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Dag Øyvind Madsen
Buskerud and Vestfold University College

Tonny Stenheim
BI Norwegian Business School


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The Balanced Scorecard: A review of five research areas

Dag Øivind Madsen
Buskerud and Vestfold University College

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The Balanced Scorecard (BSC) is one of the most influential concepts in accounting and management. The BSC recently celebrated its 20-year anniversary. Since its introduction, the BSC has been the subject of much debate among academics and practitioners. The research literature on the BSC has evolved considerably over the last 20 years. The purpose of this article is to provide an overview of five important areas of BSC research: (1) conceptual evolution (2) adoption and diffusion, (3) implementation and use, (4) performance effects, and (5) critical perspectives. The article discusses current trends and emerging issues in the BSC literature and suggests fruitful areas for further research.

INTRODUCTION

The Balanced Scorecard (BSC) recently celebrated its 20-year anniversary (Hoque, 2012, 2014). Since the BSC was introduced by Robert Kaplan and David Norton (KN) in 1992 (Kaplan & Norton, 1992), it has received considerable attention in the management and business community. The Harvard Business Review has referred to the BSC as one of the most influential management ideas of the last 75 years (Sibbet, 1997: 12). The consulting firm Bain & Company’s biannual survey of management tools and trends consistently ranks the BSC as one of the most widely used tools by managers worldwide (Rigby & Bilodeau, 2009, 2011, 2013). The BSC has also been the subject of much debate in academic circles. In recent years, several literature reviews have been carried out on the extensive BSC research literature (Abdel-Kader, Moufty, & Laitinen, 2011; Banchieri, Planas, & Rebull, 2011; Hoque, 2014). Just in the last few years two special issues of Journal of Accounting and Organizational Change have been devoted to papers on the BSC (Hoque, 2012; Nørreklit & Mitchell, 2014).

Taken together, these review articles, special issues and various other contributions show that the BSC is a highly relevant and timely topic. At the same time, several authors have noted that it can be challenging to define what the BSC really is (Perkins, Grey, & Remmers, 2014; Soderberg, Kalagnanam, Sheehan, & Vaidyanathan, 2011). The BSC concept has evolved considerably over the last 10-15 years (Bible, Kerr, & Zanini, 2006; Braam & Nijssen, 2004; Cooper, Ezzamel, & Qu, 2012). In the same time period, there has been a growth not only in terms of the number of published articles, but also in terms of the areas covered. Today, research on the BSC is not only confined to discipline-based journals in accounting and management, but can also be found in context-specific journals covering hotels and tourism (Palatková, 2015; Sainaghi, Phillips, & Corti, 2013; Vila, Costa, & Rovira, 2010), education (Karathanos & Karathanos, 2005; Sayed, 2013), the health sector (Trotta, Cardamone, Cavallaro, & Mauro, 2012) and the public sector (Dreveton, 2013; Northcott & Taulapapa, 2012).

This article will focus on five research areas which we deem the most essential in the BSC literature. Thus, our intention is not to cover all areas of the BSC literature. The reader should, therefore, consult the aforementioned review articles for more systematic and exhaustive reviews of the BSC literature. In addition, we will not focus on the practitioner-oriented or normative literature on the BSC which focuses on the design and implementation of the BSC. These issues are covered in a number of books on the BSC concept (e.g. Niven, 2005; Olve, Roy, & Wetter, 1999; Olve & Sjostrand, 2006) as well as nearly all textbooks on management accounting and control (e.g. Atkinson, Kaplan, Matsumura, & Young, 2011; Merchant & Van der Stede, 2012).

The article is structured as follows: Section two takes a closer look at the BSC concept’s evolution since 1992, and the most important actors shaping its evolution and trajectory. In section three we look at research on the adoption and diffusion of the BSC in different contexts. In section four we
focus on the implementation and the use of the BSC in practice. Section five discusses the performance effects of adopting and implementing the concept. Section six discusses various critical perspectives on the BSC. The last section summarizes the present state of the research literature and provides some suggestions for future research on the BSC.

THE EVOLUTION OF THE BSC CONCEPT

In this section we discuss (1) how the BSC concept was presented in the 1990s, and (2) how the concept has evolved since the turn of the millenium. As shown, the BSC concept has evolved considerably since its introduction in 1992, and has over time taken up elements and inspirations from other concepts and ideas (Barnabè & Busco, 2012; Bible et al., 2006; Cooper et al., 2012; Kaplan, 2008; Kaplan, 2012).

