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Jessica Braun
European Business School, jessica.braun@ebs.edu

Frederik Ahlemann
European Business School, frederik.ahlemann@ebs.edu

Kunal Mohan
European Business School, kunal1710@gmail.com

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UNDERSTANDING BENEFITS MANAGEMENT SUCCESS – RESULTS OF A FIELD STUDY

Braun, Jessica, European Business School, Rheingaustraße 1, 65375 Oestrich-Winkel, Germany, jessica.braun@ebs.edu

Ahlemann, Frederik, European Business School, Rheingaustraße 1, 65375 Oestrich-Winkel, Germany, frederik.ahlemann@ebs.edu

Mohan, Kunal, European Business School, Rheingaustraße 1, 65375 Oestrich-Winkel, Germany, kunal.mohan@ebs.edu

Abstract

The realization of benefits from IS/IT investments has consistently been reported as one of the major challenges of organizations. This paper reports on the findings from an exploratory field study on how benefits management success ultimately contributes to better IS/IT exploitation. A total of 34 semi-structured interviews were held within 29 organizations. The study applies resource-based theory to examine the benefits management resources required and the process through which organizations translate such resources into benefits management competencies. The result is a framework offering items under three dimensions to outline how benefits management ultimately contributes to better IS/IT exploitation. The dimensions are: (1) benefits management resources, (2) benefits management capability and (3) contextual factors. The analysis finds that organizations develop benefits management capability in various stages: (1) benefits measurement competency, (2) benefits planning competency, and (3) benefits implementation competency. The results of our study also reveal that resources alone are not sufficient for successful benefits management. Organizations also need to establish the contextual factors: business/IT alignment, integration of benefits management into management processes and top management support.

Keywords: benefits management, resource-based theory, IS/IT investments, capability, competency

1 INTRODUCTION

Firms in almost every industry rely on investments in information systems and information technology (IS/IT) to realize benefits after these systems' successful implementation (Seddon 1997). These benefits range from providing "problem-based solutions", which help to achieve business objectives and prevent performance deterioration, to "innovation-based solutions", which enable organizations to achieve a competitive advantage by exploiting business opportunities or creating new organizational competencies (Peppard et al. 2007). However, many IS/IT projects fail to deliver the desired benefits (Burn 1993). Hence, there has been much discussion of the "productivity paradox" (Brynjolfsson 1993) and – the essential question – whether or not IT spending does in fact lead to higher productivity. Brynjolfsson (1993) offers 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 on the implementation of technology rather than on the realization of expected business benefits.

As a research topic, the "benefits of IS/IT investments" is not a new one. It has been well researched, especially in respect of frameworks classifying IS/IT benefits (Silk 1990) and methods with which to evaluate IS/IT investments (Stone 1990). However, relatively little has been written on the topic of benefits management (BM), which has evolved as an independent research discipline investigating the successful realization of benefits from IS/IT projects (Ward et al. 1996). For a detailed literature review of BM, see Braun et al. (2009). The basic assumption in BM literature is that benefits can be realized if they are managed appropriately. However, so far, little research has been conducted on whether and how BM practices yield the expected success. Furthermore, whether and to what degree organizations need to implement BM processes, methods, tools and governance structures in order to better profit from investments in IS/IT remains unclear.

IS researchers using resource-based theory RBT have argued that IS/IT investments per se do not provide any sustained advantage (Bharadway 2000). Instead, organizations must leverage their IS/IT investments appropriately, which will enable them to achieve superior objectives. Adapting the resource-based perspective in respect of BM, Peppard et al. (2000) state that the "exploitation" of IS/IT, i.e. "the ability to maximize the benefits realized from the implementation of IS/IT investments", depends on the organization's BM capability. This comprises three distinctive competencies: (1) benefits identification, (2) benefits planning and (3) benefits implementation. In support of this view, Ashurst et al. (2008) also state that BM capability is defined and enacted through the application of a set of competencies. Accordingly, we consider these BM competencies to be a source of an organization's BM capability, enabling it to maximize the value from its IS/IT investments.

