (JBS). It also seeks to determine whether formal IT evaluation techniques are being used in the Jordanian banking sector when adopting IT. Therefore, the aim of this study is to understand the managerial perceptions and the nature of both a) IT investment decisions and b) the IT pre-evaluation process, as well as their impact on IT investment decisions in the JBS. To address the above aim, the remainder of this paper is organised as follows: a literature review that examines IT investment decision making and the Jordanian Banking Sector will provide a theoretic background. Subsequently the interpretive case study for this paper will be described, followed by

the data description and discussion. The paper will then provide conclusions and recommendations.

2.0 IT Investment Decision Making

Organizations face many challenges concerning IT investment decision making. While much research (Brynjolfsson & Hitt, 1996; Hu & Quan, 2005; Kohli & Devaraj, 2003; Mukhopadhyay, Kekre, & Kalathur, 1995) indicates that IT may contribute to the improvement of performance, there has been inconsistent evidence in the literature, leaving some observers sceptical as to whether IT investment has indeed increased business value (Thatcher & Oliver, 2001). The fact remains that an understanding of where the potential value of IT investment lies and a demonstration of its benefits have proven extremely difficult (Davern & Kauffman, 2000; Mahmood & Mann, 2000). Some studies focus on the characteristics of the decision-making process, yet little is known about how and why these decisions are made in developing countries and on what basis (Almeida & Fernandes, 2008; Jayawardhena & Foley, 2000; Tarafdar, 2005). Given that IT decision-making is becoming one of the most important organisational activities (Doherty & King, 2005).

The literature indicates that the decision-making responses of individuals and organizations may be predicted and therefore may also be accommodated or redirected through proper strategies (Rogers, 2003). On the other hand, according to (Remenyi & Sherwood-Smith., 1999), the decision-making process to select the proper IT needs to be evaluated, as it provides an assessment of how organisational funds are utilised within the overall management of an investment strategy. This view is shared by others (Ballantine & Stray, 1998; Faswheng & Eck, 2000), suggesting that IT evaluation provides management with the information to make an effective choice between a numbers of different projects competing to be chosen. Decisions are critical in determining the outcomes of IT investment processes; making decisions in the rapidly changing environment of IT is a difficult and complex process (Howcroft & Light, 2006). The constant improvement and development of IT applications are putting more pressure on IT investment decision-makers (C. Lin & Pervan, 2003; W. T. Lin & Shao, 2006; Peppard & Ward, 2004; Radhakrishnan, et al., 2008). This trend in IT investment, as IT continues to take up larger portions of organisational budgets, and its increased visibility by management emphasise the focus on the IT evaluation

effort. Lin and Pervan (2001) argue that the evaluation of IT is becoming an important activity because of the increasing levels of IT investment and the significance of IT in organisations. Murphy and Simon (2002) agree that the growing IT investment has made the justification of these situations all the more critical, while the visibility of the importance of IT to management and the perceived need for IT investment have increased greatly.

On one hand, it has been argued that acquiring suitable applications will make a significant contribution to IT value and business in developed countries. However, there are ambiguities as to how IT contributes to value in developing countries (Brynjolfsson & Hitt, 1996; K. Chau, Kuan, & Liang, 2007; Hulland, 2004; Kohli & Devaraj, 2003; Melville, Kraemer, & Gurbaxani, 2004; Mukhopadhyay, et al., 1995; Prasad, 2008). The existing literature has documented some of the factors that contribute to IT investment in developed countries (P. Y. K. Chau, 1995; Cragg, 1993; Drew, 2003; Dutta, 1999; Fink, 1998; Thong & Yap, 1995; Walczuch, Braven, & Lundgren, 2000). Meanwhile, a few (Al-Gahtani, 2003; Khalfan & Alshawaf, 2004; Tarafdar, 2005) have focused on IT investment in developing or less developed countries such as Saudi Arabia, Oman and India, further highlighting the need for work examining the Jordanian context. Unfortunately, not much has been done in this critical field, especially in Jordan, where most of the few existing publications on IT investment concentrate more on e-banking and on drivers of and barriers to IT investment (Araj & Khdairi, 2006; Ciborra & Navarra, 2005; Mashhour & Zaatreh, 2008; Siam, 2006; Titi, 2005), while paying little attention to how those drivers and barriers affect the process of making IT investment decisions.

