

Popularizing a Management Accounting Idea: The Case of the Balanced Scorecard*

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Abstract

We explore how the Balanced Scorecard (BSC), as a management accounting technique, was developed and marketed as a general management practice. Drawing on actor network theory (ANT), we analyse interviews with key actors associated with the BSC, insights gained from attending BSC training workshops, and other documentary evidence to construct a history of the BSC. Our historical analysis offers theoretical tools to understand how the various features of the accounting technique were translated and transformed, that is shaped and solidified. This translation entailed processes of modification, labelling, framing, and specification of abstract categories and cause-effect relations. We also examine the networks and associations that both shape the form of the BSC and mobilize the interests of various constituencies around it to produce what can be regarded as a global management technology. Finally, we highlight the strategies and actions used to maintain control of this technique through its continuous reinvention, and, by doing so, we emphasize the idea of strategic agency.

JEL Classification: B25, M41

Keywords: Balanced scorecard, translation, obligatory passage point, strategic agency.

POPULARIZING A MANAGEMENT ACCOUNTING IDEA: THE CASE OF THE BALANCED SCORECARD

1. Introduction

This paper seeks to understand how accounting technologies are developed, extended and popularized into global management practice. Commonly, the creation and spread of new accounting ideas is depicted as a story of great innovators and the diffusion of clever ideas and innovations (often both) and are often told by the innovators themselves (e.g. Kaplan 1994, 1998). The ideas are assumed to spread (or not) due to their intrinsic qualities and their functional effects (e.g., on productivity and control) (Bjørnenak 1997; Ax and Bjørnenak 2005). It is a rationalist story that stresses the attraction of fixed ideas and a self-evident linkage between the ideas, their promise, and their realization (Abrahamson 1991). An alternative narrative assumes that smart people sell ideas and that the effects have less to do with efficiency and functionality than with the non-rational appeal of fads/fashion, mimicry and/ or coercion (Abrahamson 1996; Malmi 2001).

Such narratives have a long tradition in historical studies (Rogers 1995). However, a different approach to history has emerged that stresses disjuncture, accident and a view of the history of ideas as a fragile accomplishment, and has been particularly influential in studies of science and technology (Latour 1987) and of technical innovations in accounting (e.g., Preston, Cooper and Coombs 1992; Miller and O’Leary 2007; Carmona, Ezzamel and Gutiérrez 1997). What these examples of ‘new accounting history’ (Miller, Hopper, and Laughlin 1991) share is an approach where functionality has to be worked on in order for the claim to be achieved and cannot be presumed because it is claimed by an innovator. Further, the new accounting history stresses the role of theory in historical analysis and rejects a view of history as a narrative of self-evident ‘facts’. Thus, this paper emphasizes the fragility of ideas, that ideas are pushed along (Gendron and Barrett 2004; Ansari, Fiss and Zajac 2010) rather than spread through their intrinsic qualities, and that an important part of accounting history is to understand how ideas result in variable effects.

This approach to history can profoundly impact our understanding of the world; managers can know how accounting technologies impact their understanding of their organizations and what effects these tools may have. Similarly, researchers will benefit from taking new accounting ideas seriously and recognizing their constructed nature, whether the ideas relate to financial reporting, audit or management accounting. Thus, we focus on how an accounting idea (the BSC), that can be casually dismissed as unworthy of careful examination, becomes accepted and even a taken for granted component of ‘good management’.

An emerging body of accounting literature examines how accounting ideas and techniques spread. Gendron and Barrett (2004) point out the fragility of attempts to promote assurance services for the web, Pipan and Czarniawska (2010) highlight variable outcomes of one accounting initiative in Italian local government, O’Dwyer (2011) examines the difficulty that accounting firms have in promoting assurance services in sustainability and Busco and Quattrone (2015) identify the role of rhetoric and

visual inscriptions in the spread of the BSC within one corporation. We concentrate on the BSC as an example of an apparently popular accounting technology and the strategies used by its inventors and promoters to make it popular.

We use Actor Network Theory (ANT) (e.g. Callon 1986; 1998; Latour 1987; 2005; Callon, Lascoumes, and Barthe 2009) to analyse the processes by which the BSC is pushed by various actors, translated into managerial thinking, and how it became widely known, debated, and implemented. Whereas Busco and Quattrone (2015) use ANT to emphasize the agency and effects of rhetoric and inscriptions, we augment ANT by highlighting human agency, not to downplay rhetoric, inscriptions and non-human actors, but to stress that humans actors can also shape the way ideas develop and become institutionalized. We follow the key actors who have been involved in developing and promoting the BSC, examine the inscriptions they developed and circulated, the networks they built to mobilize support for the BSC and the various processes of translation they engaged in. This much has become common in studies of accounting in practice (Alcouffe, Berland and Levant 2008; Preston et al 1992; Chua and Mahama 2007). We add to this literature in two broad ways.

First, we demonstrate how the idea of the BSC is seen to be practical through its travel in time and space. In doing so, we focus on the trials, experiments and networks that enabled the BSC to become general and popular. We highlight the fragility of the human-technology interaction and the various attempts of framing the BSC as an innovation. Interactions within a developing network transformed the idea of the BSC from local experiences and claims, to a more general theory which removed local detail (Greenwood, Suddaby and Hinings 2002) and provided classifications and an abstracted language (Oakes, Townley and Cooper 1998; Lawrence and Suddaby 2006) that can then be widely applied. Constructing the BSC as a practical success is central to this process. Secondly, we show how strategic agency, in the form of Kaplan and Norton, and the organizations they have been associated with, became, in ANT terms, obligatory passage points (OPPs) as they help define and elaborate problems and solutions. Compared to previous applications of ANT in accounting, we highlight the importance of strategic agency, but without treating innovators as heroes or villains (Latour 1987). We further argue that whether or not accounting innovations, such as the BSC, are seen to deliver the improvements in organizational performance they promise, it is important to understand that how they get *labelled* as success (or failure) affects their development, impact and managerial practice.

Jones and Dugdale (2002) examine the spread of ABC as an accounting idea, tracing its emergence, its innovativeness and how it permeates management. Our paper significantly extends their study. First, we go beyond their emphasis on how accounting innovations come into being by examining the continuous process of framing that underpin innovations (Greenwood et al 2002). Secondly, we pay attention to how innovators make themselves indispensable to their innovations, by theorizing Kaplan and Norton as obligatory passage points (Callon 1986). Jones and Dugdale (2002) do not attempt to incorporate the perspectives and actions of the aspiring fact builders. Thirdly, we fundamentally extend the analysis of the productive role of management consultants in the translation and diffusion of innovations. Our interviews extends their research by focusing both on the details of the BSC and how the BSC idea links and incorporates other widely accepted practices, for example, business models and strategic maps, IT and knowledge management systems, and performance appraisal techniques. We also remain

agnostic about the effects of the BSC, which facilitated us securing the cooperation of the actors involved in its development and spread. Thus, we are able to more fully examine how the idea of the BSC emerged, how it was subsequently generalized as a “knowledge management system” and travelled as a concept that is seen as usable and/or popular.

