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Organizational Maturity and Projects Performance

The Mediation of Benefits Management

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Abstract: Nowadays the investments made by organizations to get better business performances are crucial and difficult to obtain. So, it's more and more important that the business-cases underline not only the short-term objectives, but also the long-term benefits that promotes a sustainable future for organizations and investors. The main objective of our research is to study how investments on IS/IT influence projects performance in organizations. The rational of our model is that organizational maturity has a positive effect on projects performance with the mediation of benefits management. We emphasize that the integration between a maturity model and a benefits management approach can increase the effectiveness of strategic projects. Besides, it can also improve business confidence that the investments done match the desired maturity stages and will then collect benefits perceived as business value.

1 STAGE OF THE RESEARCH

The rational of our model is that organizational maturity has a positive effect on projects performance with the mediation of benefits management. We emphasize that the integration between a maturity model and a benefits management approach can increase the effectiveness of strategic projects. Besides, it can also improve business confidence that the investments done match the desired maturity stages and will then collect benefits perceived as business value. After a first year of intense literature review for our research project, we managed to deliver the research design conceptual model. At present, we are preparing the research design approach that includes the interview's guide and a survey to be launched in the beginning of 2014.

2 OUTLINE OF OBJECTIVES

This study is expected to help justify the rationale of IS/IT investments and reinforce the importance of internal organizational changes to achieve business benefits realization. The research questions that guide the present work are the following: (1) How

do organizational capabilities enhance projects performance? (2) What tools can be used as a theoretical basis for analysing and implementing a methodology that enhances projects performance? (3) What are the critical factors that could cause projects to be successful?

3 RESEARCH PROBLEM

“Whether or not IS/IT spending does in fact lead to higher productivity?” This is an essential question that has been studied in the last 30 years by the academia. Brynjolfsson (1993) introduces the “mismanagement of information and technology” as one explanation for the productivity paradox. In line with his argument, other researchers argue that most organizations focus primarily on the implementation of technology rather than on the realization of the expected business benefits. Today's business environment can definitely be described as turbulent. Gaining a competitive advantage over competitors has been the focus of the organizations since a long time because only a sustainable competitive advantage can assure a long term existence in the market (Jugdev & Mathur, 2006), (Priem & Butler, 2001). Firms that have gained competitive advantage are attempting to maintain their competitiveness by

increasing knowledge and managing that knowledge (Porter, 1985). In a competitive environment, organizations need flexibility to meet customers' demands by offering customized and high-quality products and services. The notion that the IS/IT function serves different roles in different organizations and that such roles may evolve over time has been extensively discussed in past research. Although many studies have focused on the consequences of IS/IT investments (Brynjolfsson & Hitt, 1996), (Devaraj & Kohli, 2003), there have been fewer studies examining factors that impact the IS/IT capability. This research project will be based on the combination of the benefits management and maturity models to strengthen the final results of the IS/IT investments and enhance the expected benefits in order to improve projects performance. We claim, by linking maturity models and benefits management approaches, more effectiveness of the strategic projects and more improvement on the confidence of business sponsors that their investments will return the expected benefits. Benefits management adds value providing relevant information to the strategic projects and to enhance organizations to obtain higher levels of performance, identifying the goals and the benefits and clearly mapping the way to get them, supported on the right combination of organizational changes, enabling factors and IS/IT enablers (Ward & Daniel, 2006).

4 STATE OF THE ART

Some authors argue that the result of the studies that related investments in IS/IT and the increasing performance of the organizations in the last decades were far from true (Strassmann, 1997). However, others say that the amount spent in IS/IT and the business success has no direct connection (Hochstrasser & Griffiths, 1991). The relationship between IS/IT and productivity is widely discussed but little understood (Brynjolfsson, 1993). The idea that something is wrong with the investments in systems and information technology is not new, but nevertheless gain more visibility from the moment that Robert Solow (1987; 36), Nobel Prize in Economics, said ironically "we see computers everywhere except in the productivity statistics". This expression highlights the inability to demonstrate that investments in systems and information technology result in organizations productivity improvements, known as the "productivity paradox". Many organizations today need to deliver more complex products and services

in a better, faster, and cheaper way. The business problems that companies address today require enterprise-wide solutions that call for an integrated approach and effective management of organizational resources to achieve business objectives. A maturity model approach is a process-driven improvement that provides organizations with the essential elements for effective change. It can be used to guide process improvement across a project, a division, or an entire organization. Benefits management reinforces the distinction between project results and business benefits. The main focus of investment lies not only in technology implementation, but mainly in improvements in organizational performance and business efficiency, e.g. improving processes and changing the ways the work is performed.