Although RBT has already been successfully used to explain improved organizational performance resulting from innovative IT/IS, the application of this theory to BM success raises a number of questions that the present study intends to answer:

(1) What competencies constitute high BM capability?

(2) What are the BM resources needed within an organization?

(3) How does BM ultimately contribute to better IS/IT exploitation?

We decided to approach these research questions with a broad exploratory field study by investigating BM practices in 29 organizations. The results led to a BM success framework elucidating essential competencies, their development over time, as well as contextual factors promoting those competencies. This framework can be interpreted as a "theory for explaining" (Gregor 2006) how BM is carried out successfully and sheds light on the mechanisms allowing BM to increase a firm's capability to exploit IS/IT resources.

The remainder of this paper is organized as follows: The following section introduces the main BM discourse. This is especially helpful for a better understanding of the relationships that underpin our framework. The third section describes the research methodology, followed by the results of the study in section four. Beginning with the BM resources that are required to exploit IS/IT investments' value, we then show how these BM resources lead to higher BM capability. Moreover, we introduce contextual factors that promote the development of BM competencies. The BM framework is presented in section five. The concluding section summarizes the main findings and limitations of the study and provides a brief overview of future research activities.

2 BACKGROUND

Research on the benefits of IS/IT has a long tradition. Early studies go back to the 1980s (Ward 1986) and mainly focus on benefits classification schemes and benefits evaluation; the latter is sometimes even referred to as "one of the most researched and written about topics in IS research" (Bernroider and Stix 2006). Research on BM as a comprehensive approach began in the mid-1990s with an empirical study on industry practices in the UK (Ward et al. 1996). This study found that many organizations were not satisfied with the available methods for realizing benefits. BM is, however, still a new concept. It accounts for benefits throughout the life cycle until these benefits are ultimately realized. One of the most widely used and cited models outlining the scope and nature of BM is the Cranfield BM process model (Figure 1), which formed the basis of the UK study (Ward et al. 1996).

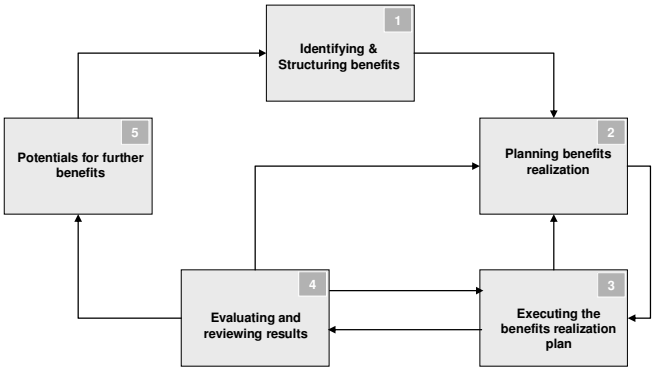

Figure 1. Cranfield benefits management process model (Ward et al. 1996)

The basic idea behind BM is the lifecycle viewpoint of the benefits of IS/IT investments: benefits have to be identified, evaluated (ex-ante), realized and evaluated again (ex-post). Thus, BM can be defined as "the process of organizing and managing such that potential benefits arising from the use of IT are actually realized" (Ward et al. 1996). In practice, this topic is comparatively new. It is therefore not surprising that only a few organizations have methodological standards in place to realize benefits from investments in IS/IT. In 2007, the result of further research extending the UK study was presented. Although the adoption of BM had increased from 12% to 25% in the participating organizations, most organizations still had to improve further. Not surprisingly, a number of researchers have focused on BM's critical issues to facilitate the adoption of its practices (Päivärinta et al. 2007). These authors identified three categories for classifying issues regarded as important when adopting and implementing a BM process in municipalities: (1) issues related to preparing municipalities' organizational context, (2) issues related to organizing the BM process, and (3) requirements related to BM tools and techniques. Analyzing the relationship between BM and strategic alignment and its effect on IT outsourcing's success, researchers have also found that organizations with a higher level of strategic alignment and a higher level of BM reported more IT outsourcing success in terms of the benefits achieved (van Lier and Dohmen 2007).