Theories do not travel simply by the power of the ideas. Various qualities, including the energies and strategies of the proponents, the power of success stories, the development of networks and the manner by which the ideas are seen to address a range of apparent problems, all help in making the theory convincing to a sceptical audience. Our theoretical oriented history responds to Dirsmith’s recommendation “that future research build upon the ANT perspective ... and probe a number of research questions” (2007: 90). These include examining the shifting nature of discourse (his research question 3) and the mechanisms used by actors in the network (his research question 5). He encourages studies like ours on the ideational and discursive aspects of the BSC and what the shifting discourses enable and constrain.

The remainder of the paper is organized as follows. In the next section we provide background on how the BSC developed, and further develop the motivation of the paper. This is followed by a brief explanation of Actor Network Theory (ANT) that we draw on to explain the process of translation in the development of the BSC. A section on research methods clarifies the types and sources of our data. In the empirical section, we identify four episodes (or elements) in the history of the BSC. In this section, we examine the processes of framing that helped establish the BSC, examining early experiments and network building, and explore the nature of obligatory passage points (OPPs), including the activities used to try to control the BSC (such as claims to thought leadership and the creation of a Hall of Fame). Finally, our conclusion draws together our main arguments and the theoretical implications of our work for understanding the spread of management ideas more generally.

2. The BSC: Some Background

A diverse set of accounting techniques have been introduced since the 1990s, including the BSC, economic value added, fair values, and target costing, and these are claimed to enable strategic management accounting and value creation (Ittner and Larcker 2001). The BSC is reported to be very popular. According to a Cranfield University research report, 75% of the companies that have a formal process of performance measurement (46% of all companies surveyed) use the BSC as their main method (cited in Balanced Scorecard Collaborative Training Material, 2006). Further, approximately 60% of large US companies and 53% of companies world-wide use the BSC (Rigby 2009) and the BSC is one of six most widely used management tools globally with managers rating it highly in terms of satisfaction (Rigby and Bilodaou 2011). The BSC has also been incorporated into management accounting teaching, and has become a service offered by professional management accounting bodies and many management consulting firms.

Although the BSC has attracted considerable interest as a performance measurement innovation (Ittner and Larcker 1998; Ittner, Larcker and Meyer 2003), it has also been perceived as a management fad and a product of management consultants (Zimmerman 2001). We take this observation as an invitation to seriously examine management consulting as a potentially important channel in influencing accounting practice (Christensen and Skærbæk 2010). There have been concerns about the variable success of the BSC in implementation (Malina and Selto 2001), questions about its logical validity (Norreklit 2000),

its various uses (Wiersma 2009) and its rhetorical basis (Norreklit 2003; Busco and Quattrone 2015). Others have questioned its universal appeal (Bourguignon, Malleret and Norreklit 2004) and cautioned that the BSC needs to adapt to variations in communication, reward structures, strategies, and information displays and characteristics (Otley 1999; Banker, Chang and Pizzini 2004). Such concerns, also typical of other accounting innovations, create skepticism and doubt, and can result in barriers to organizational implementation.

We will show that concentrating on the history of the BSC permits an in depth understanding of how new accounting ideas are not just talked about, but how they enter organizational practices, in spite of scepticism and doubts raised. This study will illustrate some of the previously undocumented translations, disruptions and manoeuvres involved in the process of spreading a scorecard from a particular context, and redefining and repackaging it through many trials, into something that is widely known as 'the BSC'. We can thereby illustrate how the drawing together of stray ideas, processes and people has enabled the BSC to be seen as operable and even necessary.

3. Theoretical Framing

Translation processes are crucial in converting an abstract idea into what is seen as a practical technology¹. Ideas help constitute practices: "all management practices necessarily embody and are constituted by ideas of what they should be" (Power 2007: 24). These ideas are often linked to rationalities and programmes (Miller and Rose 1990). In the case of the BSC, the rationalities include the importance of quantification (Pfeffer and Sutton 2006) and the value of strategic management (Knights and Morgan 1991) and the programme includes systems of measurement of organizational and managerial performance.

We analyse the emergence, trials, translations and stabilization of the BSC using ANT (e.g., Latour and Woolgar 1986; Callon 1986, 1998; Latour 1987, 1999; 2005)². ANT stresses the importance of conceptualizing management ideas and techniques as socio- technical objects that can be weak or fragile, and are held together (or not) through networks (Chua and Mahama 2007). This conceptualization emphasizes the work that needs to be carried out if technologies are to become popular. Busco and Quattrone (2015) offer a related analysis of the successful adoption of the BSC, albeit in one organization. While our theoretical approach is quite similar to theirs and we support their general emphases, we use our history of the development and promotion of the scorecard idea to emphasize two further points: the importance of experimentation and the role of strategic agency in seeking to control experiments and their outcomes. Rather than the rhetorical and productive power of BSC

¹ Following Latour (1987) and Preston, Cooper and Coombs (1992, 563), we adopt a broad conception of technology. It

² Chua and Mahama (2007) indicate some of the strengths and limitations of the approach.

inscriptions that is emphasized by Busco and Quattrone (2015) and Qu and Cooper (2011), our theoretical focus enables us to highlight the role of appeals to science and the role of Kaplan and Norton in popularizing the BSC.

Appeals to science and scientific analogies are important in understanding the history of the BSC. The proponents of the BSC have drawn on scientific imagery in discussing the idea and its development. As our empirical work will show, there is talk of companies as laboratories (e.g. Kaplan 1994), the original ‘experiments’ in leading edge companies associated with the Nolan-Norton Institute study (1991), conceptions of strategy as hypotheses, and the importance of continuing experiments with new components of the BSC to ensure it stays fresh (Kaplan 1998). During these experiments and trials, the object (the BSC) is fragile, its contours are imprecise, and its boundaries are vague. It is through repeated ‘laboratory experiments’ that the BSC object demonstrates its success and its fragility is converted into stability, its contours defined more clearly, its boundaries clarified, and its elements identified (Latour 1999: 120-124).