4.1 Maturity Models

For organizations to succeed in the global business competition of today, it is necessary that they produce a high standard of performance. Basically, the purpose of the maturity models is to provide a framework for improving an organization's business result by assessing the organization's strengths and weaknesses, enabling comparisons with similar organizations, and a measure of the correlation between organizations (Combe, 1998), (Ibbs & Kwak, 2000). In the IS/IT discipline, maturity is regarded as "a measure to evaluate the capabilities of an organization" (Rosemann & De Bruin, 2005:1). Levin & Skulmoski (2000) point out that the maturity models provides a framework to help enable organizations to increase their capability to deliver projects on schedule, within budget and according to the desired technical specifications. Working with different types of projects within an organization requires standard models in order to deliver successful future projects repeatedly, improve both the quality of future projects and gain knowledge and learn from past mistakes. Measuring maturity in organizations is regarded as a subjective instead of an objective measurement, since most significant research is primarily focusing on what people are doing operationally (Andersen & Jessen, 2003). Skulmoski (2001) recommend a view where competence and maturity should be linked together for project success and not focusing only on action and where competence should be regarded as a combination of knowledge, skills and attitudes that supports performance. The assessment procedures helped an organization understand where they have been, where they are, and what processes they need

to implement, in order to continue their implementation of management methodologies. The work of Ibbs & Kwak (1997, 2000) and Ibbs & Reginato (2002) focused on recognizing the benefits of investment in project management competency through measures of maturity in an organization's practice of project management. The assessment of maturity typically involves variations along five developmental stages (Jugdev & Thomas, 2002): Level 1: Initial (ad hoc) - Processes are not usually documented. Level 2: Repeatable or structured (abbreviated, planned) – Basic management practices have been established. Level 3: Defined (organized, institutionalized) - The management and technical processes necessary to achieve the organizational purpose will be documented, standardized and integrated to some extent with other business processes. Level 4: Managed (integrated) - There will be evidence of quantitative objectives for quality and process performance, and these will be used as criteria in managing processes. Level 5: Optimized (adaptive, sustained) - The organization will focus on optimization of its quantitatively managed processes to take into account changing business needs and external factors. The underlying assumption in the maturity models is that there is a relationship between higher levels of maturity and improved organizational Performance Projects.

4.2 Benefits Management

As competition increases as a result of globalization and other market factors, it is even more important that an organization performs at its best capabilities (Ashurst & Doherty, 2003). The decision making process over IS/IT investments is not as objective and transparent as it is claimed to be, creating significant failures on the benefits achievement process (Berghout et al., 2005). Since 1995, due to the recognition of the importance of benefits realization and management within different sectors, various approaches and models have been developed to help organizations identify, monitor and ultimately achieve the benefits. It is unlikely that benefits will simply emerge, as if by magic, from the introduction of a new technology. Their realization needs to be carefully planned and managed (Lin & Pervan, 2003), (Markus, 2004). Benefits are often identified in the early stages to form the business case and to sell the idea to the stakeholder's. A follow-up procedure with the purpose of evaluating those benefits achievement is often missing, and problems arise after the system delivery, when it's

time to show if those previous stated benefits have been realized (Remenyi et al., 2007). The perception of the continuous unsuccessful IS/IT investments found a new way and approach for how projects are undertaken. The focus should be on the realization of the benefits, since that is the organization main reason to the investment (Ward & Daniel, 2006). A common characteristic of many unsuccessful programs is the vagueness with which the expected benefits are defined (Reiss et al., 2006). Without clearly defined objectives it is difficult to maintain focus when subsequent problems occur. The increased interest in benefits realization has coincided with the increasing use and complexity of IS/IT (Ashurst & Doherty, 2003), (Bradley, 2006). A benefit is an outcome whose nature and value are considered advantageous by an organization (OGC, 2007). Bradley (2006) defines it as an outcome of change which is perceived as positive by a stakeholder. The important point in the above definitions is that advantage is owned by individuals or groups who want to obtain value from an investment (Ward & Daniel, 2006). The benefits to an organization from IT- enabled change essentially emerge from three main reasons: Either stopping doing activities, doing better what have always being done, or even doing completely new things (Peppard & Ward, 2005). Ward & Daniel (2006) differentiate benefits as tangible and intangible, whether intangible benefits are those that can only be judged subjectively and tend to employ qualitative measures. In our research we follow the Cranfield Management School approach (Ward & Daniel, 2006) that includes a process model for benefits management (Figure 1): (1) Identifying and structuring benefits - The proposed benefits are identified and, for each proposed benefit, business measures are developed, both financial and non-financial.

