WHERE ARE WE HEADED WITH BENEFITS MANAGEMENT RESEARCH? CURRENT SHORTCOMINGS AND AVENUES FOR FUTURE RESEARCH

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Complete Research

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Abstract

In 1996, the Cranfield benefits management (BM) process model was developed as a response to organizations’ dissatisfaction with the results of information systems and information technology (IS/IT) projects. In contrast with traditional project management dimensions, such as time, cost, and quality, BM emphasizes the need to identify, plan, realize, and review benefits, particularly by means of business changes. The extant literature presents several BM frameworks and methods, signaling its character as an evolving discipline. Despite this progress in research, most studies still report dissatisfyingly low BM adoption rates in practice. We aim to understand why BM is still rarely used in practice by classifying the literature with a multi-perspective framework. We find the BM literature rather unbalanced, as studies on how to conduct BM are common, but papers that investigate concepts such as the adoption/usage and context of BM in organizations are highly underrepresented. We conclude that the BM discipline still has open fields and white spots, and needs to gradually change direction.

Keywords: benefits management, adoption, organizational change, literature review
1 Introduction

Motivated by the low success rates of information systems / information technology (IS/IT) projects, the effective management of such projects and, consequently, their contribution to business value, has been a vital field in IS research for several years. While early research concentrated on investigating IS success (DeLone and McLean, 1992), and executing and finishing projects with the ex-ante specified cost, time, and scope constraints, the evaluation of IS/IT investments regarding delivering the anticipated IS/IT value was neglected. Practitioners, as well as researchers, have realized the need for management concepts that function parallel to project management, but aim to deliver project benefits (not just the immediate project results) that will support long-term organizational goals. For instance, past research has facilitated the task of selecting, implementing, and deploying a customer relationship management (CRM) system in the form of a project. But it is still comparatively difficult to realize the associated benefits, such as increasing sales and customer satisfaction, with this technology. In this context, benefits management (BM) has evolved over the past two decades as an independent research discipline that investigates the successful realization of IT project benefits (Ward et al., 1996). It emphasizes organizational change as an important prerequisite for realizing benefits from IS/IT investments, and is defined as “organizing and managing IS/IT initiatives so that potential benefits arising from the use of IT are actually realized” (Ward et al., 1996).

When analyzing studies and reports published since 1996, which consistently find BM to be a highly effective management approach, it seems surprising that researchers generally still find the BM adoption rate to be very low (Braun et al., 2010; Lin et al., 2004; Päivärinta and Dertz, 2008; Ward et al., 2007; Ward et al., 1996). Unfortunately, research to date, particularly explanations from BM theory, provides little help in understanding these low adoption rates. This might be because the available empirical studies only focus on BM’s methodological aspects such as the processes, methods, and tools (Flak and Solli-Sæther, 2013; Päivärinta and Dertz, 2008). Detailed insights, reports, and explanations that attempt to study other perspectives on BM are rare. Consequently, elements that might enable the diffusion and adoption of BM practices, such as employee needs and concerns, governance mechanisms, and organizational culture, are mostly underrepresented in research (Päivärinta and Dertz, 2008). A holistic approach is necessary to understand the problem of low adoption in practice. Even though the BM methodology might be sound and effective, its potential advantages might never be realized if it is not aligned to the organizational environment and employees’ needs. This might result in this management concept being branded a failure and dropped. Drawing on organizational change research, we propose that BM adoption should be studied from multiple perspectives in order to understand the phenomenon at hand (Leavitt and Bahrami, 1988).

Overall, we are concerned about the current research situation, which is highly relevant for the future progress of BM. We see a need to analyze the BM literature holistically, in order to reveal the imbalances in research interests, and identify areas where our understanding is still inadequate. The revelations as a result of a thorough literature review might help shift future research efforts to areas that will help improve BM adoption and its success rate. The research goal of the underlying study is to take stock, consolidate past findings, and to identify white spots, i.e. topics of interest for BM that have been neglected, but are critical for the successful evolution of this management discipline. For this purpose, we first adapt an analysis framework for organizational change to the BM characteristics, which are a humanistic, technical, control, and an organizational perspective. We then search for BM-related publications in journals and conferences, as proposed by Webster and Watson (2002), assign them to the dimension on which they focus, thereby building clusters of researched topics. In the next step, we analyze the content of the publications to identify what has been done, in order to formulate recommendations for future research. In doing so, we offer researchers the big picture and ideas for future research, and ways in which they can contribute to the development of the BM field. Practitioners can apply our analysis framework as a holistic lens to locate the potential for
improvement in their BM implementation, and make use of the insights that our state of the art analysis provides.