We use the concepts of trials, experiments and laboratories to provide further insight into the processes of translation. Hacking (1992) discusses the concept of experiments as the crucial characteristic of claims to science and knowledge more generally and that the stability of science is a product of the interaction of ideas (theories), inscriptions (data and interpretations) and experimental apparatus. Laboratories refer to a series of related experiments that may be spatially and temporally separate: “[t]he study of laboratories has brought to the fore the full spectrum of activities involved in the production of knowledge... scientific objects are not only ‘technically’ manufactured in laboratories but are also inextricably symbolically and politically constructed.” (1992: 115). Thus, Latour and Woolgar (1986) show how laboratory life involves what is conventionally understood as science but also involves the creation of symbolic representations of the science and the formation of political strategies to convince others about the science. Similarly, our empirical work shows that Kaplan and Norton worked hard to ensure that experiments carried out in organizations around the world were brought back to them, incorporated into their subsequent writings and diagrams, and used to promote further developments and claims for the technology.

We draw on the concept of ‘trials’, the means through which experimentation with a new idea takes place, where the elements of an idea are identified, its boundaries drawn, and the object itself defined, and if successful, solidified (Latour 1999: 118-124). While undergoing these trials an idea is defined, refined, and, as a consequence, is fragile. But the developers of the idea attempt to convert this fragility into stability. Technologies, such as the BSC, are not viewed simply as “essences pertaining to nature made up of mute objects facing a talkative human mind, but *occasions* given to different entities to enter into contact” (Latour 1999: 141, original emphasis). The emphasis on trials and occasions for interaction highlights that the BSC is malleable, capable of being developed and changed, and that it produces effects (such as specific strategic and management practices). The term translation is preferred to concepts such as diffusion and dissemination since translation highlights the possibilities for transformation through trials and interactions.

A translation process transforms the original idea, leaving out some components and adding others. Like all technologies, the beginnings of the BSC are rooted in many previous suggestions and experiments in multiple performance measurement (Kaplan 2008). Many trials take place, dispersed across time and space. There have been multiple versions of strategic

performance measurement systems, each with their own histories and proponents (e.g. the performance pyramid and the performance prism). This gives rise to multiple and often conflicting claims by different groups who try to speak on behalf of the original idea. Deviation takes place through reinterpretation, and a technology may change both through ‘improvements’ in trials as well as through frictions and resistances, such as “lack of communication, ill will, opposition ... and indifference” (Latour 1987: 267).

Our second theoretical contribution is to highlight the role of actors and power in the development and popularization of the BSC. We acknowledge that ANT is “an empirical version of poststructuralism” (Law 2009: 145) and tends to eschew concepts such as power and agency. Many general social science approaches struggle with the relation between structure and agency (Giddens 1984; Clegg 2010) and we do not claim to have resolved the conflicts in understanding the relation between structure and agency. However, we feel that ANT’s concept of OPP is helpful in explaining the attempts to frame the idea, control it, solidify networks of support and overcome resisters. We seek to understand how Kaplan and Norton and their networks become OPPs in matters relating to the BSC. OPPs are central in processes of problematization and solution promotion. Problematization is the way that issues are identified and made to seem problematic where they had previously been accepted. Proposed solutions to these problematic issues can be suggested and become more or less indispensable. OPPs formulate problems and their solutions, and seek to create specific definitions and understandings, through which new practices or information must pass.

Actors attempt to frame how the BSC was packaged and disseminated, although ANT stresses that the fate of a technology or idea depends on others. Callon (1998) notes that framing entails establishing a boundary within which interactions take place. The framing process is of a dual nature: it involves the commitment of the protagonists to the significance and content of the interactions inside the boundary and it is also rooted in an external world. Thus, while framing brackets the outside world it does not abolish links to it. We will see later how Kaplan and Norton sought to certify software, experiments, and trainers such that certain ‘external’ practices and experiences would be deemed authentic and part of the ‘community’, whereas others are excluded. This understanding of framing relates to ideas of theorization in new institutional theory; as “the development and specification of abstract categories and the elaboration of chains of cause and effect” (Greenwood et al. 2002: 60).

Framing involves simplifying accounts and distilling “the properties of new practices and explain[ing] the outcomes they produce” (Greenwood et al. 2002: 60). It is a process “whereby localized deviations from prevailing conventions become abstracted and thus made available in simplified form for wider adoption” (ibid). It involves naming and labelling an innovation, identifying failures and developing solutions, and using graphical presentations to visualize interactions (Latour 1990; Busco and Quattrone 2015). Once management ideas are generalized and abstracted, they become detached from “expertise in any particular process,” and as a result, “can be applied to any and all processes,” more or less anywhere (Armstrong 2002: 282). The BSC offers a common language which aims to create shared conceptions and understandings about managerial control, performance measurement and strategy, even if the language allows (and encourages) specific vocabularies and local ways of understanding the world. For example, the theory of the BSC offers four causally connected

perspectives and a language of strategy, objectives, targets, measures and initiatives that can be edited by “populating” the template with the specifics of each organization.

It is important to recognize explicitly the role of strategic agency in building networks and in influencing relational effects. Said (1975) argues that individuals are marginalized in the decentred approach of poststructuralism, and argues persuasively that individuals matter, neither as simple bearers of structure nor as autonomous agents who are free to make unconstrained choices, but rather as agents who actively interpret and make sense of their situations and bear moral responsibility for their values and actions. OPPs are central to us in understanding the problematization of the technology and how actors attempt to channel the target audience (e.g. of the BSC) through conceptions and well-defined practices. Thus we stress an actor centred view of OPPs, a gate where the interests of actors must coalesce before a stable network is formed (Callon 1986; Latour 1987). Networks remain unstable and fragile to the extent that actors are sceptical or hostile. Actors become spokespeople for the network, and seek to bar contrary interests, problematizations and solutions. Almost everyone who wants to gain knowledge of the BSC has to pass through the OPP formed by Kaplan, Norton and their associations and institutions. Those wishing to understand and use a BSC, including other consulting firms, professional accounting bodies, software suppliers and organizations considering the use of the BSC, but also opponents of the system, have to explain their choices in relation to what one management consultant referred to as ‘Kaplan and Norton’s BSC’.

4. Research Methods

The research reported in this paper arose from related field studies of the BSC in two organizations (see Qu and Cooper, 2011; Cooper and Ezzamel 2013). Those studies involved learning about the history of the BSC, partly in relation to the specifics of those two organizations, but also more generally, particularly in terms of the roles of various management consultants in the development and spread of the ideas. One of us spent three months in a Canadian management consulting firm, observing their work practices and discussing the scorecard with consultants as they developed and implemented versions of it³. This set of observations included studying the development and implementation of the BSC, as well as exploring the network of allies the consulting firm worked with, including the professional literature on the BSC, business technology companies, and potential users. In the second study, we examined the spread of the BSC in a multinational firm and spent time with both external and internal management consultants and their network of allies, including the writings of Kaplan and Norton and other professional literature.

³ See (Qu and Cooper, 2011) for a discussion of the terms of access and nature of the participation in the Canadian management consulting firm. Fundamentally, access was granted to one of the authors as a full time PhD student.