2.1. Main Characteristics of the Jordanian Banking Sector

Banking is among the most IT-intensive industries and among those that first began to rely significantly on IT for their operations; the banking industry is categorized as one with high information demands. Therefore, IT in the Jordanian banking sector (JBS) is taken as a key tool to improve the quality of service and to gain competitive advantage (Siam, 2006). Considered the backbone of the economy, as illustrated by the 'credit crunch' phenomenon, whereby financial difficulties in banks have impacted heavily on the international and national economies, the importance of banks has never received as much attention as in recent years and Jordan is no

exception (JordanBanksAssociation., 2008). Jordan was the only Arab country by the mid-1980s in which the value of banks' assets exceeded its gross domestic product (GDP). The Jordanian banking sector currently consists of 24 licensed banks in addition to the Central Bank of Jordan, which is the sole regulator overseeing the JBS and is responsible for drafting and enforcing the laws and regulations governing the sector (ArabAdvisorsGroup., 2007). Fifteen local banks, eight foreign banks and one specialized bank make up the 24 licensed banks, two of these being Islamic and the rest commercial banks (NationalInformationCenter, 2008). Decision-making in the JBS varies, depending on the structure of the bank in terms of the nature of ownership. Many factors play important roles in the decision-making process in both publicly and privately owned banks; these factors will have the same effect on the process of making IT investment decisions.

3.0 Research Method

The case study research method was chosen here within the qualitative approach for the following reasons: to gain rich descriptions and deep understanding of the context in order to understand the objectives of the study; it is a worthwhile way of exploring existing theory and enables the researcher to explore real life in depth, providing powerful insights (Gillham, 2000a; Geoff Walsham, 2006). IT adoption is a complex socio-technical phenomenon (Herrmann, Hoffmann, Kunau, & Kai-Uwe Loser, 2004; Luna-Reyes, Zhang, Ramón Gil-García, & Cresswell, 2005; McMaster & Kautz, 2002), since it involves a wide range of situations and entities including human and nonhuman actors: software, technical hardware, resources, vendors, system design, business cases, requests for proposals, etc. These elements are expected to interact with each other to achieve the strategic aims of the organisation concerned. To handle this kind of complexity and the interrelated phenomenon of the impact of IT investment in the Jordanian banking system, Actor Network Theory (ANT) was selected as a preferable option as a method of analysis and an interpretive lens to understand the dynamics of IS use, as highlighted in previous studies (B. Latour, 2004; Monteiro & Hanseth, 1996; G. Walsham, 1993). In summary, the current study uses interpretive approach to capture the complex interactions between people and technology. The use of ANT will be made to structure the data analysis and to follow the process of IT investment decision making. The primary data was collected using

17 semi-structured interviews with key stakeholders of the bank's IT decision making process.

Actor Network Theory does not require a particular method to be implemented; it is flexible and allows the use of techniques as such as ethnography and case study. The theory encourages the researcher to follow the actors (Callon, 1991; B. Latour, and American Council of Learned Societies., 1996) and to let them design the framework and set the boundaries of the study. This section describes the sources of data and the ways in which it was collected and analysed. Some of the data was drawn from documents which were supplied to me by participants at the three banks. These documents were collected while I was engaged in conducting interviews. An ongoing access to documentation provided the means to triangulate interview data with observed behaviour and adoption processes. The researcher interviewed staff from a cross-section of bank departments; the interviewees consisted of the Chief Executive Officers (CEOs) and Chief Information Officers (CIOs), several managers involved in decision-making and members of the IT teams. A five-month field visit in the autumn and the winter of 2009/2010 allowed for observations of IT adoption processes. In the present study the researcher used interviews, documentation and to a lesser extent observation to collect the empirical data.