The paper is organized as follows: Section 2 provides an overview of our theoretical foundation, forming the bases of BM. Afterwards, we build our analysis framework and delineate the literature review process by describing our data collection and analysis. This is followed by the presentation of our descriptive and concept-centric results. In Section 5, we discuss our results and future research opportunities, while Section 6 includes the conclusion and our study’s limitations.

2 Theoretical foundation

Research on BM began in the mid-1990s with an empirical study on industry practices in the UK, in which Ward et al. (1996) define BM as “the process of organizing and managing such that potential benefits arising from the use of IT are actually realized.” According to this initial study, many organizations were dissatisfied with the available methods for realizing benefits. Subsequently, the authors presented the Cranfield BM process model as a means of overcoming this. This process model remains one of the most widely used and cited models in the BM research field. It outlines the scope and nature of BM in five stages: (1) identifying and structuring benefits, (2) planning benefits realization, (3) executing the benefits realization plan, (4) evaluating and reviewing the results, and (5) discovering potentials for further benefits. In stage one, the benefits are identified, appropriate measures are derived, and the linkages between an IS/IT investment and the business changes required to realize the anticipated benefits concluded. The subsequent benefits realization’s planning covers the allocation of responsibilities and the assessment and planning of the respective changes. In stage three, the appropriate business changes are conducted, along with the preceding IS/IT implementation. After the results’ evaluation and review, a comparison of before and after measures is undertaken to assess the degree of achieved benefits realization. In the last stage, further unanticipated benefits are planned and realized, while new experiences are documented for future projects (Ward et al., 1996). Tools, such as the benefits dependency network (BDN), have been developed for BM (Peppard et al., 2007; Ward and Daniel, 2006). The BDN is used to link the overall investment objectives and the required benefits (the ends) with the necessary business changes (the ways) and the essential IT capabilities (the means) that enable these changes.

Despite these advances, BM is comparatively new in practice. It is therefore not surprising that only a few organizations have methodological standards in place to realize the benefits from IS/IT investments. In 2007, the results were presented of other research that built on the UK study. Although the adoption of BM had increased from 12% to 25% in the participating organizations, it was still immature (Ward et al., 2007). Consequently, a number of researchers decided to investigate the critical BM elements that facilitate its adoption in practice (Paivarinta et al., 2007). Despite previous research endeavors (Ashurst et al., 2008; Baccarini and Bateup, 2008; Peppard et al., 2007; Remenyi and Sherwood-Smith, 1998; Ward et al., 1996), BM research can still be described as an evolving discipline. In 2009, a literature review (Braun et al., 2009) identified only 74 research papers as highly relevant for BM (60 journal articles and 14 conference papers). Of these, only nine articles focused on the BM process itself, while the remaining 65 dealt with only one of the phases of the Cranfield BM process model. To date, most research has either been qualitative (Flak et al., 2008; Hellang et al., 2012; Peppard et al., 2007; Remenyi and Sherwood-Smith, 1998), or theory analyses and explanations (Gregor, 2006).

Some research in the BM field has drawn on the resource-based view (RBV) to address the question of how an organization can increase the likelihood that its IS/IT investments’ projected benefits will ultimately be realized (Ashurst et al., 2008). The resource-based view (Acedo et al., 2006; Barney, 1991; Coff, 1997; Mata et al., 1995; Priem and Butler, 2001) postulates that an organization’s internal resources are predictors of the economic situation. It recognizes that an organization’s resource
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position should be considered when strategic options are examined, in order to create a competitive advantage (Wernerfelt, 1984): Applying the RBT to the general understanding of how organizations can optimize the benefits of IS investments, one can argue that IS investment does not as such provide any sustained advantage (Bharadwaj, 2000), nor does it have any inherent value (Peppard et al., 2007). True value is not created by the mere possession of the IS resource, but rather by an organization’s ability to activate and exploit this resource (Ashurst et al., 2008). In this context, researchers also refer to “value conversion contingencies” (Davern and Kauffman, 2000), “conversion effectiveness” (Weill, 1992), and “benefits realization capability” (Ashurst et al., 2008), which organizations can use to transform IS resources into actual benefits. Ashurst et al. (2008) developed a benefits realization capability model that is enacted through a coherent set of benefits realization competencies. Each competence is underpinned by a closely related suite of benefits realization practices.