None of the researchers received any financial benefit from these studies.

These early investigations are an important backdrop in that we had already extensively examined the writings of Kaplan and Norton, and carefully studied Kaplan's own versions⁴ (notably 1994, 1998, 2006 and 2008) of the history of the BSC. Table 1 provides a list of BSC texts that we focussed on. Further, we discussed the use of the BSC and performance measurement systems with a range of management consultants and their clients. This led us to focus on the role of Kaplan and Norton and the various consulting firms they have been associated with, most notably the Balanced Scorecard Collaborative (BSCol).

INSERT TABLE 1 ABOUT HERE

INSERT TABLE 2 ABOUT HERE

To develop our own history of the BSC, we conducted sixteen interviews, attended four days in training sessions (details in Table 2), and twice visited the offices of the BSCol (two days by one author, and a two day visit involving two of the authors), where we had informal discussions with consultants and support staff. We interviewed leading figures in the development of the BSC, managers from organizations that were early adopters of the BSC, management consultants in the BSCol, a publisher of BSC books, and others (such as software vendors, HR consultants and applicants for Hall of Fame awards) who entered the network. Each interview had a different agenda and focus and we recorded and transcribed those interviews where possible (as indicated in Table 2). All interviews were conducted on the understanding that anonymity would be preserved, but we subsequently obtained permission to quote from the interviews with Kaplan and Norton. We were concerned to identify, "who is constructing the facts, who is directing the story, who is pulling the strings?" (Latour 1999: 115). Our questions were tailored to the specific person, but in general we asked those interviewed to provide their account of how the idea of the BSC came about, how it has developed, how it was packaged and presented, what associations and networks were developed to mobilize support for and promote the BSC, their expectations about the future, and the strategies used to manage the BSC (Alvesson and Kärreman 2007).

Clearly, retrospective interviews are somewhat unreliable if one subscribes to a naïve realist view of history, but they nevertheless provide narratives that we can compare with others who were involved, and allow us to identify the shifting BSC network. We maintain an agnostic view of the BSC and its merits and believe this was crucial in gaining access and eliciting information that would have been difficult to obtain if we were seen as critics or enthusiasts⁵. Our agnosticism nevertheless allows us to be sceptical about all claims made and our interpretation of all the material we collected; we did not pre-judge claims as true or false, but rather as objects for further investigation. Our history is obviously impacted by our choices about the people we interviewed and the organizations we focussed on; these choices were influenced by our prior research and emerging perceptions of the network surrounding Kaplan and Norton. Clearly we do not subscribe to a view that a definitive,

⁴ Kaplan's versions are presented as a linear and functionalist history of the development of the BSC.

⁵ Kaplan and Norton in particular are aware of the critiques of accounting 'innovation action research' (Kaplan 1998), and are critical of the failure of previous studies of such research (Jones and Dugdale, 2002) to speak with them or other innovators.

objective history of the BSC is possible, but instead offer a theoretically informed history of how the BSC became popular and influential.

By attending training sessions and management courses, we were able to identify current key actors in the network and to understand recent developments that are considered important to transform the idea of the BSC. These workshops were attended by people who saw themselves as BSC champions in their own organizations and were involved in BSC implementations. We identified ourselves as researchers to participants at the training sessions. We relied on our daily “observation notes” (Strauss and Corbin 1998) in recording the training sessions and interactions between participants (e.g. about their experiences of introducing and experimenting with the BSC). We collected training manuals, practitioners’ guidebooks and references, toolkits, charts and templates, and strategy maps. Analyzing these materials enabled us to further see how the BSC has been packaged. In addition, we analyzed fifty four bi-monthly magazines produced by the BSCol (*The BSC Reporte*) from 2001- 2009 in order to identify shifting foci of the BSCol and the various claims made about its use and impact.

We carefully analyzed all the materials as we collected them, using categories that emerged over the course of our study. We used the method of constant comparison to develop theoretical categories until our theoretical scheme was saturated with examples (Glaser and Strauss 1967). We augmented this approach with situational analysis (Clarke 2005) that involves the development of maps of the context and network of our interviews and observations and is designed to enrich a grounded theory approach. Our prolonged engagement with the project (Lincoln and Guba 1985), the face-to-face interviews we conducted, the insights we gained from visiting the BSCol and the management consulting firm, and attending workshops, and the documentary evidence we consulted afforded us the opportunity to probe deeper into the research issues that guided this paper. Our analysis of the data we collected entailed an interpretive reading that sought to go beyond the surface, consistent with the latent content analysis approach (Berg 2001).

5. A History of the BSC in Four Episodes.

Our material suggests four historical episodes⁶ in the development of the BSC as a set of laboratory and experimental trials through which the BSC “proves its metal” (Latour 1999: 119). Figure 1 provides a simplified picture of this history, and highlights some of the specific sites examined and the movement of the scorecard idea between sites as it becomes a generalized technology. The Figure indicates a process whereby local experiments become an abstract theory that in turn can be presented as universal, objectified through the use of templates by agents such as consulting firms and software designers. These templates are customized to other localities, which, in turn, re-shape the theories and modify the universal knowledge.

⁶ We use the term ‘episodes’ here to refer to as incidents, experiences, or events that we regard as important in the history of the BSC. Further, each episode enables us to develop specific theoretical points.

INSERT FIGURE 1 ABOUT HERE

The process of converting the BSC from a local context into an abstract system and back into local implementation involves a number of interdependent translations (Latour 2005; Callon et al. 2009) but which we present here as separate for clarity. Thus our first episode discusses the local politics involved in creating and embedding a trial, the second episode emphasizes experiments and building networks, the third stresses the role of framing and the fourth episode stresses OPPs and strategic agency. Inevitably, the theoretical issues and the empirical illustrations spill across the episodes, with each developing a theoretical theme rather than offering a chronology.

Episode one: Assembling a local scorecard: the politics of an early trial

An experiment at Analogue Devices (ADI), is acknowledged as the inspiration for Kaplan and Norton's formal explication of the BSC (Kaplan and Norton 1996b; Kaplan 1998). Schneiderman (2001b; undated) provides an insider's view by a former ADI executive who claims to be an originator of the ADI scorecard in 1986⁷, a time when the idea of the BSC was still a possibility rather than a fact. Our analysis of this episode stresses initial trials and the politics surrounding the scorecard and how networks of support are built.