Pre-2000

The BSC was originally formulated and presented as a multi-dimensional performance measurement system (Kaplan & Norton, 1992). Its main purpose was to provide managers with more and better information for strategic decision-making. The original version of the BSC focused primarily on integrating financial and non-financial performance measures. KN called this a dashboard of different performance measures grouped in four perspectives. However, the narrow focus on performance measurement soon shifted. From the 1996 book by KN (Kaplan & Norton, 1996) onwards, there has been an increasing focus on the link between these measures and the organization’s strategy and the causality between measures and perspectives (Braam & Nijssen, 2004; Bukh & Malmi, 2005; Stemsrudhagen, 2003). Instead of using the dashboard as a metaphor, KN started to use the airplane metaphor, where the managers are seen as pilots using the cockpit’s instrument panel to fly the plane to its destination (Nørreklit & Mitchell, 2007).

Post-2000

Around the turn of the millennium, KN started to discuss the so-called strategy-focused organization (Kaplan & Norton, 2001). They also introduced the term strategy map, which over time has become perhaps the most significant element of the BSC concept. Strategy maps are used to visualize and communicate the strategy to the organization (Kaplan & Norton, 2001; Kaplan & Norton, 2004). The use of such strategy maps are supposed to contribute to better alignment of different parts of the organization (Kaplan & Norton, 2006a).

More recently, KN have suggested that strategy should be a separate function in the organization («the office of strategic management») (Kaplan & Norton, 2005), placing an emphasis on strategy implementation. KN’s most recent book (Execution Premium) revolves around this theme (Kaplan & Norton, 2008). KN have developed the concept from being a rather ‘narrow’ performance measurement system to a ‘broader’ and more holistic management system which can be used to describe, communicate and implement the organization’s strategy (Kaplan, 2008; Kaplan, 2012).

In other words, over the course of the last two decade there has been a considerable shift in the way the BSC is presented in the literature (e.g. KN’s books). Nowadays there is a much stronger emphasis on strategy, while performance measurement has gradually moved into the background. This does not necessarily mean that the current BSC concept is in conflict with prior versions. Performance measurement still plays an important role in the implementation of and the monitoring and control of strategy. The measurement ‘scorecard’ or ‘dashboard’ is still relevant. For example, many organizations use simpler versions of the BSC where the main focus is performance measurement (Madsen, 2014b; Speckbacher, Bischof, & Pfeiffer, 2003).

Who has shaped the BSC’s evolution?

There is a number of actors that have shaped the evolution of the BSC concept, but it is widely recognized that the concept’s originators, KN, have been of particular importance (Cooper et al., 2012; Nørreklit, 2003; Qu, 2004). For example, the magazine The Economist has called the duo «the most inseparable double-act in management». Over a period stretching more than 20 years, KN have produced a steady stream of new books, articles and other products and services through their consulting organization Palladium Group (Cooper et al., 2012; Qu, 2004).
There is also a number of other academics who have jumped on the ‘BSO bandwagon’ and written competing books (Niven, 2005; Niven, 2011; Olve & Sjostrand, 2006) and articles (Marr & Adams, 2004; Marr & Neely, 2003). KN’s books have also been translated to a number of different languages. The Scandinavian countries may serve as an example, as there are number of country-specific BSC books containing local case examples (Bukh, Bang, & Hegard, 2004; Bukh, Fredriksen, & Hegard, 2000; Christensen & Bukh, 2013; Hoff & Holving, 2002, 2015; Olve, Roy, & Wetter, 1997; Olve et al., 1999). Some of these local BSC books have become very popular. For example, Olve et al. (1997) has been translated into several other languages.

These various sources of evidence show that actors from academia (business schools) have played an important role in the evolution of BSC as a concept. The importance of academics in the development of the BSC can be contrasted with the case of the Beyond Budgeting philosophy which to a larger extent than the BSC has been shaped by consultants and practitioners in multinational corporations (Becker, Messner, & Schäffer, 2010; Bjørnenak, 2010; Johanson, 2013; Sandalgaard & Bukh, 2014).

ADOPTION AND DIFFUSION OF THE BSC

An important stream of BSC research concerns the adoption of the BSC in organizations, and how the concept has been diffused between organizations in different national and cultural contexts. In this stream of research it is useful to distinguish between studies of the supply-side and studies of the demand-side. The supply-side consists of the field of actors providing products and services (e.g., consulting advice and software) related to the concept, while the demand-side consists of potential users of the concept, i.e., organizations and managers.