By critically examining past research efforts, we conclude that while considerable progress has been made, this has primarily been in the field of developing the BM frameworks, methods, and techniques. The actual adoption and use of such methods, particularly from a user’s perspective, have been neglected. In addition, complementary contextual factors (e.g., organization size, industry, and IS/IT project characteristics) and governance mechanisms also only received minor attention. This is a critical issue, as no matter how effective and efficient the BM methodology is, it will be of no use if employees, who are expected to use and apply such practices, do not really embrace and adopt them.

3 Research methodology

3.1 Analysis framework

In their BM literature review in 2009, Braun et al. only found nine articles that focused on the whole BM process framework, while the remaining findings were limited to single phases of the Cranfield BM process model. However, since Braun et al. (2009) only focused on the BM process and its stages (a technical perspective), its scope is too narrow. In contrast, we illuminate the BM body of knowledge holistically from a set of different perspectives that aim to cover the aspects that are relevant for its adoption. Furthermore, as we take a broader time frame, as well as more outlets, into consideration, we have found significantly more publications on benefits management itself, especially in conference proceedings. Therefore, we extend the scope by adding humanistic, control, and organizational perspectives, as well as by explaining the development of our analysis framework below.

Several authors have stressed that adopting BM means conducting organizational change. In his research commentary, Earl (1992) emphasizes that realizing benefits requires changing business. In other words, things need to be done differently (Ward et al., 1996). This is an insight that is also found in recent literature, as Doherty et al. (2012) also stress that organizational change is needed for successful BM. To examine the organizational change from relevant perspectives, we draw on the Leavitt and Bahrami (1988) framework for our analysis. They find that any organizational change must account for four interwoven dimensions: people, business structure, technology, and control mechanisms. We adapt the framework, which is relevant for our research purpose, keeping in mind BM’s specific characteristics. In line with Leavitt and Bahrami (1988), we stress that our dimensions are tightly interwoven, and therefore mutually affect the success of BM adoption. Figure 1 illustrates our final framework of analysis.
**Technical perspective:** As BM aims to realize the benefits of an IS/IT investment by implementing change in the particular business environment, its systematic process steps are highly relevant for the endeavor’s success. If the BM methodology and its elements are not coherent, it becomes less effective in achieving the goal of realizing IT/IS value. Therefore, considering BM adoption from a technical perspective, we examine frameworks and methods that are expected to enable successful benefits management.

**Humanistic perspective:** A prerequisite for BM adoption is the actual users’, i.e. employees, acceptance and proper use of BM. Studies on methodology acceptance have found that users’ low acceptance rate decreases its potential benefits. This decrease in benefits is due to management practice not addressing the concerns, fears, desires, wishes, and needs of the employees affected by the methodology, which leads to user resistance, which may in turn hamper its intended execution (Mohan et al., 2012). Consequently, when implementing and executing BM, the needs of its users have to be taken into consideration. This leads us to our second dimension – BM user.

**Control perspective:** We propose BM governance as another meaningful dimension, which is required to monitor and control BM adoption. The conduction of BM needs to take the roles, responsibilities, and control mechanisms into account as vital parts (Ward and Daniel, 2006). As business becomes more involved with an IS/IT project as a central part of benefits realization (Earl, 1992; Ward et al., 1996), the prior standards and guidelines in most organizations might be violated. BM should be assessed from a control perspective by establishing clear guidelines for better steering, in order to monitor and prevent resistance early on.