Overall, researchers agree that there is a large potential for improvement of BM processes in organizations. Only a minority of organizations have adopted a comprehensive approach to actively

manage benefits from their IS/IT investments (Ward et al. 2007). Despite these research endeavours, BM research can still be described as an evolving discipline. A 2009 literature review identified only 74 research papers as highly relevant to BM (60 journal articles and 14 conference papers). Of these, only nine articles focused on the BM process, while the remaining 65 dealt with only one of the phases of the Cranfield BM process model (Braun et al. 2009). Thus far, academics have not analyzed BM success as such, which is one of the central questions organizations need to answer when deciding whether or not to invest their resources in BM.

3 METHODOLOGY

3.1 Research Approach

Since research on the BM success is still in its infancy and very little is known about the influence of BM on a firm's capabilities to exploit IS/IT resources, we decided on an exploratory approach to our research. Drawing on the recommendations by Eisenhardt for the development of theories from case research (Eisenhardt 1989b), we initiated a field study based on interviews with BM practitioners to look for empirical patterns that would explain BM competency building based on specific BM resources. Furthermore, we focused on the circumstances in which this process would lead to BM success. The level of analysis was the organization. We were not merely interested in the process of realizing benefits for a single project, but rather in how BM could be successfully applied throughout the organization.

3.2 Data Collection

To collect data, we carried out guided interviews with BM stakeholders at top management, middle management and project management levels. The sample included 34 interviewees from 29 organizations operating in the following industries: insurance, banking, logistics, IT provision, telecommunications, energy and the retail market. Our selection of cases represents a convenience sample, because only a limited number of the companies we had access to actually applied BM practices. To qualify as a participant, a company needed to have benefits identification practices in place. Applying the logic of theoretical replication (Benbasat et al. 1987; Yin 2002), we emphasized variation over replication to obtain results from a variety of different settings.

In order to strengthen the internal validity of our research, existing literature – especially the Cranfield BM process model (Ward et al. 1996) – was used to form a priori constructs. These were used to develop the interview guide, frame our questions and structure our interview protocols (Weston et al. 2001). Based on the results of a pilot test with practitioners, we made small adjustment to the initial interview guide. The final interview consisted of 23 open-ended questions supplemented by ones that could be beneficially pursued during the interview, for example, if the interviewees' answers were not satisfactory. In order to take advantage of emergent themes and unique case features (Eisenhardt 1989b), we steered the interview according to the interviewee's answers. All interviews were conducted face-to-face, audiotaped, transcribed and approved by the interviewees. Generally, two investigators conducted each interview, which ranged between 60 and 90 minutes.

The interview began by asking the interviewees how benefits were defined within their particular organization. The interviewees were then asked to describe how benefits were evaluated, planned, realized and controlled. Furthermore, we asked them how satisfied they were with each of the benefits' life-cycle steps. When we knew how BM was carried out, we asked what the BM activities' objectives were in order to understand the 'why'. These real-life data allowed us to understand the complex and ubiquitous interactions between investments in IS/IT, the activities carried out to manage benefits, and the impact of these activities on the organization. All the material we gathered through the interviews was collected in a case study database and analyzed by two of the authors.

3.3 Data analysis

Data analysis was undertaken in two phases. First, we carried out a within-case analysis, using a content analysis technique that enables the analysis of open-ended data. The bottom-up development of the coding scheme by two researchers ensured a higher degree of reliability. While developing the coding scheme, we frequently carried our coding checks to develop a shared concept (Weston et al. 2001). Basic coding dimensions (construct types) included: (1) *benefits management resources* such as process models, methods, policies and tools; (2) *benefits management competencies* such as identifying and evaluating benefits, planning benefits realization and carrying out benefits realization; and (3) *contextual factors* that promote the development of competencies like management support. We relied on process theory (Langley 1999; Pentland 1999) to analyze the cases, and on guidelines for case-based theory building (Eisenhardt 1989b; Eisenhardt 1991).