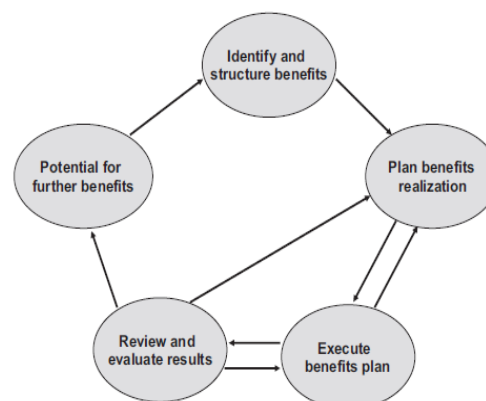


Figure 1: Process model for benefits management (Ward & Daniel, 2006; 105).

(2) Planning benefits realization - For each benefit, specific responsibility for realizing the benefit is allocated within the business. (3) Executing the benefits realization plan - Alongside the implementation of the proposed IT application, the necessary business changes as detailed in the benefits realization plan are carried out. (4) Evaluating and reviewing results – Following the full implementation of IS/IT and business changes, the previously developed business measures are used to evaluate the effects of the project. (5) Establish the potential for further benefits – As a result of the post-project review; it may become apparent that further benefits are now achievable.

Several authors recognized the importance of the two initial phases. Bennington & Baccarini (2004) suggest that the benefits identification should be a combined approach of interviews and workshops involving key stakeholders. Remenyi et al. (2000) note that a key aspect of benefits identification process is that the stakeholders learn to better understands what is required from an investment and what is affordable and possible. Best practice is to involve key stakeholders to identify and agree desired benefits maximizing the likelihood of commitment to realize those benefits across a range of levels in the business or the organization (Ward & Daniel, 2006). The key tool of Cranfield School approach is the benefits dependency network (BDN) (Figure 2) designed to enable the investment objectives and their resulting benefits to be linked in a structured way to the business, organization and IS/IT changes required to realize those benefits.

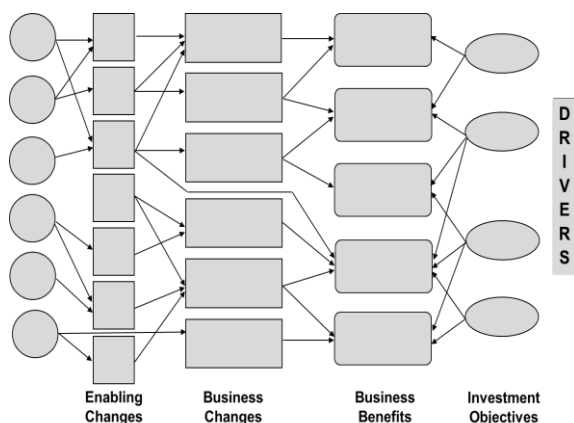


Figure 2: BDN framework (Ward & Daniel, 2006; 134).

Once the BDN has been constructed, measures for each benefit, responsibilities for achieving all the benefits and implementing all the changes, and

timeframes must be established. The organization have setting targets, identifying and quantifying the benefits removing known problems through new IS/IT means and new ways of executing business processes and activities.

5 CONCEPTUAL MODEL

Based on the previous comments we proposed the research conceptual model shown in Figure 3

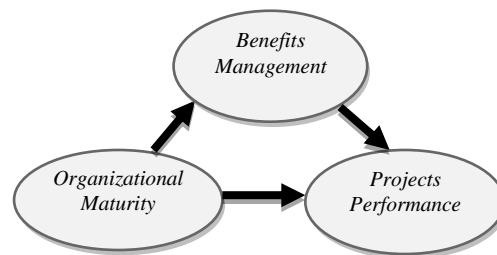


Figure 3: Mediation Model.