**Organizational perspective:** Successful BM adoption needs to account for the prevalent organizational context that shapes its organizational culture, IS/IT projects, departmental collaboration, etc. Companies exist in a dynamic, competitive environment that essentially influences its capabilities, competencies, and corporate structures (Wade and Hulland, 2004). For an appropriate adoption, BM needs to account for these capabilities and structures by being adapted appropriately. If particular capabilities and supporting structures are not available, successful BM adoption might not occur (Ahlemann et al., 2013; Peppard et al., 2007). Thus, we propose that the organization itself, with its environment and culture, influences BM practices strongly. We label this BM context.
3.2 Data collection

Because benefits management is a rather young discipline, papers on the topic of interest do not always use the term “benefits management” (related terms, like benefits realization, value management etc. are often used), making the identification of relevant publications difficult. Consequently, we had to use a wide range of search keywords, e.g., ‘benefits management,’ ‘managing benefits,’ ‘manage benefits,’ ‘benefits realization,’ ‘realizing benefits,’ ‘value management,’ ‘managing value,’ ‘value realization,’ ‘realizing value,’ ‘realize value,’ etc. as well as analyze the content (title, abstract, key words, and, if possible, the full text) of the publications found in depth. Furthermore, we decided not only to search in the top journals of the basket of eight, but also in lower ranked journals, as well as conferences, to ensure a broad range of outlets. We searched for articles published between 1990 and 2013, to ensure that we identified all relevant articles on BM from its emergence until today. In line with Webster and Watson (2002), we went back and forth, scanning the references of key articles, which we considered highly relevant, to find articles that had not been identified in the first search cycle. Pure practitioner-oriented publications, such as magazine articles or white papers, were omitted from our data collection if they did not fulfill basic scientific standards (e.g., the review process) in terms of validity and reliability.

We examined journals in the EBSCO database. Furthermore, due to the rather young nature of BM, we searched in the following established conference proceedings: Americas Conference on Information Systems (AMCIS), International Conference on Information Systems (ICIS), Australasian Conference on Information Systems (ACIS), Pacific Asia Conference on Information Systems (PACIS), European Conference on Information Systems (ECIS), Internationale Tagung Wirtschaftsinformatik (WI), and Hawaii International Conference on Systems Sciences (HICSS).

Altogether, our search revealed 59 articles, of which we classified 42 as relevant after a detailed content analysis. 17 papers were not regarded relevant for our study, and consequently dropped, as their emphasis was not mainly on the BM concept itself, or they only dealt with BM-related tools or techniques (e.g., IS/IT investment evaluation or benefit calculation). Furthermore, some articles were published in a revised and extended version in different outlets, so that we only included the original one.

3.3 Data analysis

In order to conduct a systematic categorization and description of the selected literature, we subjected the 42 papers to a classification framework based on our multidimensional analysis framework, as well as on recommendations by Palvia et al. (2003) and Palvia et al. (2004). We added additional sub-categories (e.g., the theoretical foundations), which were adopted in the process of working with the articles, to ensure that all relevant aspects of our research were covered. We studied the content of each publication to classify the entire pool of papers on the basis of our classification frameworks in terms of the following dimensions: the object of analysis, theoretical foundation, research type, research method, data collection, and data analysis. Figure 2 provides a complete overview of the literature review framework and its elements.
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From a content-oriented perspective, we identified the research gaps and future research opportunities. In line with Webster and Watson (2002), we structure our literature review concept-centric by categorizing articles according to their topics instead of their authors.

4 Results

4.1 Descriptive analysis

Our literature review shows that research on BM started to evolve in the early 1990s, peaked in 2008 with seven publications and reached a low in 2009. After 2006, the number of publications on BM stabilized, averaging at least three per year (excluding 2009), as represented in Figure 3.
Figure 4: Classification of publications

Figure 4 represents our descriptive analysis’s results after the application of the literature review framework to our pool of papers. In most studies, BM frameworks and methods are the primary unit of analysis, while the BM context is a complementary dimension quite often. BM users are specifically rarely part of any study. To date, most studies lack a theoretical foundation. If they use one, they mostly draw on the RBV. Furthermore, we have found an imbalance in the research types, as qualitative studies have been conducted far more often than quantitative ones. This also explains the high usage of complementary case studies and interview studies. Although surveys are also commonly applied, they are mostly analyzed for descriptive statistics, as inferences based on structural equation modeling (Chin, 1998) are rarely drawn.

4.2 Content analysis

BM Framework and Method

This dimension comprises all studies that examine BM, with its applications and variations in practice, its particular process stages, success factors, and its impact on the organizational success, from a technical viewpoint.