The Supply Side of the BSC Concept

A number of researchers have found that different supply-side actors such as consulting firms, professional organizations, software firms, business schools, and public sector agencies have been important drivers of BSC diffusion (Ax & Bjørnenak, 2005; Ax & Bjørnenak, 2007; Banchieri, Campa-Planas, & Sanchez-Rebull, 2012; Braam, Benders, & Heusinkveld, 2007; Braam, Heusinkveld, Benders, & Aubel, 2002; Cooper et al., 2012; Madsen & Slåtten, 2013; Modell, 2009; Qu, 2004). In an interview study carried out in Finland, Malmi (2001) found that supply-side actors played an important role. Ax and Bjørnenak (2005) studied the diffusion of the BSC in Swedish firms from a supply-side perspective, focusing on how the concept was communicated in the business media and in conferences. They found that supply-side actors, particularly consultants, were important drivers of the diffusion process. Another finding was that local consultants customized the BSC to fit better with local market preferences in Sweden, where unions and employees are particularly important and influential stakeholders.

Qu (2004) studied the processes shaping the emergence and popularization of the BSC, focusing particularly on the role of the network of actors around Harvard Business School. In what may be characterized as a follow-up study, Cooper et al. (2012) have looked at how KN have popularized the BSC concept. Seen together, these studies show that KN and the network of actors around Harvard Business School have been important drivers in the diffusion and popularization of the BSC and shaped organizations’ propensity to adopt the concept. More recently, Madsen and Slåtten (2013) studied the configuration of the ‘management fashion arena’ supporting the diffusion of the BSC in Scandinavia. Actors such as consultants and conference/seminar organizers played important roles in all three countries, but there were also differences in terms of the roles played by for instance the business media and academics.

The Demand Side of the BSC Concept

As pointed out in the introduction, Bain & Company’s biannual survey has consistently shown that the BSC is one of the most popular management tools among managers. In 2007, 66 per cent of the respondents claimed to be BSC adopters (Rigby & Bilodeau, 2007), and even though the adoption rate has come down a bit, it still hovers around 50 per cent (Rigby & Bilodeau, 2009, 2011, 2013). In the literature over the last 15 years there have been a number of surveys which have looked more closely at the adoption and diffusion of the BSC in different contexts, such as the US (Maisel, 2001; Marr, 2005; Silk, 1998), Denmark (Nielsen & Sørensen, 2004), Sweden (Ax & Bjørnenak, 2005; Olve & Petri,
2005), Norway (Eriksrud & McKeown, 2010; Kjøde, 2003; Madsen, 2012; Stemsrudhagen, 2004), the Netherlands (Braam et al., 2007; Braam et al., 2002), India (Anand, Sahay, & Saha, 2005), Jordan (Al Sawalqa, Holloway, & Alam, 2011) and the German-speaking countries (Speckbacher et al., 2003).

Table 1 provides an overview of studies which have looked at the adoption and diffusion of the BSC in different national contexts. It is difficult to draw conclusions based on these studies since they have been carried out by different researchers, at different points in time, and by using different types of research methods and samples. However, the studies cited in Table 1 demonstrate that the BSC has been adopted and diffused in most parts of the world.

### TABLE 1
ADOPTION RATES IN DIFFERENT COUNTRIES/REGIONS

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Adoption rate (approx.)</th>
<th>Sample</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worldwide</td>
<td>66 %</td>
<td>Managers of large companies</td>
<td>Rigby and Bilodeau (2007)</td>
</tr>
<tr>
<td>Nordic countries</td>
<td>27 %</td>
<td>Publically traded companies</td>
<td>Kald and Nilsson (2000)</td>
</tr>
<tr>
<td>Germany, Austria and Switzerland</td>
<td>25 %</td>
<td>200 large companies</td>
<td>Speckbacher et al. (2003)</td>
</tr>
<tr>
<td>Norway</td>
<td>30 %</td>
<td>Manufacturing companies</td>
<td>Olsen (1999)</td>
</tr>
<tr>
<td>Norway</td>
<td>26 %</td>
<td>Controllers and CFOs</td>
<td>Eriksrud and McKeown (2010)</td>
</tr>
<tr>
<td>Sweden</td>
<td>38 %</td>
<td>Technical and industrial companies</td>
<td>Olve and Petri (2005)</td>
</tr>
<tr>
<td>Jordan</td>
<td>35 %</td>
<td>Large companies</td>
<td>Al Sawalqa et al. (2011)</td>
</tr>
<tr>
<td>India</td>
<td>45 %</td>
<td>Large companies</td>
<td>Anand et al. (2005)</td>
</tr>
<tr>
<td>UK</td>
<td>57 %</td>
<td>Large companies</td>
<td>Anonymous (2001)</td>
</tr>
<tr>
<td>USA</td>
<td>35 %</td>
<td>Fortune 5000 companies</td>
<td>Marr (2005)</td>
</tr>
<tr>
<td>USA</td>
<td>43 %</td>
<td>Members of the American Institute of Public Accountants</td>
<td>Maisel (2001)</td>
</tr>
<tr>
<td>USA</td>
<td>60 %</td>
<td>Fortune 1000 companies</td>
<td>Silk (1998)</td>
</tr>
</tbody>
</table>

Why Are Organizations Adopting the BSC?