Through a cross-case analysis, we attempted to execute a detailed search to identify the similarities and differences between the cases. This approach enabled us to identify patterns that were subsequently included in our BM success framework. The cases thus helped us to gradually identify the framework's constituent elements. On the whole, each case refined our understanding of these constituents, while individual case transcripts contained the narratives that showed the underlying mechanisms of how BM can be successfully applied.

4 FIELD STUDY RESULTS

4.1 Benefits Management Resources

Adopting a resource-based perspective, we argued that BM resources increase the organization's capability to exploit IT/IS resources. Throughout our field study, we came across three basic types of BM resources: (1) resources supporting benefits identification, evaluation and measurement (*benefits measurement resources*), (2) resources supporting *benefits realization planning*, and (3) resources supporting *benefits implementation*. These resources are described in more detail below.

The most fundamental BM resources utilized by organizations affect the way in which a firm *identifies, evaluates* and *measures* IT/IS investments' benefits. These resources are found in almost every organization, but their characteristics differ from case to case. Most organizations have, for example, developed some sort of benefits classification scheme to classify the benefits expected from IS/IT investments for evaluation purposes. Many organizations thereby differentiate between tangible and intangible benefits – a practice that is supported in the literature (Irani 2002). On the one hand, our sample included organizations that only account for monetary (tangible) benefits in terms of cost savings, such as a firm in the financial sector. On the other hand, we found that a logistics company's internal IT provider undertook a more differentiated classification of benefits. This firm evaluates benefits in terms of (1) cost savings, (2) quality improvements according to standards such as CMMI, ITIL or ISO, and (3) efficiency improvements, for example, the number and duration of calls within a call centre.

In order to evaluate and measure the benefits of IT/IS investments, we identified various evaluation methods for IS/IT investments that serve as resources. Organizations that mostly account for monetary benefits have established drafts to apply analytical evaluation methods (Stone 1990), such as return on investment (ROI) calculations used by an insurance company or modified internal rate of return (MIRR) used by an internal IT provider of a logistics company. In contrast, in organizations that do not capture benefits by financial measures alone, there is an increasing interest in interpretive methods. Balanced scorecard methods (BSC) (Martinsons et al. 1999) are especially suitable to this end and are already being used, for example, by an IT provision company to account for tangible as well as intangible benefits.

Regarding the need for further research on benefits measurement resources, there is an obvious lack of resources in terms of methods for capturing qualitative (intangible) benefits, as we observed that: "Especially where strategic goals have to be achieved, benefits are too complex and cannot only be captured monetarily". Despite academic literature that aims to close this gap focussing on various interpretive methods – such as critical success factors and other subjective, multi-objective, multi-criteria methods – practitioners still do not regard these as suited to their needs according to our interviews.

Benefits measurement resources are complemented by resources that support *benefits planning*. Generally, every organization already uses some sort of planning, for example, strategic planning, which has been of primary interest to practitioners and academics for many years. However, it has become obvious in our interview study that only a few organizations have to date established resources to support the planning of benefits. One interviewee stated, for example, that benefits planning is not accounted for as his organization "implies that benefits will be realized once the IS/IT has been implemented, although the management knows that this is often not the case". BM literature has already described several methods of benefits planning, among them the benefits dependency network (BDN) (Ward and Daniel 2006). The BDN is designed to link the investment objectives and their benefits to the changes required in the organization and, finally, to the changes in IS/IT. As the authors (Ward and Daniel 2006) have noted, BDNs tend to become very large and complex in real-life projects. This, combined with the lack of literature on the method, led us to assume that complexity was the reason for BDNs not having been established in any of the organizations within our sample.