Gaining access to the bank presented its own challenges. Persuading individuals to participate in the study, building trust and credibility at the field sites and getting people from each site to respond were all important access challenges. Even at the very early stages, I also needed to consider factors related to the appropriateness of the sites (Weis & Fine, 2000). I tried not to take any predetermined stance that might keep me from acknowledging all dimensions of the experience that I would be witnessing. The participants were to some extent fearful that their affairs would be revealed to people outside their community and this made them unwilling to accept the researcher's interpretation of the situation. Also related to access is the issue of working with people who might not be familiar with the conduct of semi-structured interviews in qualitative research and the risks associated with such interviews (Corbin & Morse, 2003).

The bank was first approached at a very early stage, in March 2009, so that the researcher could overcome any obstacles to the data collection which might delay the

study or lead towards unpredictable circumstances. As addressing the research problem required in-depth information, data was gathered by means of semi-structured interviews, which are seen as one of the most important sources of evidence in creating a case study data. To gather useful data from each interview which I conducted and to be as accurate and precise as possible in interpreting the data, as Yin (2003) recommends, I managed to make audio recordings of most of the interviews. The importance of data accuracy was also explained to the interviewees and as a result, sufficient time was given to make notes, but this did not feel right, since interviews were often interrupted by phone calls and by queries from other members of staff, disrupting the flow of the interviews and making it difficult to preserve the important verbatim responses of the interviewees. Some interviewees appeared unable to speak freely in front of a machine and I was sometimes not permitted to tape-record the interviews, so I also took handwritten notes at the same time where that was possible.

4.0 Case Study Analysis

4.1 IT Investment Decisions Making

The decision making process can be understood as a black box encompassing actors and interests, which can help to describe how some IT investment proposals are accepted while others are rejected or modified. This means understanding how the emerging interest in the idea of investing in new technologies has become dominant and how enrolling human and nonhuman actors and aligning their interests to those of the networks will influence decision-making. Discussions that were held with participants indicate that like the bank operating in the Jordanian market which still needs to develop, the bank – Bank A or Commercial and Retail Bank A (CRBA) invested in technology for a number of reasons. In other words, the intention to invest would not arise if the interest were not presented.

CRBA interview participant 5 or (CRBA5) reported:

‘The bank has a systematic way of making decisions. In any project, especially when there is a call for new IT, they must provide evidence of the benefits of the new system and what risks might be associated with IT investment.’

It is important to acknowledge that if no serious measures (*a systematic way of making decisions*) are taken to enrol new actors and align their interest with those of current actors, this may cause potential risks and complexity in decision making process and the loss of potential opportunities to strengthen the actor network. If it is to have an effect, the network needs to engage the energy of all key actors, such as by providing:

‘evidence of the benefits of the new system and what risks might be associated with IT investment’ (CRBA5).

Otherwise, the IT decision-making network will be too weak to be able to grow and to be stabilized. CRBA4 introduced the parameters of speed and complexity:

‘The speed of change and complexity of the business environment made us rethink our IT strategies’.

Complexity in the banking environment, where IT is used to gain business value, will eventually have an impact on IT strategies, which are in reality part of and not external to the IT decision-making network. Thereby, in that network, strategies regarding IT must be seen as an effect of the decision making network.

Business and IT people must have an understanding of what their bank is about, that is, the banking context in which IT investment decision were made, implemented and used. CRBA3 made the following point:

‘Because of the demands of economic powers in the market and legal requirements, business people are getting more concerned with IT investment decision to face economic and political instability’.

At the broad overview level, knowledge of the bank by the actors implies knowing its goals and objectives, its core capabilities. Knowledge about the bank must include knowledge about its economic environment and the constraints imposed on IT investment decision by its rules, economic and political stability and the government regulations. CRBA6 emphasized this important point:

‘Competition, newly market entry power need to be handled in a very professional way, which demands high quality IT investment decision making’.