Why do organizations decide to adopt the BSC? Researchers typically distinguish between two types of explanations. Rational accounts of adoption behavior assume that organizations act rationally, and adopt concepts such as the BSC to improve performance measurement practices or strategic control. Such explanations have intuitive appeal. In contrast, social accounts explain adoption behavior by highlighting that organizations are embedded in their institutional and social environments, and are influenced by management fashions (Abrahamson, 1991, 1996) or other types of social and institutional pressures (Sturdy, 2004). In the following section we will take a closer look at whether these two explanations of BSC adoption behavior are mutually exclusive.

Malmi (2001) identified five motives behind BSC adoption: (1) to translate strategy into action, (2) to manage organizational changes, (3) to implement quality programs and win quality awards, (4) as a response to managerial fads and fashions, and (5) as a response to the abandonment of traditional budgetary control. In another Finnish study, Rautiainen (2009) investigated the adoption of the BSC in municipalities. Rautiainen distinguished between three types of motives: (1) imitative, (2) rational, and (3) normative-experimental motives. Rautiainen found that the motives were not mutually exclusive, but were tangled and interrelated. Similar findings have also been reported elsewhere. For example, Madsen (2013) interviewed 39 managers of Scandinavian organizations which had adopted the BSC, and found that the motives can be grouped in different categories. Some managers emphasized that they wanted to improve processes related to performance measurement, budgeting and strategy, while others emphasized organizational politics and changes as the reasons for adopting the BSC. Some mentioned
broader cultural and social trends, e.g. the increased focus on being ‘balanced’ and take into account more than just financial performance measures. Finally, some had also been in contact with supply-side actors (e.g. consultants) which indicates that management fashion had a certain degree of influence on the decision to adopt the BSC (see also Madsen, 2014a).

These studies suggest that BSC adoption may be explained by economic rationales and social factors. There is also reason to believe that the motives and rationales might be tangled and interrelated. The available evidence, however, is limited, and it is still not clear which role the supply- and demand-sides play in shaping adoption behavior in relation to the BSC.

THE IMPLEMENTATION AND USE OF THE BSC

Interpretation and Understanding of the BSC
Research has shown that the BSC concept can be interpreted and understood in different ways (Aidemark, 2001; Ax & Bjørnenak, 2005; Braam, 2012; Braam et al., 2007; Hansen & Mouritsen, 2005; Madsen, 2011, 2014b; Modell, 2009; Wiersma, 2009). A wide room for interpretation makes the BSC appealing to a large number of potential users in different contexts. This also makes the concept plastic and stretchy, and less likely to clash with local cultural values and cognitive frameworks. This is one possible explanation of the BSC’s apparent global appeal (see Table 1). However, research has shown that the way the BSC is interpreted depends on factors such as professional background and specializations. For example, one study shows that users with an accounting background tended to place more emphasis on the technical aspects of the BSC and were more likely to interpret and use the concept in the traditional ‘accounting way’ as a performance measurement system. In contrast, users with an HR or organizational background were more likely to interpret and use the BSC as a tool for strategy development and implementation (Braam et al., 2002). Divergent interpretations of the BSC are also likely to occur as users read and are exposed to different versions of the BSC literature (Braam & Nijssen, 2004) or are exposed to different intermediaries (e.g. consultants) who put their own spin on the BSC (Ax & Bjørnenak, 2005; Braam et al., 2007; Madsen, 2011; Madsen, 2014a).

Customization and Adaptation of the BSC
In their BSC books and articles, KN emphasize that the BSC can be adapted to the user’s unique situation and needs. A recent review article which looks at adaptations of the BSC, shows that the concept is customized and adapted in a variety of ways in practice (Lueg & e Silva, 2013). In other words, the BSC should not be viewed as a ‘straight jacket’ which has to be applied in a specific way.

The adaptations of the BSC can happen on both the supply-side and the demand-side. For instance, Ax and Bjørnenak (2005) showed that supply-side actors ‘bundled’ the BSC with other local initiatives and ideas such as the intellectual capital model and non-budgetary control. The end result was a ‘Swedish BSC’ which looked quite different from the original BSC model proposed by KN.

Other researchers argue that the adaptation mainly happen on the demand-side of the market, i.e. among the users in practice. The main reason is due to the fact that the BSC is a flexible concept with a considerable room for interpretation (Aidemark, 2001; Ax & Bjørnenak, 2005; Braam & Nijssen, 2004; Dechow, 2012; Johanson, Skoog, Backlund, & Almqvist, 2006).