Another valuable resource for the planning of benefits realization is the so-called benefits realization plan (BRP), which should form an integral part of the project plan. Whereas the project plan details the activities needed to implement IS/IT changes, BRP includes the activities, interdependencies, timing and responsibilities required to implement business and organizational changes in order to realize benefits. However, we found this resource established in only one case; most of the organizations only focused on implementing the technology "in time and in budget". Lastly, methods for stakeholder analysis are another example of resources for the planning of benefits realization. One of the techniques, as suggested by Ward and Daniel (2006), includes dividing stakeholders into six groups according to their attitude towards the change project (opposing, persuadable, supportive) and their importance to the project's success (low, high). This analysis helps to align the interests of all stakeholders to account for compulsory activities in the BRP.

Complementary to the above outlined resources are *benefits implementation* resources. For the most part, this resource refers to how the organization deploys the benefits attributed to IS/IT investments. Although we found agreement during the cross case analysis that the business department was the one responsible for benefits implementation, benefits implementation resources must be established throughout the organization, including business and IT departments. We found that most organizations have already come to understand that "successful project completion in terms of time, budget and quality does not necessarily lead to successful benefits realization" as a project manager stated. However, hardly any of the organization in the sample had established resources to actively realize the benefits attributed to the IS/IT investment.

There is still a lack of academic literature on the methods of *benefits implementation*. However, we believe that common resources used for IS/IT implementation could be extended for the purpose of benefits implementation. For example, reporting and control must be extended in such a way as to include the benefits dimension. In addition, the CIO of a logistics company suggested that "audits frequently carried out to control project progress should also focus on benefits and not only on time, budget and technological issues". According to many interviewees, the most challenging resource to acquire for benefits implementation would be appropriate personnel with sufficient technological and business know-how to implement IS/IT and organizational changes, and with sufficient social skills to ensure that the stakeholders are continuously involved. In this regard, existing literature identifies resources like management skills as a critical factor that drives various BM competencies. For

example Turner and Müller (Turner and Mülller 2005) suggest that different leadership styles are appropriate for different BM competencies.

4.2 Contextual Factors

Besides BM-related resources, our study revealed that certain contextual factors are crucial for BM to ultimately contribute to better IS/IT exploitation. In this regard, it makes a major contribution towards the existing literature on BM. The relevance of the following contextual factors is outlined below: (1) business IT alignment, (2) management process integration, and (3) top management support.

It has been argued that what distinguishes organizations with high-performing IT departments from others is not technical wizardry, but the way they manage their IT activities. The notion that achieving high performance from IT is not just about developing and managing systems, but is about an organization-wide activity that requires a strong partnership between business and IT, is gaining widespread acceptance in the literature (Peppard and Ward 1999). It is therefore generally accepted that one of the key factors for successful IS planning is the close linkage of IS and business strategies (Segars and Grover 1999). In practice, this relationship is often poor because there is a significant "gap" (Peppard and Ward 1999) or lack of alignment between the IT department and the rest of the organization. It has been argued that this is the reason why many businesses fail to realize benefits from investments in IS/IT. This view is further acknowledged by Peppard and Ward (1999), who mention that IT success depends upon an effective relationship between business managers and IS managers, and that the principal responsibility of realizing benefits and delivering value from IT investments lies in the hands of the former. Consistent with this argument, we suggest that the development of strong business/IT relationships enable organizations to realize benefits from IS/IT investments. This perception is supported by our interview study's results. There was consensus among the interviewees that the goal of the IT department is to generate value for the business, and therefore IT has to be aligned with the business function. The main question when evaluating IS/IT investments should be, in the words of one interviewee: "How can the IS/IT support business processes?" In order to do so, another interviewee stated that "the IT organization has to understand the business processes in order to realize benefits successfully." Thus, we can conclude that IS/IT itself does not bring any benefits, but that it would do so if it was aligned with the business.

In addition to business/IT alignment, we argue that BM must be *integrated into management processes* in order to unfold to its full potential. By management processes, we mean personnel management processes that align the often divergent goals and interests of all the parties involved. The principal-agent theory explains this inefficiency in relationships and implies that it is caused by a fundamental misalignment between the principal and agent's goals and interests (Eisenhardt 1989a). This theory further suggests solving the problem by designing contracts in the form of incentives to realign the parties' interests. Thus, actions regarded as optimal by the principal would also maximize the agent's interests. In this way, organizations can achieve higher levels of benefits by ensuring that their employees' rewards are based on their benefits realization.