The nature of the banking industry placed the bank in a very competitive market. As a component of the external environment, competition had a strong influence on the decision network. Human actors would try to enrol this nonhuman actor to strengthen the decision network. New market entry is another important actor. In the past years, CRBA had enjoyed sustained success, but despite a growth in sales, the bank reported a reduction in its net profit before tax, which declined in 2009 to JD 97 million from 142 million in 2008. The bank had identified two major external factors leading to this reduction: the economic and political stability and unprecedented import competition.

Major decisions had to be made as a result of this external pressure. According to CRBA9, structure strategies, plans and procedures were important:

‘The new structure, strategies, plans and procedures of the bank has made it possible to facilitate decision-making through new banking practices, based on a new definition of activities to achieve better performance and demonstrate best practices.’

Thus, CRBA9 made it clear that the establishment of a new organizational structure strategies, plans and procedures provided the necessary foundation for the bank to integrate the efforts of business and IT people to achieve its strategic goals. Designing an organizational structure involved the incorporation of best banking practices based on clearly defined authorities and responsibilities, effective performance and support for certain activities.

Another factor which has to be mentioned here is one identified by CRBA8:

‘By the time we discovered that the system that had been adopted by the bank was not functioning properly, the losses were huge in terms of the expense, the time that was consumed in implementing the system, training the staff and the opportunities that have been missed to date.’

IT investment could cause damage to the bank's ability to meet a significant financial burden, which was a negative actor in the network providing resistance to the constant need to update the systems. However, if they resisted enrolment and insisted on withdrawal from the network, this would tend to destabilise the actor network and perhaps cause it to collapse, because it could no longer make a difference in facing these challenges. Thus, the possibility of influencing the adoption of IT would be limited. As CRBA7 stated:

'the bank stakeholder's interests can influence how much credence is given to the technological viewpoint. Operationally, it can be a very hostile view, so there is a lot of blaming and conflicts instead of working together to fix it'.

The network of decision-making is characterized by stakeholder's conflicts, power struggles, marginalisation and exclusion. Although all actors are the same, they are not of the same size. The difference between actors is therefore an effect of this network, where it is not only humans who make a difference in IT investment decision making network, but also the organisation structure, strategies, plans, procedures, conflicts, power struggles, marginalisation and exclusion. It is important to stress that an actor is not just a human inspired with intentionality. In the opinion of CRBA13:

'Managers have different attitudes when it comes to convincing the management of new ideas. Basically, the relationship that is built with other key decision-makers is crucial in what approach they might take to proceeding with their idea'.

4.2 IT Evaluation

A significant factor which may have strengthened the network was that the bank had established procedures to exert agency in the actor network and to put pressure on other actors to become involved. It has also established a good inscription standard which identified the bank's interest in this process. These procedures required that substantial *steps be taken* for the sole purpose of creating an IT RFP before further steps to claim the support of a business sponsor. CRBA7 outlined the process:

‘An RFP will be reviewed many times by all the people involved. The bank has a systematic way of doing evaluations. When there is a call for new IT, the RFP must provide evidence of what problems they are trying to solve, the benefits of the new system and potential risks’.

Each project will still need to go through a more detailed assessment in IT investment decision making, IT investment planning and analysis, Evaluation of IT (Business Sponsors, Building an RFP (request for proposals), RFP implementation). This process of evaluation and analysis assesses the strategic importance of a given IT proposal by examining it from the business and IT perspectives. The analyses show how misleading results can occur in the context of interconnected, complementary niches (e.g. overstated performances relative to the bank measures). For example, evaluation of IT may suggest that an organization can obtain competitive advantage through its use but may fail to address the question of how it should be used and implemented to ensure that the bank receives maximum benefit. The evaluation of IT in all respects is critical for maximising the business process and bank performance. IT is not strategic on its own but gains strategic significance as part of a complementary system of resources.