Some are going even further and view the BSC as a so-called boundary object (Star & Griesemer, 1989). According to this theoretical perspective, the BSC is a ‘plastic’ concept which only contains certain core elements that can be identified across different adaptations and translations. Typical elements which can be recognized in most BSCs are the four standard perspectives (financial, customer, internal processes, and learning/growth) and a mix of lead and lag indicators. Among researchers who take this theoretical position, the way the BSC is interpreted and used depends on the users’ unique situation and organization-specific problems and issues (Hansen & Mouritsen, 2005).

Typologies of BSC Use
A number of researchers have looked more closely at patterns in the use of the BSC in practice. These researchers have developed different typologies or classifications of BSC use. Below we describe and compare five of these typologies (See Table 2).

Speckbacher et al. (2003) identified three types of BSC use (Type I, II and III). This typology is possibly the most well-known and cited typology in the BSC research literature. Type I describes use
of the BSC as a performance measurement system. This type of use is closely related to how the BSC concept was presented in the 1990s. Type II includes cause-and-effect relationships and a stronger link to the organization’s strategy. This type of BSC use is close to the use prescribed in KN’s 1996 book. Type III represents the most advanced form of BSC use, and includes more advanced elements such as a link to rewards and compensation systems. Speckbacher et al. (2003) found that less than 10 per cent of the organizations in their sample utilized a type III BSC.

Cobbold and Lawrie (Cobbold & Lawrie, 2002; Lawrie & Cobbold, 2004) classify BSC in three generations: first, second, and third generation BSCs. A first generation BSC is essentially a performance measurement system, while third generation has taken several additional steps, e.g. applied strategy maps and destination statements. Brudan (2005) distinguishes between five types of BSC use. The simplest type of BSC is primarily used for reporting, while the most advanced form is a complete BSC which includes strategy maps and other advanced elements.

Soderberg et al. (2011) distinguish between five levels of BSC use. The first level is a BSC where the performance measures are derived from the organization’s strategy. Level two can be divided into a level 2a and level 2b. Level 2a includes level 1 plus a balance between the different performance measures, while level 2b includes cause-and-effect relationships. Level 3 is a BSC which fulfills the requirements of level 2a plus level 2b. Level 4a includes so-called double-loop organizational learning where the organization is capable of challenging its own assumptions and ‘worldview’, whereas level 4b also includes a link to compensation and reward systems. Finally, level 5 is the most advanced BSC system, which fulfills all the lower-level requirements.

Perkins et al. (2014) distinguish between three generations of BSCs. BSC 1.0 refers to use of the BSC as a performance measurement system, while BSC 3.0 is third generation use. This typology builds on Lawrie and Cobbold’s (2004) earlier typology, but is more fine-grained and divides the three generations into eight different versions.

A Comparison of the Typologies
There are many commonalities between the typologies presented in Table 2. The five typologies all separate between ‘simple’ use of the BSC as a performance measurement system to more ‘advanced’ application of the newer theoretical elements (e.g. strategy maps, strategic destinations, reward/compensation systems) which have been incorporated into KN’s concept over the course of the last two decades. At the same time, there is disagreement between the researchers when it comes to the distribution of different types of BSCs among organizations. For example, Speckbacher et al. (2003) found that few organizations used an advanced type of the BSC (‘type III’), while Soderberg et al. (2011) argue that this group is much larger. One explanation of this inconsistency is that these articles where published at different points in time. The study by Speckbacher et al. (2003) was carried out when terms such as strategy maps were relatively unknown in practice. The increased use of the new and ‘advanced’ elements might be explained by the fact that more organizations over time have gained knowledge about and experiences with these areas of the BSC theory and literature. This makes organizations more inclined to adopt and implement a more ambitious BSC.

**TABLE 2**

<table>
<thead>
<tr>
<th>FIVE TYPOLOGIES OF BSC USE</th>
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<tr>
<td><strong>Type I</strong></td>
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<tr>
<td><strong>Type II</strong></td>
</tr>
<tr>
<td><strong>Type III</strong></td>
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THE PERFORMANCE EFFECTS OF USING THE BSC
An important question in the research literature is whether or not the use of the BSC has an effect on organizational performance, as is typically claimed in the normative BSC literature and by promoters of the BSC such as management consulting firms.