In this model, organizational maturity is a construct consisting of seven dimensions represented by the following first order factors (Figure 4).



Figure 4: Organizational maturity construct (OGC, 2010).

Similarly, benefits management is conceptualized as a construct consisting of five dimensions, represented by the first order factors depicted in Figure 5. The rationale of our model is that organizational maturity has a positive effect on projects performance with the mediation of benefits management. Organizational maturity will be assessed by using the P3M3 self-assessment questionnaire for practitioners. Concerning projects performance, the questions will be about how well

the projects were performed during the last three years when comparing with all direct competitors in terms of financial results, market share, and sales growth.

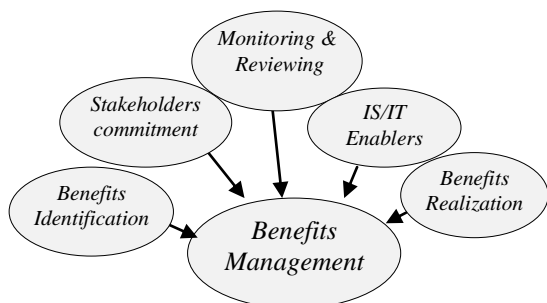


Figure 5: Benefits management construct.

Accordingly, we develop the following hypothesis:

(H1) – The relationship between organizational maturity and projects performance is mediated by benefits management. In order to test the mediation model, Baron & Kenny steps (1986) will be followed: (1) There is a significant relationship between organizational maturity and benefits management. (2) There is a significant relationship between organizational maturity and projects performance. (3) There is a significant relationship between benefits management and projects performance. If the effect of organizational maturity in projects performance remains statistically significant, even in the presence of the effect of benefits management (the mediator variable), then a partial mediation will be found.

6 METHODOLOGY

According to Silverman (2006) methodology is a general approach that establishes the ways in which any phenomenon can be studied. Yin (2003; 20) defines a research design as the “logical plan for getting from here to there, where here are the initial set of research questions to be answered, and there are the conclusions”. As the scientific rigor in this kind of research paradigm is of crucial importance in order to truthfully explain the social reality under investigation, the study defined and adopted a research model and a set of hypotheses from the existing literature and sound theories. The set of hypotheses will then be empirically tested and validated under a mediation model. This investigation is primarily quantitative with its roots on the research model hypotheses testing. Furthermore, the research also draws on a

preliminary qualitative component with the objective of defining and validating the constructs and its components through experts’ interviews. The interviews are conducted in a semi-structured manner, in order to explore the usage of maturity models and benefits management concepts. The data collected through those interviews is then analysed and coded. The results of this exploratory study will allow us to validate the central constructs of our model and will serve as an input to the next step of the study: the validation of the research. The hypotheses testing will enable us to understand the nature of certain relationships amongst the variables of interest for the study. This will be based on a cross-sectional survey since it excludes explicitly the time dimension. Therefore, our research uses a mix of approaches, qualitative and quantitative, to address relatively complex related issues, not always perceived and applied in the same way in organizations.

7 EXPECTED OUTCOME

Although benefits management is emerging as one of the approaches that assist organizations to manage the whole life cycle of programmes and projects, there appears to be no evidence in the literature of the successful implementation of any of the approaches available. We hope to create clear evidence that benefits management contributes to projects success, namely: (1) In the identification of objectives and benefits of IS/IT investments in order to reinforce the organizational changes. (2) In the engagement of different stakeholders to define the expected benefits. (3) To create greater awareness of how projects outputs would lead to the achievement of outcomes by establishing a specific workforce to help defining and measuring the achievements. (4) To establish a formal method to plan and evaluate the expected benefits of investments, complying with initial requirements. (5) To create an environment for learning and improving, driven by expected benefits, as this was not the focus of the implementation. Investments in IS/IT projects and other change programmes are the means of improving projects and organizational performance, creating new strategic options and capabilities. By linking maturity models and projects performance, having benefits management as a mediator factor, we will try to prove that is easier to implement best practices on the organizations that have higher levels of maturity. We also want to confirm that a correct combination of IS/IT

implementations and management practices lead to a positive influence on the projects performance. Then we aim to conclude that organizations with higher levels of maturity have a positive influence on their projects performance, particularly in the cases where they make use of benefits management practices.

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