Although a plethora of studies has applied a case study approach to gain empirical insights, they often mention that the investigated organizations have no formal BM process in place, as the following results show. Bennington and Baccarini (2004) examined the BM process by conducting a field study in Australia, in which they provide empirical insights into local BM practices and find that only a few organizations have implemented a formal BM process. They found the same results when conducting a multi case study within construction projects in Western Australia (Baccarini and Bateup, 2008). This finding is also confirmed by other explorative studies on BM practices in the Norwegian public sector. Flak et al. (2008) comment on the limited empirical validation of the prevalent BM. Therefore, to provide rich empirical descriptions of applied BM practices, Flak et al. examined the data of 48 eGovernment projects. They admit that these practices did not follow a formal BM process either, as,
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For example, the facilitation of quantitative benefit estimates and benefit-specific roles were hindered. Similar findings were described by Hellang et al. (2013), who compared six practices of BM in the Norwegian public sector. They found three different approaches to benefits realization emerging in practice, all of which have similarities, but have differ in goals (Hellang et al., 2013). Others have also found that very few organizations in Germany apply a comprehensive approach to BM (Braun et al., 2010).

van Lier and Dohmen (2007) conducted six case studies to investigate the extent to which strategic alignment and BM increase IT outsourcing success, and find a positive relation. However, they stress that none of the case organizations applied a BM approach in a formal sense, instead they applied similar practices which can be characterized as such. Love et al. (2005) also find that medium-sized organizations are often more reluctant to change than smaller one, as in the latter it means less change.

In recent years, a number of authors have investigated BM success and its determinants. Doherty et al. (2012) conducted three case studies with the research objective to investigate factors with a positive effect on BM’s success. Their research results show that successful BM requires a reconstitution of traditional IS project management success factors, like a detailed benefits planning approach, ongoing benefits reviews, and organizational change. Furthermore, they find that coherent governance structures and active business leadership are additional factors. Braun et al. (2010), who applied RBV as a theoretical lens to understand BM success, followed a similar research objective. In 34 interviews, they find that contextual factors play a major role. Mohan et al. (2011) applied the results of a survey of 456 respondents to structural equation modeling and find that particular BM-related competencies, such as analysis, planning, implementation, and review affect its success positively.

**BM User**

In general, our results show that studies on BM users are still scarce. In 2007, Päivärinta et al. (2007) conducted a Delphi study to identify the facilitating issues of BM adoption in Norwegian municipalities. They found 59 issues, which were further ranked according to their importance. One overarching theme in terms of this concept is the importance of BM methods and the tools that employees find easy to use and learn. Furthermore, they found that being able to see the impact of BM methods on everyday work is also considered relevant (Päivärinta et al., 2007). In another article, Päivärinta and Dertz (2008) extend the previous results with a qualitative analysis, providing detailed quotes from the Delphi study, and stressing the relevance of effortless BM methods. Ease of use is therefore considered critical for BM adoption.

One research objective of the survey by Lin et al. (2004) of Taiwanese private organizations, was to investigate the usage of BM methods. They find that BM practices are overall ineffective and seldom used, as only 24.5% of the respondents applied BM. Furthermore, they find a significant correlation between the effective and wide use of BM and the organization’s maturity in terms of its strategy, structure, staff, etc. (Lin et al. 2004).

**BM Governance**

In case studies, several authors have found the definition and communication of clear roles and responsibilities an important factor (Freeman and Seddon, 2004; Ward and Elvin, 1999). Ward and Elvin (1999) find that the roles between business and IS were unclear/inappropriate throughout the projects in three case study, which finally led to many problems, such as rework, significant delays, costs, etc. Therefore, they recommend enabling appropriate benefits ownership, which should be communicated to willing stakeholders and which they should accept to ensure that the business and the IS aspects are balanced in all the required interventions. In their book on BM, Ward and Daniel (2006) describe the roles of a benefits and change owner. While the benefits owner is responsible for ensuring a particular benefit’s achievement, the change owner has to account for the successful achievement of an identified change. It has also been found that inadequate IT governance practices affect benefits realization negatively (Peppard and Ward, 1999; Ward et al., 1996).
Ahlemann et al. (2013) find that appropriate governance mechanisms for distributing benefits accountabilities is an important factor. They describe an accountability framework, which includes mechanisms on how to assign accountabilities to the business and the IT stakeholders. Furthermore, they elaborate on incentive systems linked to individual goals based on benefits realization. Finally, they also recommend integrating BM with strategic planning processes in order to enable the necessary portfolio management, alignment with strategic goals, accountability mechanisms, etc.