**Direct Effects of BSC Use on Organizational Performance**

Researchers have pointed out that the BSC is a management concept which may increase organizational performance by supporting the implementation of an organization’s strategy (De Geuser, Mooraj, & Oyon, 2009). Yet, it has proved difficult to document a strong relationship between BSC use and performance (Braam & Nijssen, 2004; Davis & Albright, 2004; De Geuser et al., 2009). To a large extent, the jury is still out on whether BSC increases performance. There are many variables mediating and moderating the relationship between BSC use and performance. It is conceivable that the effects of BSC use is related to how the concept is interpreted, understood, and in turn implemented (cf. Braam & Nijssen, 2004). For example, an organization which interprets and implements the BSC as a performance measurement system is likely to experience different effects than an organization which interprets and implements it as a strategic management system.

Therefore, there is reason to believe that there is a close relationship between how the BSC is implemented and the associated performance effects (Braam & Nijssen, 2004; Davis & Albright, 2004). Use of the BSC which complements and supports the organization’s strategy can improve its competitive position and performance, while BSC use which does not have a good fit with the organization’s strategy may have an opposite effect and may reduce performance (Braam & Nijssen, 2004; Davis & Albright, 2004; De Geuser et al., 2009). Lucianetti (2010) finds that the use of strategy maps gives organizations increased performance. Organizations that have a thorough process related to the development of strategy maps typically have a better fit between the BSC and their strategy. One example of BSC use which may lead to decreased performance is the use of a large number of unrelated performance indicators (Madsen & Stenheim, 2014c).

**Indirect Effects of the BSC on Organizational Performance**

In interviews managers typically report that they perceive a number of benefits of using the BSC (Madsen & Stenheim, 2014b). Therefore, it is also likely that there will be other more indirect effects of using the BSC. For example, by utilizing strategy maps it becomes possible to visualize the organization’s strategic goals and how these can be reached through the assumed causal relationships. This can be useful in order to facilitate strategic discussions in the top management group and to communicate to the rest of the organizations members how they should work in order to reach the organization’s long-term strategic goals. Hence, it is possible to argue that the BSC, and particularly the use of strategy maps can be useful for ‘strategizing’, i.e. the use of the BSC in actual strategy work (Jarzabkowski, Balogun, & Seidl, 2007; Whittington, 2003).

**An Assessment of BSC Effect Studies**

Researching the performance effects of adopting and implementing management concepts can be challenging from a methodological standpoint. In the BSC research literature there are different ways of measuring the ‘effect’ of BSCs. Some researchers focus directly on the concept’s effect on organizational performance, while others focus more on indirect effects, which are of a more behavioral nature. Further complicating issues is the fact that there are many moderating and mediating variables blurring the relationship between BSC use and performance. In addition, not one study is perfectly comparable to another. The methodologies differ, the samples differ and the point in time at which the data are collected differ. This makes it difficult to compare the results from different studies. Nevertheless, studies on performance effects are important since it will ultimately matter whether or not the concept has a performance enhancing potential. Moreover, it will be important to get more knowledge about how different versions of the BSC influence the relationship between use and performance.

**CRITICAL PERSPECTIVES ON THE BSC**
As we briefly touched upon in the last section, it is difficult to document the effects of using the BSC. Therefore, a number of researchers have raised the question of whether or not the BSC can deliver on its promises and live up to the hype. The BSC has been criticized from a number of different angles. The criticisms are leveled at different aspects of the concept. There are particularly six aspects which have been discussed extensively in the BSC literature: (1) the causal relationships between the perspectives and measures, (2) the underlying assumption that organizations implement strategy in a rational top-down process, (3) the use of dramatic and seductive rhetoric in the BSC literature, (4) how BSC hinders creativity, innovation and organizational learning, (5) the BSC as a management fashion, and (6) the BSC as a consulting product and ‘old wine in new bottles’. The first three aspects can be seen as direct criticism of the fundamentals of the concept, while the latter three are mainly concerned with the ways in which the BSC is used by different actors in praxis.

Causal Relationships

One of most fundamental criticisms of the BSC is directed at the assumed causal relationships between lead and lag indicators, and between the indicators in the four perspectives. This criticism has particularly been raised by Nørreklit and colleagues in a series of articles published in the management accounting literature (Nørreklit, 2000, 2003; Nørreklit & Mitchell, 2007; Nørreklit & Mitchell, 2014; Nørreklit, Nørreklit, Mitchell, & Bjørnenak, 2012). As pointed out by Perkins et al. (2014: 152) it is not an easy task to summarize this criticism as it is complicated and abstract, but it revolves around three aspects of the BSC theory: (1) lack of a time dimension in the BSC, (2) lack of clarity about the relationships between the different perspectives in the BSC, and (3) little knowledge about causal relationships between different measures and performance.