We argue that only if such reward systems accompany BM can the latter realize its full potential. The following statement from an interviewee shows the difficulty organizations currently face: "Benefits are not controlled ex post. Thus, the project valuation ex ante is not carried out carefully." Earlier studies have also revealed a lack of post-implementation reviews (Peppard et al. 2007). Thus, it is not surprising that interviewees consistently regarded the inclusion of benefits realization in agreements on management objectives as a key success factor.

The importance of *top management support* for IS/IT systems' success has been discussed and acknowledged in the literature for a long time. Furthermore, researchers have claimed that the successful implementation and realization of IS benefits depend on the executive management's active and informed participation. In the 1980s, this claim received further support from numerous authors. For example, Nath (1989) mentioned that upper management's involvement may be a critical factor in determining the success of IS management. Other researchers came to a similar conclusion, noting that

organizations where the CEO was involved in the management of IT were more progressive in realizing benefits and generating value from IS/IT investments (Jarvenpaa and Ives 1991). Thus, top management should approve the IS/IT project manager's initiatives, thus indicating the importance of IS/IT investments to line management, and providing a general business direction that will ensure that operational managers take responsibility for delivering the anticipated benefits. Beath (1991) also supports this view, stating that top managers are crucial to the successful implementation of IS/IT, because of their ability to bring about organizational change – a prerequisite for generating benefits from IT investments. This perception was shared by our interviewees: they consistently cited top management's support as a critical success factor for successful BM.

4.3 Benefits Management Capability

Extending the classical notion of organizational capabilities, an organization's BM capability is defined as its ability to utilize organizational resources for the purposes of realizing superior value from IS/IT investments. This argument is similar to that of Bharadway (2000), who defines IT capabilities in much the same way. Capabilities may further be understood as a set of coherent competencies, which is the notion underlying this article. In our field study, we observed three basic competency patterns that organizations usually develop sequentially: (1) the *benefits measurement competency*, (2) the *benefits planning competency*, and (3) the *benefits implementation competency*. These are discussed in detail below.

Overall, the results of our interview study led to the conclusion that the *benefits measurement competency* is present in almost every organization, thus forming the first stage within the BM capabilities framework. We therefore define benefits measurement competencies as a firm's ability and knowledge to use and combine a set of BM measurement resources (e.g., benefits classification and evaluation methods) in order to improve that firm's capability to identify the right benefits and evaluate them realistically. This then leads to superior transparency regarding the anticipated (ex-ante) and realized (ex-post) benefits of IS/IT investments, so that project approval is not only based on estimated costs, but also on estimated benefits.

The results of our study show that most organizations began to appreciate the positive effects of benefits measurement competency. One organization, for example, did not have any competency in capturing benefits consistently throughout the organization until as recently as 2008. Until then, the project managers in the firm evaluated benefits based on individual, non-standardized measures. Consequently, the evaluation was very subjective. Transparency was relatively low and did not allow any comparison between IS/IT investments. The lack of transparency also led to the ineffective control and tracking of the firm's benefits realization status. Recently, the organization has created a predefined set of quantitative as well as qualitative benefits categories against which each project has to be evaluated and has also set guidelines regarding who should be involved in these evaluations. Consequently, the competency to use these resources effectively has improved tremendously, as has transparency regarding benefits. The benefits of each project can now be compared and all the relevant stakeholders are involved in the evaluation process. As a result, the organization could establish a sound basis for project approval decisions. The interviewees considered this valuable and, more specifically, the organization felt more confident that it would be able to make the right decision during the project approval decision-making process.