4.3 Formality of IT Decision Making Process

Managers may describe this as getting management support, and there was a clear awareness of the importance of senior management support. Senior managers have always expressed their vision of the need to change. However, such management support was not built overnight. All senior managers were enrolled in the network of IT investment and this was underpinned by all the managers attending IT investment presentations. There are no independent entities, only relations between different actors which make things happen. The relations that exist between different actors within a network are what generate IT investment and make it apparent. Hence the following observation by CRBA2:

‘Some of the managers depend on their charisma and personality attributes to approach other decision-makers and other members of staff before making any IT case official.’

This theme was a common one, reiterated by several managers throughout the bank. IT investment decision making based on the experience of executives were considered to be justified if these systems were able to deliver good performance. The effect of IT was viewed as positively as normally expected.

There are many ways to enlist the support and the enrolment of a key actant, by involving and mobilising people in an actor network. The first approach is structured in fixed steps and involves incorporating the idea into a document that identifies the IT perspective in future banking and the expected benefits, which can then be presented for further approval by decision-makers. The other approach is to bypass some of these routine procedures and rely on charisma, personal skills and experience to carry the idea to other actors in the bank, then to work hard to clarify the idea and have it justified for them as well as other potential actors. The impact of any departmental executive or senior manager on the investment of IT can be revealed and dissected through an examination of their activities and the way that they have mobilized support for those activities in the past. Some were prepared to adopt a different plan when their first attempts to accelerate the investment of IT in the bank were unsuccessful. However, a different approach is needed to explore the idea. The difference between this approach and the previous one is that here the idea is justified by exploration prior to being written down, rather than put in writing first and justified later.

5.0 DISCUSSION AND CONCLUSIONS

Understanding the context of decision-making is significant in the process of the initiation of IT ideas and of IT investment decision making. The context may strengthen the resolve of different actors in the network by acknowledging the complexity of the IT decision-making process. In such circumstances, when trying to make decisions to invest in IT, the human intention in making a decision to invest in IT is shaped by the need for IT.

5.1 IT Investment Decisions Making

Banking industry cannot wait for technology to be matured in order to avoid any risky IT investment decisions. Eventually, this will cause the bank to lose a lot of

opportunities in the market and damage its image against other competitors since the implementation for new IT is essential to create new services. As a part of decision making process IT evaluation will minimise the potential risk and complexity that may occur in IT decision making (Sharif & Irani, 1999). As it was mentioned by one interviewee, to handle complexity in it decision making at the highest level of responsibility these risks should be measured, monitored and anticipated. This case study of Bank A has shown that the Jordanian banking market is still developing. Even though it has passed the point of emergence, it is still not mature. With the ongoing economic and political reform the opportunity for improvements and maturity is absolute. A mixed of external and internal factors affected decision making in the bank.

External environment has exerted heavily effect on banks when it was seen to be unsafe and encouraged more cuts in IS/IT investment budget where the high cost for market entry was extremely high (Hoskisson, Eden, Lau, & Wright, 2000) .Jordan economy can be described as one of the growing economies in the region but even though it is facing a huge challenge for change, these challenges supported by the political instability (Lalvani, 2003) that characterise the Middle East region. Obligatory changes that required by governmental bodies inmost cases tend the bank to avoid traditional investment evaluation given that they are forced to comply by the power of regulation. Including the above (Farbey, Land, & Targett, 1995; Powell, 1992; Willcocks, 1994) have also stated a range of reasons for an organization to lack an IS evaluation plan. Besides, particular attribute of the economy can seriously damage the ways by which an organization will develop. One can refer to new competitors and new market entry powers as the cause of turmoil in the banking sector in which, investment evaluation could provide decision maker with the possibilities of the success and failure of any potential IT project.

Based on the results from the empirical study, it's the bank structure, strategies, plans and procedures that guided decision making process (Rogers, 2003). An interviewee has assured that the adopted strategies made it possible to invest in new technologies; this can be clearly seen in bank A who conceder investment in IT is top priority to compete with other banks. One of the main issues here is that, many of IS /IT ranked as highly demanded and there for regarded as not an extra coast that uses other

resources needed somewhere else. Thus an IT spending should be considered to be capital assets that will deliver substantial value on the long run, not as interim cost (Applegate, McFarlan, & McKenney, 1996; Weill & Broadbent, 1998). The relations between the needs and the implementation of IT projects in some how appear to be based on stakeholder's interests. One of the interviewee said to me that stakeholder's interest and conflicts govern the current IT trends in the bank. IS/IT is still growing in a more critical way, though not organized manner. It was made clear by investing in new system that existing approaches to control risk were inadequate. Hence, thoughtful consideration to the context of change would be crucial in showing how diverse interests of the stakeholders and others were aligned.