In defense of the BSC, it can be argued that the concept has evolved considerably since the 1990s and that the criticism is leveled at an outdated version of the BSC. Kaplan (2012) argues that most of the (academic) criticism of the BSC focuses too much on these aspects of the BSC, and to a large extent overlooks the role that the BSC can play as a tool for strategy implementation (strategy execution).

A Rational Top-Down View of the Strategy Process

In the BSC literature there is an assumption that organizations are, by and large, rational and instrumental. This entails that it is possible for managers to plan their strategy and then implement this strategy in a top-down orchestrated process. It is assumed that the strategy is developed in the upper-echelons of the organization (i.e. the top management group). In the management accounting and control literature it is particularly Nørreklit (2000) who has criticized this view. Together with colleagues, Nørreklit has questioned whether the top-down thinking inherent in the BSC concept is a good starting point when trying to implement strategies (Nørreklit, 2000; Nørreklit, Jacobsen, & Mitchell, 2008; Nørreklit et al., 2012). Furthermore, this rational view of strategy (‘the planning school’) has been criticized by practice-oriented researchers in the field of strategy and organization studies (Jarzabkowski et al., 2007; Jarzabkowski & Spee, 2009; Whittington, 2003).

Rhetoric

Some critics have pointed out that KN’s BSC literature appeals to managers’ emotions instead of logic (Nørreklit, 2003; Nørreklit et al., 2012). Nørreklit (2003) argued that KN are using dramaturgical and rhetorical devices, which make the BSC literature exciting and engaging for the reader. This means that KN’s books resemble those written by management gurus (Nørreklit, 2003; Nørreklit et al., 2012). For example, KN frequently utilize metaphors to make their points. The manager is portrayed as an airline pilot who utilizes the instrumental panel in the cockpit (i.e. the BSC) in order to safely maneuver the plane (i.e. the organization) to its (strategic) destination (Nørreklit & Mitchell, 2007).

Hindering Creativity, Innovation and Organizational Learning

Studies have shown that the BSC may have certain negative organizational implications. Voelpel, Leibold, and Eckhoff (2006) argue that the concept can become a ‘straight jacket’ which may potentially harm the organizations seeking to be innovative and creative. The reason for this is that the
BSC is built on notions of strong organizational control. This may be negative for organizations which operate in knowledge-intensive industries. It should be noted that KN has responded strongly to the arguments made in this paper (Kaplan & Norton, 2006b). A similar criticism is made by Antonsen (2014) who looks at negative organizational effects of using the BSC. Antonsen studied the use of the BSC in a Norwegian bank, and found that the BSC may hinder information sharing, cooperation and organizational learning. Again, this is related to the notions of formal control inherent in the BSC concept.

Management Fashion
The BSC has also been criticized for being a management fashion. Several researchers have pointed out that the BSC has many of the characteristics of a ‘management fashion’ (Ax & Bjørnenak, 2005; Braam et al., 2007; Madsen, 2011; Malmi, 2001). As pointed out in part two, a number of different supply-side actors have been involved in the diffusion and popularization of the BSC (Ax & Bjørnenak, 2005; Braam et al., 2007; Cooper et al., 2012; Madsen & Slåtten, 2013; Qu, 2004). For instance, in this paper we have looked at research which has studied how KN have used rhetorical strategies to appeal to and captivate their audience (Nørreklit, 2003). In a similar vein, the BSC has also been referred to as ‘rhetorical machine’ which shapes how the concept is diffused and used in praxis (Busco & Quattrone, 2009; Busco & Quattrone, 2014). Other researchers have pointed out that the BSC is a ‘seductive’ concept which can be hard for managers to resist (Andon, Baxter, & Mahama, 2005). The BSC is presented in an appealing way, and the relatively high adoption rates reported in the studies cited in part three show that managers have indeed been ‘seduced’ by the BSC. The BSC is consistently ranked as one of the most popular management tools in the world (Rigby & Bilodeau, 2007, 2009, 2011, 2013).

On the other hand, the BSC has had a longer life-span than what is typical of management fashions. Therefore, the BSC can possibly be called an ‘enduring management fashion’ since the concept is still widely used more than 20 years after it was introduced (Frigo, 2012; Hoque, 2012, 2014; Madsen, 2011). In many ways, the BSC concept has been institutionalized as part of what can be considered ‘good practice’ in management accounting and control, evidenced by the fact that most influential textbooks in the field are devoting many pages to describing the concept (Atkinson et al., 2011; Hoque, 2006; Merchant & Van der Stede, 2012).