We can also confirm that organizations are facing difficulties when evaluating qualitative benefits, as was recognized in earlier studies (Kanungo et al. 1999). Besides a lack of resources for the evaluation of qualitative benefits, most organizations have not yet established adequate competencies for evaluations of this nature. Many interviewees therefore acknowledged that there was ample room for improvement with regard to the evaluation of qualitative benefits.

We argue that, following the development of a benefits measurement competency, most organizations then develop a *benefits planning competency*. We therefore define benefits planning competency as a firm's ability and knowledge to use and combine a set of benefits planning resources so that its

capability to exploit IT/IS resources is improved. Our study revealed that, in order to outline and plan benefits realization, organizations need to understand the causal relationship between IS/IT investments, resultant changes within the organization (e.g., processes), and measurable benefits (Ward and Elvin 1999). This is a prerequisite for developing a benefits dependency network (BDN). The internal IT provider of an insurance company, for example, knows which monetary benefits must be realized, but does not understand how the IS/IT investment relates to these benefits. Such a myopic evaluation may be of value when deciding whether the costs justify the benefits, but does not provide a basis for the successful planning of benefits realization. On the other hand, one of the other organizations not only evaluates benefits in monetary terms, but outlines verbally how the IS/IT investments result in benefits. In this case, the benefits planning competency was much higher and organizational as well as business changes were successfully accounted for.

In line with Premkumar and King (1994), we also argue that an excellent planning process may not provide the desired outcomes, unless it is followed by suitable implementation activities. These authors (1994) even found the lack of implementation plans to be a problem associated with the realization, and argue that a suitable mechanism must be instituted to facilitate implementation. Besides logically reasoning that implementation follows planning, our interview study supported *benefits implementation competency* as the last stage within the overall construct of BM capability. We therefore define benefits implementation competency as a firm's ability to and knowledge of using and combining a set of benefits implementation resources to improve its ability to exploit IT/IS resources. One organization, for example, used its documentation and knowledge of IS/IT changes to undergo training to allow the changeover from the old to the new system to be as efficient as possible, and to enable the firm to better profit from the new technology. In this case, we saw the positive effects of the success of benefits implementation, because resistance from users was perceived to be considerably lower than in the many cases where there had been no training.

The sets of competencies we identified are largely in line with previous research. Ward et al. (2007) identified the following five practices as essential for BM: (1) transferral of lessons learned, (2) evaluation and review of organizational change, (3) development of benefits delivery plans, (4) evaluation and review of benefits delivery plans, and (5) development of organizational change plans. Also, as mentioned earlier, Peppard et al. (2000) maintain that BM capability comprises three distinctive practices: (1) benefits identification, (2) benefits planning and (3) benefits delivery. Based on their research on improving the impact of IT development projects, Ashurst et al. (2008) came to the conclusion that an enterprise-wide benefits realization capability is needed if organizations want to generate value and successfully implement IS/IT.

5 BENEFITS MANAGEMENT SUCCESS FRAMEWORK

The purpose of this study was to draw on the resource-based view of the firm to explicate the relationship between BM resources and establishing these resources successfully throughout the organization. We evaluated the theory as well as the empirical findings of an exploratory interview study and recognized that organizations establish BM resources for various reasons. Among the positive impacts are increased competencies regarding benefits measurement, benefits planning and, ultimately, benefits implementation. For the same reasons, organizations align their IT with the business and integrate BM in management processes. Furthermore, the need for top management support was accepted as important to realize BM's full potential.

We thus argue that a framework for measuring the success of BM should consist of three dimensions that together explain how BM generates value from IS/IT investments: (1) benefits management resources, (2) benefits management capability, and (3) contextual factors. Figure 2 depicts the BM success framework and illustrates the link between these three dimensions.