Doherty et al. (2012) find that although well-balanced teams and effective governance structures are regarded as important in prior literature, no recommendations are available on how these should be integrated to leverage their effect. They report that, based on their case studies, these teams require aligned goals and proper governance structures that enable cross-departmental collaboration. Ahlemann et al. (2013), who also depict incentive systems as meaningful mechanisms to achieve benefits ownerships and mutual collaboration, make similar recommendations.

BM Context

Several authors have shown that benefits from IS/IT projects can only be realized if an appropriate organizational culture prevails (Peppard et al., 2000; Peppard and Ward, 1999). In his book, Ashurst (2011) elaborates on an appropriate culture and proposes that an open, learning-oriented climate is important, as it allows failures to be communicated and improvements to be recommended to learn from them. This includes policies and practices for HR, which comprise an appropriate definition of performance, career paths fostering participation in leading change projects, and cross-organizational collaboration (Ashurst, 2011). These aspects are in line with Braun et al. (2010), who find that contextual factors, such as business-IS alignment, integration management processes, and top management support, enhance BM success and provide empirical evidence of this. Similarly, other studies have applied SEM, confirming that a tight collaboration between business and IS departments are a prerequisite for successful BM (Mohan et al., 2011). In terms of organizational capabilities, business IS partnership is seen as having a meaningful impact on BM (Peppard, 2001; Peppard et al., 2000).

Flak and Grönlund (2008) conducted a survey in the Norwegian government sector by examining 54 projects selected for a BM approach. They find a strong link between the size of municipalities and their willingness to make an effort to conduct BM, implying that larger municipalities are less deterring. Love et al. (2005) find that IS/IT investments differ greatly across the industry sectors. While Ward and Daniel (2006) regard BM in the public and private sectors as rather similar, Päivarinta and Dertz (2008) see differences in job security and in the organizational culture “which might be more prominent in the public sector.” Overall, several authors have recommended that future research should take the industry sector, company size, reach and scope of the IS/IT investment, etc. into consideration regarding BM practices (Schwabe and Banninger, 2008; Williams and Schubert, 2010). In their study, Eckartz et al. (2012) find that practitioners also wish to deploy a BM method in line with their concrete paradigm and context.

Doherty et al. (2012) recommend tailoring BM to its specific organizational context. Therefore, it should account for each IS/IT project’s uniqueness and, simultaneously, for the dynamic project and investment lifecycle, which can change over time. Several studies, which describe the necessity of adapting benefit taxonomies and methods appropriately to IS/IT projects’ characteristics, support this statement (Freeman and Seddon, 2004). Recently, Doherty (2013) has demonstrated the relation between BM’s principles and techniques and socio-technical approaches.

5 Discussion and future research opportunities

Discussion
Our descriptive analysis’s results allow for a number of inferences. We interpret the increase in publications in recent years as an indication of more interest in the field. The high number of qualitative studies, particularly case studies, also hints at increasing insights from practice. However, many of these case studies were built on project reports in a database, instead of being direct local observations in the field. As most organizations do not have formal BM process applied, the results allow no direct inferences regarding the discipline. Consequently, there is still a considerable demand for in-depth empirical studies and BM method evaluation. The comparably low number of quantitative studies limits the generalizability of the findings to date. As mentioned before, sophisticated statistical methods like SEM are rarely applied. On examining the application results of our analysis framework, several shortcomings emerge in each dimension.

From a technical perspective, our findings confirm that most BM studies were conducted in this area. Several studies investigate BM frameworks and methods in practice, although no formal BM process was applied in most cases. Research on BM success may be seen as another indicator of the growing maturity of this dimension. Sophisticated research on single process stages occurs quite often, especially in related fields, such as IS evaluation and review disciplines. We also find that available BM methods are regarded as too complex and difficult for practitioners to use (Paivarinta et al., 2007).