The early development of a scorecard at ADI was the "offspring of Analog's five-year strategic planning process and its TQM activities" (Schneiderman 2001b). The idea that culminated in combining financial measures with non-financial measures in one diagram started off as a temporary solution to resolve a struggle between a "practical" financially-oriented Chief Operating Officer (COO) and a "theoretical and philosophical" quality-committed CEO: "[The CEO] intellectualized very quickly that the non-financial measures were the cause and the financial measures were the effect, but to [the COO] it was just the opposite" (former manager at ADI). ADI was assessed by its employees to be two headed: a reference to the CEO and the COO who ran ADI together, but had very different views of financial and quality measures. Managing ADI, it was suggested, was "political", where "personal reasons" were "the determining factors" for corporate decisions, further indicating that "there's a lot of tension internally (focused) on financial measures infused through them because (the CEO) was interested in non-financial measures" (former manager at ADI).

This struggle between the two most senior executives at ADI placed Schneiderman in a tough position. "[Schneiderman] was constantly on a knife edge in terms that anything [he] did to please [the CEO] displeased [the COO] and anything that [he] did to please [the COO] displeased [the CEO]" (former manager at ADI). As the Director of Quality at ADI, Schneiderman suggested a one page scorecard as a compromise between two senior managers who argued about the relative importance of financial and non-financial metrics at ADI's quality and strategy meetings during the late 1980s. The first version of the scorecard developed by Schneiderman was called the "Quality Corporate Performance Product" which "was all non-financial" (former manager at ADI). The prototype scorecard contained a small set of non-financial goals focusing on external results

⁷ There is a long history of scorecards being promoted and/ or used by a variety of organizations. Kaplan (2010) refers to some of these, as well as pointing out that these were either local or conceptual experiments that were not widely implemented.

(e.g. on time delivery and lead time) and their internal process drivers. This scorecard with its non-financial measures was published internally, along with the financials.

The development and quarterly reporting of the Quality Corporate Performance Product aimed to change the focus of managers at ADI from financial measures and to encourage them to spend “more time looking at non-financial measures as really indicators of what those financial measurements are” (former manager at ADI). In 1987 Schneiderman renamed the report a Corporate Scorecard.

INSERT FIGURE 2 ABOUT HERE

The prototype scorecard of 1986 went through several trials at ADI, with proposals for a small set of goals to others arguing for a more elaborate mix of financial/non-financial measures, others emphasising either results or process, suggestions for internal or external focus, and others articulating rationales for either leading or lagging indicators (see Figure 2). However, according to Schneiderman (2001b), the 1987 scorecard remained unchanged till 1992. Figure 2 shows that the measures reflected local priorities, such as new product introductions, time to market, on time delivery etc. The scorecard was thus the product of a local political struggle about the appropriate emphasis at ADI, and eventually was focussed on quality issues. Although Schneiderman presented ADI’s Corporate Scorecard numerous times to customers, at professional associations and at several major US Business Schools (Schneiderman, undated), his idea of the scorecard seems to have had limited external impact.

ADI viewed their scorecard as valuable in generating a process of establishing, revising and discussing the scorecard, rather than it being a measurement tool. The process of establishing new sets of measures entailed setting up “various groups of people to help develop a corporate wide standard and separate performance measurements” (former manager at ADI). The process also involved setting up “an executive information system, and so we had it all on line for the corporate system” (former manager, ADI). The proposals for the scorecard and the new quality-based measures developed by the groups had to be approved by the CEO and the COO. ADI focused on making presentations of the scorecard to employees and integrating it into an annual business planning process. The documents produced from the strategic planning process were perceived as a by-product. “Like many organizations, ADI’s written strategies quickly became dead documents; even finding old copies turned out to be a major chore” (Schneiderman, undated). For many in ADI, what was important was the scorecard process, rather than the scorecard itself:

“Now I don’t care whether it’s a document. In fact, I think a document in general is irrelevant. The process of getting to that document – the document is nothing more than a piece of paper that says, ‘we’ve now finished the process.’” (former manager at ADI).

This process-focus contrasts with the early managerial literature on the BSC, which emphasizes measurement schema and templates (e.g., Kaplan and Norton 1992; Niven 2002). The focus of the trials around the Corporate Scorecard at ADI was on the specifics of the firm and its concerns about the relation between profit and product quality. As we will see, the emergent BSC stripped out the politics and detail of ADI. There was an emerging idea of balance between the financial and non-financial measures at ADI, but one quite different from the balance notion as it developed in the BSC. Schneiderman argued with other ADI executives that more non-financials than financial should be included in the Corporate Scorecard: “since the financial

issues are so heavy you got to put more of the non-financials in order to get it balanced” (Former manager at ADI). Having said that, ADI’s scorecard emphasized the importance of identifying a few vital non-financial performance measurements as it was thought that the selection of metrics must be based on ‘strategic impact’, not ‘balance’:

“Trying to apply a scorecard in a perfectly balanced way undermines its purpose — to provide management with a better way to target resources to improve operating performance in the most critical areas.... When it’s time to revisit a scorecard’s design, use strategic impact, rather than strategic balance, to guide the overhaul. The result is a less balanced scorecard, but perhaps a more strategically useful one”. (Schneiderman 2001a: 12).

Whether or not ‘balance’ should be a defining characteristic of the scorecard was part of the trials that the development of the scorecard went through during this first episode. Some saw ‘balance’ as a feature that would endow the scorecard with wider appeal; others were concerned that it was detrimental to an efficient allocation of resources within ADI. What is particularly important for us is that the genesis of the idea of ‘balance’ surfaced as part of the trials that occurred during this episode, and as we will see later ‘balance’ became a central part of the new name. Perhaps unsurprisingly, however, trials are often contested and although balance is a central feature of the BSC, managers at ADI pointed out that there were also arguments about the overall benefit of their Corporate Scorecard, and whether the idea of balance should be rejected.

Episode two: Consultants and the role of experiments in building networks

“Innovation is what takes a disparate set of things and makes it into a commercial product or in our terms, a real concept. It’s stitching together a lot of things.” (Kaplan interview)

Further trials, experiments, adaptations and negotiations can be expected if the scorecard was to travel beyond what can be regarded as the local laboratory at ADI. A network was created.

“[T]he real history of innovations does not generally follow a simple schema, to solve the technical problems first and then deal with the market.” [Instead], “it is made of adaptations, series of trial and error and countless negotiations between numerous social actors, and it is a genuine combat from which conquerors, who know how to choose good representatives, emerge” (Akrich, Callon and Latour 2002: 207).

Kaplan became aware of developments at ADI when Schneiderman approached him in 1989.

According to Kaplan (1994a: 180):

“Art Schneiderman ...[asked me] to deliver a talk on activity-based costing. As I responded to this request, I began to realize that I had more to learn from Art than he did from me. I agreed to deliver the ABC talk, but part of the deal was for me to visit Art at an Analog plant.”

Kaplan’s visit at ADI was written up in a case about the use of the continuous improvement Half-Life Method. The case concluded with a few paragraphs on the Corporate Scorecard. However the scorecard was not immediately seen as significant. The ADI case on the Half-Life Method was first presented at Harvard Business School in 1990 and was taught elsewhere (Schneiderman, undated).