5.2 IT Evaluation

Before any decision making would be implemented, IT pre-evaluation considered as vital to provide that rational decision were possible if every thing were set off as it was planned. According to (Zahir Irani, 2002) unfortunately it's very difficult to justify IT since the cost occurs immediately while the benefits are hostage to future conditions and other markets and organisational factors may lie beyond the control of decision makers. According to one interviewee, evaluation is valuable in the beginning of a project that an initial decision and assessment needs to be taken, but later on evaluation seems to be unrealistic if it were to be performed. When the project is crucial, different authority needs to examine and approve new IT investments and more business units are involved, this will complicate the investment evaluation process of such projects.

The IT idea, incorporating the vision and interests of its promoter, referred to as the IT idea champion, would be presented in the form of a request for proposal (RFP), which at this stage is weak and easily rejected. This RFP, which in ANT is considered a nonhuman actor, demonstrates the ability to take action due to the reputation of its initiator and the power of the vision that was invested in the idea. Most ideas related to IT start with an RFP from the interested department, which must address the necessity level of the adopted technology by presenting a solid proposal that clarifies the need for such a system. Many issues have to be drawn together in this proposal in order for it to be presented to the top management, who will review it and subject it to intensive evaluation before any decision is made. In this long process, politics and

power will show how they can play a major role in favour or against the project and the criteria used in the evaluation (Markus, 1983). Due to political reason the project costs are probably to be underestimated and its benefits presented in a favourable attitude. Most of the benefits at this point were built on assumption while other IT investment evaluation criteria might be more appropriate but not used can deliver more tangible and useful input for decision makers. Some interviewee had their contradictory view questioning the ability of certain criteria to make any value added since the result is so obvious.

5.3 Formality of IT Decision Making Process

Even formal evaluation dominated, Informal evaluation has taken place more often due to the previous experiences by bank superiors in constant and frequent accessions, even though that formal evaluation is considered inevitable and common procedure in new IT project. With considerable part of the benefits looked as intangible “qualitative” by decision makers concerning IT investment, decision appear to be to a certain degree as subjective and unreliable to be measured and spend time and resources on it since the benefits appear so obvious by experienced seniors and have been proven right in many accessions. According to (Zahir Irani & Love, 2000) traditional evaluation techniques in which IT is the main concerns may perform poorly, as many of the benefits are strategic, and therefore not simply quantifiable. On the other hand they were very well aware of the importance of other quantitative methods that is stable and well established in the field if IT investment evaluation. (Dhillon & Backhouse, 2001; Serafeimidis & Smithson, 2003) have supported this view that subjectivity or the “gut feeling” is what characterizes most of the evaluation processes when it comes to decision-making. IT investment cannot be evaluated in quantifiable measures since there are many intangible aspects which have to be considered, this does not means that quantifiable accountability should be avoided and that IT investment decision cannot relay on hard measures only, but, this means that decision makers should allow both measures to be performed jointly. So, the “gut feeling” and experience of the executives could not be underestimated when it comes to some of the IT investment decisions.

5.4 Significance of This Research

Building on the significance of this research, this study contributes to the theory of IT investment decision-making and pre-evaluation in a developing country. Practically, it will help executives and managers to understand the process of successful IT investment and implementation in the JBS. Secondly, this study will contribute to the research methods used, since it is one of the first studies of IT investment in the JBS using the interpretivist case study approach. Moreover, it uses Actor-Network Theory (ANT) to conduct the data analysis, distinguishing it from existing studies that have used the positivist approach; as such, it should encourage more interpretive research in Jordan.

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