Guidelines on BM users, i.e. how to adopt BM and which aspects to consider, are quite rare in the literature. The only source that comes close are the guidelines on how to reconceptualize traditional IS project factors to allow them to become BM specific. There are no studies that offer insights on how to introduce BM in an organization from a change management perspective. In particular, there is a lack of statistical analyses on an individual level that reveal the causal relations and their strength. However, the results show that the concept of BM usage has slowly evolved during recent years. While particular authors (Paivarinta et al., 2007) have investigated the facilitation of BM usage/adoption issues, the hitherto applied methodological approaches in this area are unable to examine and provide an in-depth explanation of the phenomenon of interest. We admit that the findings of Paivarinta et al. (2007) have advanced the research, but to gain a deeper understanding of the described issues, more sophisticated research methods need to be applied. While Ward and Daniel (2006) promote the BDN from an academic perspective, an empirical validation is still lacking. In addition, several authors have reported on the additional effort that BM requires from specific stakeholders (Päiväranta and Dertz, 2008). Following the Cranfield BM process model, the identification and planning of benefits involving all relevant stakeholders are already linked to additional efforts for the involved stakeholders. Despite this additional effort and the value of the stakeholder involvement mentioned in prior papers (Flak and Solli-Sæther, 2013; Paivarinta et al., 2007), no study has examined the acceptance or resistance of BM from a humanistic perspective. Keeping these issues in mind, we regard this white spot as very important when planning to implement BM in an organization.

Research on BM governance has already shown some findings and insights from practice. As it is particularly mentioned in recent publications, we see this as an indicator that it is slowly gaining the community’s interest. Keeping in mind the underlying consequences of BM for its stakeholders, it seems necessary to gain insights into and a deep understanding of those governance mechanisms that are necessary to foster BM adoption. As we find in our analysis, general concepts, such as roles, responsibilities, and strategic processes, have already been identified.

Although we list several studies that deal with the BM context, it is often investigated as a complementary topic to BM frameworks and methods. Studies that primarily focus on the BM context are rare. In our analysis, we find that several contextual factors are listed, such as top management support, organizational culture, organizational characteristics (sector, size, industry), and, ultimately, IS/IT project characteristics. However, these remain on a merely descriptive level, presenting the first explorative findings, but seldom in-depth insights and explanations.

Future Research Opportunities
In terms of future research opportunities on BM frameworks and methods, we therefore recommend a stronger focus on applying a formal BM process in the field and collecting its data on site. This might also help enhance the existing BM methods, making them more applicable for practitioners. Therefore, we call for more applied research methods, such as action research, to find reliable data on BM approaches. Applying sophisticated quantitative methods, such as SEM, allows for a better understanding of the interdependencies between the stages and higher generalizability of BM research. In addition, longitudinal studies are another opportunity to study BM’s effect on projects’ success and, subsequently, on an organization’s sustainable competitive advantage.

The BM user dimension requires specific further attention, and we recommend applying more sophisticated instruments, such as SEM and in-depth case studies, to develop the discipline in this direction. Furthermore, since they can be compared to research on technological, or even methodological, acceptance (Mohan et al., 2012), there are several research opportunities that should be addressed in future studies, such as the switching costs, sunk costs, and non-technological characteristics.

In their study of the adaption and usage of management practices, Mohan and Ahlemann (2011) point out that its costs have, to date, not been studied, and depict a potential gap in this research topic. Subsequently, future studies might use the extensive switching costs topology, which Burnham et al. (2003) propose. When investigating BM acceptance on an individual level, a person’s desire to use new BM methodologies might be specifically inhibited by the following switching costs (Burnham et al., 2003): a) economic risk costs are the costs of accepting uncertainty linked with a potential negative outcome when switching to new practices of which the user has insufficient information; b) evaluation costs represent the time and effort costs, which are linked with the search and analysis required to make a decision whether to switch to a new BM methodology; c) learning costs are the costs in terms of time and effort when acquiring new skills or know-how in order to use a BM methodology and tools effectively; and d) personal relationship loss costs represent the affective losses that emerge due to the broken bonds of identification formed with the people with whom the individual user used to interact when using old methods/processes (e.g., new review processes/roles) through increased cross-departmental collaboration and, thereby, changing the way users interact with others.

To acquire a full understanding of the costs’ effect and of the switching costs, sunk costs (i.e., irretrievable expenditures) should also be investigated. Evidence from numerous empirical studies (for an overview, consult Singer and Singer (1986)) confirms that sunk costs cause a decision-making bias known as the sunk-cost fallacy. This bias reflects the tendency in individuals to invest more future resources in a situation in which a prior investment has been made, compared to a similar situation in which a prior investment has not been made. Consequently, sunk costs might hinder individuals in their adoption and usage of new BM methodologies, as they have already invested learning time and effort in the present methodology.