“The visit and case-writing process, however, also documented a Corporate Scorecard that senior executives at Analog were using to evaluate the company’s overall performance. The Corporate Scorecard included, in addition to several traditional financial measures, some metrics on customer performance (principally related to lead times and on-time delivery), internal processes (yield, quality, and cost), and new product development (innovation) The

significance of Analog's Corporate Scorecard, however, did not become apparent until another project [Measuring Performance in the Organization of the Future] emerged" Kaplan (1994a: 181).

The rise of the BSC to a general theory depended on capturing the interest of other managers and executives who might have similar concerns (see Figure 1). To build the network, a more general story of the scorecard had to be constructed; this is what Kaplan and Norton did by conceptualizing the scorecard and renaming it as a BSC as part of its framing (Callon 1998). In the above quote from Kaplan (1994a), framing is where the metrics are reclassified into 'financials', 'customer', 'innovation', and 'internal processes', that became the four perspectives of the BSC. Framing occurs because only these perspectives on performance are recognized, in effect excluding other potential perspectives such as employees, environment and community, except as they are perceived to impact the four classic BSC perspectives.

Creating general categories based on common sense framing makes it easier to comprehend an idea by diverse audiences, and thereby build a stable network of support (Callon 1986). The process of making the ADI scorecard into a more general object began in late 1989 when the Nolan Norton Institute, a consulting unit of KPMG, formed a multi-client research project on "Measuring Performance in the Organization of the Future" (Kaplan and Norton 1996b: preface). The project involved bi-monthly meetings of participating companies with outside experts, who presented on a variety of topics. Kaplan was an academic consultant to the research project:

"[The project was to] design a management framework for measuring performance in the organizations of the future. The study was based on the assertion that current approaches to performance measurement are based on an obsolete organizational model and are interfering with our ability to move into the future. The study concluded that the organization of the future must give as much emphasis to measuring the factors that create financial value (such as quality, service, and response time) as we now give to the measurement of financial value itself (Nolan Norton Institute, 1991)."

Senior executives from a dozen companies met throughout 1990. Kaplan invited Schneiderman to present the ADI case on quality and the Half-Life Method, but it was "Analog's Corporate Scorecard (that) captured the interest of the participants" (Kaplan 1994: 256): "they [the study group] liked the structure of how quality measures were arranged in these various perspectives" (Participant of Nolan-Norton Study). How exactly ADI's Corporate Scorecard captured the interest of the participants and whether there were any sceptics or debates is not clear. Following the presentation of ADI's Scorecard, several firms agreed to experiment with the scorecard idea in their own organizations. The idea "proved successful in many of the pilot sites and became the prime output from the year-long research project" (Kaplan 1994: 257). The Nolan-Norton research study involved experiments with the idea of the BSC in a number of high profile firms (see later) and provided a space for early translations of a performance measurement system and the development of a network of actors interested in the scorecard idea and how it might be implemented in different locations.

However, there was an important barrier to overcome: three years after introducing the scorecard, ADI's stock price dropped by two thirds, suggesting a need for further problematizations of the idea (Latour 1987). It was necessary for the proponents to construct the issue as the need to link quality matters with other outcomes, not as a fundamental problem with the scorecard itself:

“You had to connect the quality to outcomes. Not just financial outcomes but customer outcomes and that was really the gap that I think really helped us to crystallize that we needed a scorecard based on strategy and outcomes, rather than just the process” (Kaplan, interview).

As experiments among the participating firms in the Nolan- Norton study continued and were fed back to the project participants, networks were formed to consolidate these further developments. For example, one of the companies created scorecards for their customers and developed the idea of “strategic customers”. Kaplan and Norton encouraged this as a way of working “across organizational lines to create a commonality of purpose. How do you align external partners? And this is kind of a big idea. We’re talking about a networked world forming alliances” (Kaplan, interview).

Thus, a major addition to the BSC that came through these experiments was the customer perspectives quadrant:

“Because the scorecard... is a framework for describing a strategy starting with your financial goals, you know, how much of it do you want to get from growth and how much do you want to get from productivity? And so you parcel out the three to five year financial objectives into growth and productivity and say ‘okay, for the growth, where do the customers come from?’ This is what was missing from the Analog Devices scorecard: they improved quality but they didn’t translate it into ‘how do we sell more to existing customers?’ or ‘how do we find new customers that we can now market with our enhanced capabilities?’” (Kaplan, interview)

Experiments have the effect of imparting ‘scientific realism’ upon innovations (Hacking 1983: 262). The idea of strategy as a series of hypotheses draws on scientific language and provides a sense of scientific respectability. Further, experimenting with the BSC provided enthusiastic support by those who felt their local experiments were successful⁸ and indicated that at least for those firms where it was applied, an indication of its practicality. Enthusiasm and claims of practicality are important attributes in popularizing a management idea (Strang and Macy 2001). These trials were also an important means of ‘objectifying’ the BSC as something tangible and robust that can travel from the realm of experiments into the real world. The trials indicated that the BSC could survive apparently rigorous tests that it connected financial goals to growth, productivity and customers in the real world and that modifications and local conditions could be incorporated into the technology.

Two more ideas were considered essential in the formal conceptualization of the BSC: “one is the idea of the four perspectives, the balance, the other was this dynamic, that these things are related in terms of cause and effect” (Norton, interview). The idea of a balanced measurement system emerged in one of the early workshops that Kaplan and Norton arranged (Norton interview). Given that the BSC incorporates four perspectives, a concern with how these perspectives might be weighed against each other was inevitable: “in the first workshop, you know, we kind of hit on this idea of a balanced measurement system” (Norton, interview). Thus, identifying the key components of the BSC went hand-in-hand with the desire for balance: in workshops, “we would say you had a framework going in, you know, we need more than financial, so what else do we need? And then that kind of got us quickly to this idea of balance (Norton, interview).

⁸ We have been unable to identify any of the original firms in the Nolan Norton study who felt the BSC was unsuccessful.

With the four perspectives (or quadrants), the idea of 'balance', and connecting quality to outcomes, the first version of the BSC was born. During this episode, the idea of 'balance' became more solidified as a 'fact', and as an essential feature of the BSC. The workshops acted as a springboard for the continuous development of the BSC through discussions between network participants about their experiments in trying to develop scorecards for their companies:

“We met once a quarter-we would have a couple of guest speakers. I would stand back and say, now, here’s where we were last time, here’s what we talked about, here’s the new ideas, here is the updated framework [of the BSC], and then would say, ‘Shell Canada has done some interesting work this quarter and so has AMB’. So we’ll have a couple of case studies. So these guys would get up and describe what they did and now there’s an intergroup dynamics. They’d say, ‘wow, Shell can do it, wow, you know, we’re better than they are’.” (Norton interview)

These quarterly workshop meetings acted as a “cycle that is very powerful for innovating and generating ideas” (Norton, interview). The trials of developing the scorecard during this episode were no longer internal to one organization, as was the case in the preceding episode. Rather, members of the Nolan-Norton project were encouraged to experiment with new ideas, but also draw on developments to the scorecard undertaken by successful organizations, thus enrolling the support of high status organizations.