Old Wine in New Bottles
Some have also raised questions of whether the BSC is a ‘consulting product’ (Ittner & Larcker, 1998). This leads to the final area of criticism, namely that the BSC is ‘old wine in new bottles’. Is the BSC primarily a repackaging and rebranding of existing knowledge sold by merchants of management knowledge? To this point, it has been pointed out that there is not much new in terms of content, instead it is primarily the wrapping and the rhetoric which is new. For instance, some researchers have shown that the BSC does much the same as some older management control tools such as the French concept Tableau de Bord (Bessire & Baker, 2005; Bourguignon, Malleret, & Nørreklit, 2004; Epstein & Manzoni, 1997).

Tableau de Bord has existed since the 1930s, and can be described as a dashboard which can be used to measure an organization’s performance. As in the BSC, key performance indicators are used. The main difference is that the Tableau de Bord as a concept is adapted to the French culture and ideology, while the BSC can be seen as a product of the American shareholder-oriented philosophy (Bourguignon et al., 2004).

SUMMARY AND AREAS FOR FUTURE RESEARCH
Summary
The current article has provided an overview of the research literature on the BSC. In the review, we have chosen to focus on certain main research areas. The first area concerned the evolution of the BSC over the course of the first two decades. Research has shown that the concept has evolved in different ways since its introduction in 1992. The second area covered the adoption and diffusion of the concept. Here we looked at the role of the supply-side of the BSC in the adoption and diffusion process. We also looked at the demand-side of the concept.
Section four focused on the implementation and use of the BSC in practice. First we discussed how the concept’s wide room for interpretation means that the concept is interpreted, understood and enacted in different ways by actors operating in different contexts. Then we looked at how the concept is adapted. The BSC is not a ‘straight jacket’ but may be customized to fit an organization’s needs and characteristics. Finally, we looked at patterns in the use of the BSC. Different researchers have made typologies or classifications of BSC use. We compared and contrasted five such typologies. One commonality is that the typologies separate between simple and advanced types of BSC use. A common finding in the literature is that relatively few organizations are using the more comprehensive or ‘advanced’ versions of the BSC.

In section five we looked at the performance effects of BSC use. Research has shown that it is difficult to document the effect of BSC use on financial performance. As discussed, this may be due to the interpretive space of the BSC, which means that it lends itself to different interpretations and use in practice. In addition, there are many variables which may mediate and moderate the relationship between BSC use and performance.

Finally, we presented several critical perspectives on the BSC. One important line of criticism has focused on conceptual and theoretical issues related to the assumption of causality. Furthermore, some have criticized the assumption of rationality and the view that strategy can be implemented in a top-down fashion. Others have criticized the rhetoric surrounding the BSC and the way the concept is presented in books and articles. In a similar vein, some researchers have pointed out that the BSC exhibits many of the hallmarks of a management fashion, and could be an example of a consulting product which to a large extent is ‘old wine in new bottles’.

Areas for Future Research
Our review of five areas in the research literature on the BSC reveals many interesting opportunities for future work. One promising area is more research on the adoption and diffusion of the BSC. What factors explain why the BSC seemingly has had a worldwide impact, an even stronger impact than most other management concepts? Is there something in particular about the rhetoric (Nørreklit, 2003; Nørreklit et al., 2012) or the way the concept is presented visually (Free & Qu, 2011) which makes the BSC particularly contagious? Since the concept has arguably reached stage of maturity in terms of its life-cycle, there should in the future be ample opportunities to study abandonment and deinstitutionalization processes in relation to the BSC.

It would also be useful to obtain more knowledge about the perceived benefits and problems associated with BSC use (Al Sawalqa et al., 2011; Hoque, 2014; Madsen & Stenheim, 2014b, c). Most of the extant research has focused on problems and failed implementations of the BSC, and relatively few success stories have been reported in the research literature (Hoque, 2014). More insight into successful applications of the BSC can be of great interest and use to practitioners grappling with BSC implementation in practice.

Another area which has received scant attention in extant research is the use of BSC in different types of organizations, particularly of different sizes. Most of the research on the BSC has been carried out in large organizations, but the concept is also used in SMEs (Andersen, Cobbold, & Lawrie, 2001; Fernandes, Raja, & Whalley, 2006; Machado, 2013; Rompho, 2011). However, the literature on the use of the BSC in SMEs is under-developed, which is regrettable given that SMEs play important roles in most economies (cf. Mitchell & Reid, 2000).

Finally, there is a need for cross-national comparative studies of BSC use. For instance, researchers could examine patterns in terms of adoption, diffusion and implementation in different countries. Such studies could shed light on the role of culture, ideology and values (Ax & Bjørnenak, 2005; Bourguignon et al., 2004) and preferences in terms of corporate governance (Johanson, 2013; Näsi, 1995) in shaping country-specific adoption, diffusion and implementation of the BSC.

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