Furthermore, also the effect of non-technological characteristics, which comprise individuals’ personal traits, their self-beliefs, habits and emotions, as well was organizational and national culture in the context of BM usage, have rarely been examined in past studies. In the context of understanding the effect of individual users’ personal characteristics and traits on accepting a new methodology, such as on their needs – as examined by needs theories in, for example, Maslow’s hierarchy of needs (Maslow et al., 1970) and Murray (1938) theory of psychogenic needs, expectancies, age, and gender. Therefore the investigation of needs and, subsequently, needs theories, might unfold new insights into this phenomenon. According to needs theories, individuals are motivated to use a particular methodology by their individual desire to satisfy certain needs. From the many definitions of basic needs, Ryan and Deci’s (2000) fits the topic of BM methodology acceptance best. As they indicate, “a basic need, whether it be a physiological need or a psychological need, is an energizing state that, if satisfied, conduces toward health and well-being but, if not satisfied, contributes to pathology and ill-being” (Ryan and Deci, 2000). This implies that, if BM fails to satisfy an individual user’s basic
needs, it might generate strong discomfort, which consequently leads to the user’s rejection of the BM methodology.

Future research opportunities in the BM governance dimension should opt to gain further understanding of the particular governance mechanisms that are particularly meaningful for facilitating BM’s adoption and usage. In this regard, prescriptive recommendations on how to adapt these appropriately for BM are not yet available. For instance, a multi case study might unfold appropriate practices and identify the practices that are particularly effective.

As the BM context is mostly analyzed on a descriptive layer, we call for further research to examine the contextual factors that provide an understanding about the factors that are pre-determinants of BM adoption, how they work, and why they do so. As partly implemented in a few studies on BM, structural equation modeling can help reveal the cause-effect chains in the BM context.

6 Conclusion and limitations

To conclude, we propose that all four dimensions and their interdependencies need considerable attention in the light of BM adoption. As mentioned in the beginning of this article, even the soundest method may be prevented from reaching its potential if it is not aligned with the organizational environment, users’ needs and supporting governance structures. Similarly, from a humanistic perspective, users will only accept and support BM if they have no fears of and suffer disadvantages from its application. Subsequently, as a BM method requires its users to collaborate cross-departmentally, an open-minded organizational culture is needed, as well as complementary governance mechanisms that support such a collaboration with appropriate goals and incentives. Finally, we want to recommend, besides spending time on examining these dimensions in particular, researchers should seek to understand the interdependencies and mechanisms that have consequences for BM.

From a practitioner’s perspective, the contribution of our research is threefold. First, our analysis framework helps practitioners assess their BM implementation from several perspectives, which might unfold new aspects worth considering to leverage its adoption. Second, by providing a summary of BM’s state of the art, practitioners can discover and apply further practices that were previously not part of their BM implementation. Third, based on our future research opportunities, practitioners can gain an understanding of the direction in which BM is headed and the areas that need to be tackled in the future, which can become part of their agenda.

Despite the contributions it makes, our research has some limitations. We acknowledge that by only considering publications from 1990 onwards, there may be other papers with important concepts and findings relevant for our research but not examined. As BM is a rather young discipline, practitioners and researchers use different terms and concepts, enabling a proliferation of possible keywords. Consequently, our choice of keywords and search strings might have failed to address “buzz words” and unique BM methodology names. In terms of data extraction, we found that some studies did not describe their methods and samples adequately. The extraction process might therefore have resulted in inaccuracy in the data. Furthermore, our categorization might have suffered, and could not always be conducted very satisfactorily because some articles lacked sufficient details about the design and findings. Owing to this, we might have differed in what we actually extracted. There is therefore a possibility that the extraction process may have resulted in some inaccuracy in the data.

Ultimately, BM adoption and success remains a complex and elusive, yet important, phenomenon. Past research has made progress in unraveling some of its mysteries, but we see that there is a backlog of research issues that still need to be addressed. Therefore, as a next step in our research program, we will investigate the phenomenon of BM adoption further by preparing a multi case study that will enable us to gain deeper insights from all four perspectives.
References