Kaplan and Norton wrote a *Harvard Business Review* article which summarized these early experiences (Kaplan and Norton 1992). It seems this was taken for granted as a desirable thing to do in order to popularise the idea; professors at Harvard Business School try to popularize their research through articles in *Harvard Business Review* and books published by Harvard Business School Press⁹. The BSC is presented as a way of resolving what is defined as the problem of relying on traditional financial measures by offering a solution of complementing financial with non-financial performance measures. This builds on Kaplan’s earlier problematization of accounting, and the need for supplementary non-financial and operational measures (Kaplan 1984). It is also an era where Western firms are looking for ways to compete globally, in particular in relation to quality and operational excellence (Hayes and Abernathy 1980). The BSC was referred to as “a management framework for measuring performance in the organization of the future” (Executive Summary, Nolan-Norton study, 1991).

ANT emphasizes the fragility of ideas and the effort required to establish a network of support for innovations. Writing was not enough to build a strong network. This is articulated in relation to the BSC between 1993 and 1996.

“People think you write a good article and the phone rings off the hook, that you need an answering service to take orders, you know. It’s not that way at all. So this was kind of heavy slogging. An occasional company here would be interested and I’d work with them. And then we got five companies, actually, [who] picked up the idea, worked with us, we worked with them as consultants, so we had real hands-on experience with them” (Norton interview).

Norton’s consulting firm helped build a network of organizations that experimented with the BSC: “the Nolan Norton Institute was our attempt to create that kind of an environment that allows you to take advantage of the many companies that you were working with, and to create research oriented communities” (Norton, interview). The emphasis was on building networks and

⁹ In the 1990s Harvard Business Review, Harvard Business School and Harvard Business School Press were formally linked. More recently, these connections have been weakened, if not completely legally severed, although the tradition of connection remains.

communities that would support the BSC during its various phases of development. A strong network is one that is difficult to resist and the production of legitimate language and credible technologies is important in this network building (Latour 1987). As Norton indicates, it is also a ‘slog’. High profile organizations participated in the Nolan-Norton research study, including Advanced Micro-Devices, American Standard, Apple Computer, Bell South, Cray Research, Dupont, EDS, GE, HP, and Shell Canada. This initial network provided legitimacy for the BSC, but also supported the simultaneous creation of BSC experts. Several of these initial experimenters eventually set up their own consulting firms or worked for the BSCol. Further, after the 1992 *Harvard Business Review* publication, several senior executives contacted Kaplan and Norton asking for their help in implementing a BSC system in their organizations and requested additional information about BSC implementation (Kaplan and Norton 1996b, preface)¹⁰. The participating executives and their companies were portrayed as opinion leaders and early adopters of successful BSC systems. As we discuss further in episode three, stories of success are persuasive in popularizing management innovations (Strang and Macy, 2001). Harvard Business School teaching cases (e.g. Kaplan 1995, 1996a, 1996b) often offer success stories. Cases from successful leading-edge companies are believed to apply to other companies, whereas stories of failure tend neither to be written, nor to be appealing.

Episode three: Framing and generalizing the BSC

Our analysis of the first two episodes stresses how a local experiment is translated into a compelling and more general idea and technology through multiple experiments and processes of network building. The BSC as an accounting and management technology needs to be seen as more than story-telling for it to be taken seriously by a wider audience. Norton (interview) expresses a more general understanding about consultants:

“Practitioners know the most because they go the deepest and live with it, but unfortunately they have a sample of one so it’s hard for them to extrapolate. The university professors... have a limited amount of time in general and they get spread very thin so they don’t get the depth but they get the breadth and they’re great at synthesizing and so forth. But the consultant fits right in the middle because the consultant works with the companies in depth and works with the executives in depth and at the same time consultants that are good are able to do in part what a university researcher would do, synthesize and generalize.”

Whatever the merits of Norton’s view, we conceptualize the synthesizing and generalizing referred to above as framing, and these processes are the focus of episode three. The identification and linking of the four perspectives of the BSC framed the boundary (Callon 1998) which Kaplan and Norton and other proponents of the BSC claim represented the required elements to run a successful organization. The four perspectives provide a frame for managing organizations and for depictions of organizational success. The arrows in the BSC inscriptions depict not just the interactions between the various perspectives, but offer an image of completeness, where nothing important is excluded. Such framing highlights that the four perspectives are categories that elaborate the cause-effect chains that appear to scientifically link the BSC to organizational success, and deny

¹⁰ Our informants at ADI tell us that the failure of Kaplan and Norton (1992) to acknowledge ADI in the development of the BSC prompted some heated discussion about whether the firm should sue Kaplan and Norton. In the end, it was decided this would be a distraction for the firm. Later writings (Kaplan and Norton 1996b; Kaplan 1998) acknowledge the role of ADI.

the relevance of any other perspectives. Below, we discuss four, inevitably inter-related, elements of the framing of the BSC, namely (i) the development of abstract categories and naming concepts; (ii) articulating causality; (iii) identifying previous failures and presenting solutions; and (iv) using inscriptions and graphical presentations. These elements help transform the BSC from a local practice to a pervasive technology.

(i) *Development of abstract categories and naming concepts.* The initial BSC taxonomy (Kaplan and Norton 1992) specifies four abstract perspectives: financial, customer, internal business; and innovation and learning. Although individual organizations sometimes customized these perspectives, developing and stabilizing this taxonomy was deemed critical to the success of the BSC:

“The taxonomy becomes critical. So if you have changed the taxonomy every year then your whole ability to capture and share knowledge would be destroyed” (Norton interview).

The four perspectives had to be made to appear coherent and sensible to potential audiences:

“If you look at this, we didn’t have all those elements in place. Most of the things were there, but innovation was in the fourth perspective, and then we still hadn’t realized that was part of the value chain of processes so we moved [it]... they kept moving it into the process perspective...So we actually changed that” (Kaplan, interview).