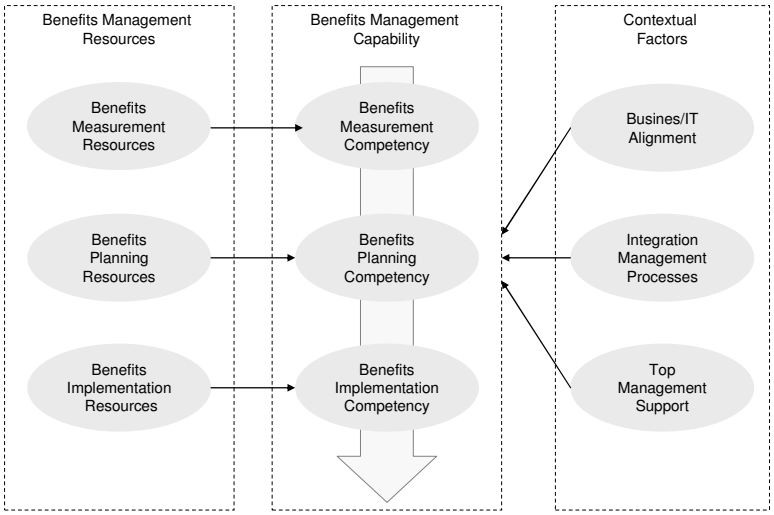

Figure 2. Benefits management success framework

6 CONCLUSIONS, LIMITATIONS AND OUTLOOK

The exploratory field study was carried out as an integral part of an ongoing research programme to understand how BM helps organizations to exploit the benefits of IS/IT investments. It elicited responses from 34 interviews to a list of open-ended questions about BM resources, capability and critical success factors. All interviewees consistently acknowledged the importance of BM, but also mentioned the immaturity of this field in practice. Very few organizations have established a comprehensive BM approach to ensure that benefits from IS/IT investments are actually realized.

This study contributes to the body of BM literature by linking BM and resource-based theory (RBT), showing that RBT is an adequate basis for the BM framework. One of the major contributions of our research is the identification of contextual factors and the provision of empirical evidence that these contextual factors play a critical role in enhancing BM capability. In addition, we analyzed BM success at the organizational level, whereas former studies have often focused on the project as a unit of analysis.

Research conducted to date still lacks empirical evidence of BM success. The framework presented in this study is a first step towards closing this gap. First, we were able to identify the competencies that constitute a high BM capability, namely the benefits measurement competency, the benefits planning competency and the benefits realization competency. We also showed that organizations develop these competencies in sequential stages. Second, we identified three BM resources needed to realize the benefits from IS/IT investments: the benefits measurement resources, the benefits planning resources, and the benefits realization resources. Finally, we showed that only the combination of BM resources, BM competencies and contextual factors contributes to better IT/IS exploitation.

The framework we presented in the previous section provides practitioners with a basic guideline on how to improve BM capability further in order to ultimately achieve benefits implementation. Organizations not only have to establish BM resources and capabilities within the organization, but they also have to continuously foster the development of these resources and capabilities. Furthermore, our results show that contextual factors, for example, business/IT alignment, integration into management processes and top management support must also be taken into account if organizations want to exploit the benefits from IS/IT investments.

While our research has provided strong support for the existence of the proposed relationships, further research should attempt to confirm the existence of the BM resources and capabilities, and the contextual factors and their relationships. We examined a rather large sample, but still lack negative

cases where endeavours to establish BM actually failed. In this study, we did not have a single case where benefits have not been identified and evaluated in some form. Another limitation of the present study lies in the relative BM immaturity of the organizations observed. Although we are confident that our initial stages of competency development are stable and reflect reality with a significant level of validity, there is the risk that the later stages may be less valid, because only a few organizations have already reached this level of capability. However, we believe that, as a whole, the BM framework is an important step towards consolidating our knowledge on how benefits are realized.

As part of the next stage of the research programme, the framework will be tested empirically. This will involve developing a measurement model for each of the variables. This poses a great challenge. In its current version, the framework is a combined process and variance model (Seddon 1997), which makes it difficult to create a measurement model to carry out confirmatory research. In a parallel process, we will attempt to develop a BM implementation model that could provide practitioners with guidance on how to implement BM within an organization. Nevertheless, there is considerable scope for further research on BM that would be beneficial to many organizations struggling to realize the benefits of IS/IT investments.

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