Categories need to be stabilized. For example, there is nothing natural or inevitable about innovation being part of the learning and growth perspective, or, indeed, of the internal business processes perspective. Managers often agonize about where specific objectives fit among the different perspectives. Organizations are encouraged to customize (“populate”) the BSC template with what managers deem appropriate metrics, but in this process the template itself is rarely discussed. Instead, as Qu and Cooper (2011) indicate, populating a perspective helps to give it meaning in a specific situation, and helps to build the network of support. Converting ideas into objectives, measures, targets and initiatives helps to stabilize a perspective, while being flexible enough for users to give it specific meaning and substance:

“You’ve got to provide a stabilizing framework and so taxonomy determines importance. You know, the balanced scorecard as we apply it today is – there is still four perspectives, companies do five, six, three, and so forth,...but we try to stabilize on the [four perspectives].....” (Norton, interview).

The promotion of the BSC as a stable taxonomy helped to bring together what might otherwise look like diverse ideas and practices, giving them coherence and meaning:

“And so we have a framework which is now widely adopted around the world, and a lot of people have that framework... Without the framework which is pre-existing, that idea would have been an interesting idea, but so what?” (Manager, BSCol.).

In addition, a universal concept of organization is conceptualized as being manageable via attention to the measures that populate the four perspectives. The BSC abstracts organizations by reducing them to four perspectives. Kaplan and Norton connect each of these categories via numerous examples that assert that each perspective is crucial to the effective running of organizations. Moreover, through the framing of the BSC, Kaplan and Norton locate strategy at the apex of planning and monitoring activities as the benchmark against which organizational achievements are assessed. Different versions and experiments were incorporated into the framework, thus containing issues that were initially not considered in the early versions of the BSC idea. For example, experimental features, such as the proposal for an Office of Strategy Management (Kaplan and Norton 2005) mean that issues such as implementation that were not originally stressed, could be brought into the

idea of the BSC. The framing encouraged elaborations of the interactions between the abstract four perspectives, thereby bracketing the outside world whilst remaining rooted in it (Callon 1998). In bracketing the outside world, the four perspectives abstracted from any local experience or context; yet the BSC remained rooted in the specific conception of the organization and modes of management (e.g. the primacy of strategy) enabling it to be presented as a global technology, a knowledge system, and a management system that can be put into practice across many, if not all, organizations.

Naming concepts and practices provides the foundation for further framing, elaboration and communication: “the naming of new concepts and practices become[s] a part of the cognitive map of the field” (Lawrence and Suddaby 2006: 228). The naming of the innovation itself as BSC emphasized two important features: multiple measures and balance. Being measurable and calculable are qualities deemed necessary in modern management, and the BSC is a collection of measures that can be combined, re-combined and form the basis for further calculations and measures. The importance of multiple measures is articulated by Kaplan and Norton (1996b), likening the management of a modern organization to that of flying an aeroplane, with both needing the use of multiple measures. Yet Schneiderman doubts the value of balance (2001a), highlighting the ambiguity in the term. We also found in our fieldwork in a Western Canadian consulting firm that balance was understood as meaning each perspective should have equal weight (Qu 2006).

Naming concepts and practices are elaborated in part by drawing on other discourses of management. The language of ‘strategic mapping’ builds on ideas from cybernetic thinking (Vesper 1979) and has been extensively used by Porter’s Monitor Group. Further, the naming of the ‘learning and growth’ perspective uses very popular ideas of learning organizations (e.g., Senge 1990). Concepts such as alignment, execution and mapping are given specific meaning in relation to developments with the BSC in various organizations. Strategy is understood as competition and is linked to SWOT analysis which conceptualizes an organization’s environment in terms of threats and opportunities rather than, for example, cooperation (Oakes et al. 1998). Drawing on other discourses is in itself unremarkable since all texts build on previous texts; what is important is that Kaplan and Norton draw on popular and engaging discourses and language which not only inevitably molests, that is, disrupts and is not entirely faithful to, these prior texts but also enhances the credibility and apparent practicality of their ideas (Cooper and Ezzamel 2013).

(ii) *Articulating causality.* The BSC framework imposes causal connections on diverse ideas (Kaplan and Norton 1996b). The BSC is presented as a translation of strategy into a set of multiple measures tied together in a series of cause and effect relationships that are intended to collectively navigate the organization towards future competitive success:

“I can remember when I was giving a speech in Germany... I always remember I created a cause and effect link, so you think actually there’s a link between these four perspectives. If you train your employees in quality approaches, how to solve - you know – eliminate defects, then the process will improve. You’ll have more reliability and consistency and if that happens you’ll deliver on time and... if that happens they [your customers] will be more satisfied and loyal and your financial results [will be better]. And I actually drew this. And that diagram is in one of the early chapters in the Balanced Scorecard book” (Kaplan, interview).

Financial and non-financial measures are assumed to capture critical value creation activities of employees at all levels (Kaplan and Norton 1996b). For example, the customer perspective is rationalized by arguing that if customer needs are satisfied, a causal chain leads from customer satisfaction to increased customer acquisition, increased customer profitability and increased

customer retention, which ultimately leads to increased market share. The articulation of causality also runs through the familiar framework of objectives-measures-targets-initiatives, suggesting that if an organization adopts specific initiatives, this will lead to achievement of targets and objectives. Ordering logics, such as cause-effect relationships, stabilize objects (Law 2009). There is recognition that such causal arguments need to be tested, but the assumption of causality itself is asserted despite little evidence about the validity of linkages in the BSC (Malina, Norreklit and Selto 2007). Murthy and Mouritsen (2011) show that stable and uncontested causal chains are difficult to identify; assumptions of causality vary over time and are understood, and acted on, differently.

(iii) *Identifying previous failures and presenting solutions.* Framing involves the “specification of a general organizational failing for which a local innovation is a solution or treatment, and justification of the innovation to be more appropriate than existing practices” (Tolbert and Zucker 1995: 183). The BSC is offered as a way to align employees to organizational goals and improve the effectiveness of strategy implementation. The problematizations offered by Kaplan and Norton have varied over time. The original article linked the BSC to the problem of poor measurement practices and the decline of US manufacturing (Hayes and Abernathy, 1980; Kaplan 1984). Later writings (e.g. Kaplan and Norton 1996b) argue the need for a technology that overcomes the problem of translating corporate strategy and vision into terms that can be understood and acted upon. It is held that before the development of strategy maps, there was a void concerning how organizations describe their strategies:

“In the great scheme of things, the contribution, I think, that the Balanced Scorecard and strategy maps have made is that they filled this void, allowing an organization to describe what their strategy is” (Norton interview).

Thus, the solutions offered by the BSC advocates are inseparable from the problematization that preceded it. Developments of the BSC are also presented as responding to specific problems that have arisen in prior implementations or as identifying new issues that can be addressed by the technology. For example, Kaplan and Norton (2004a) link the BSC to knowledge based organizations and the ‘new economy’ and their 2006 book is focussed on aligning service units of an organization to production and delivery units. Thus the BSC is framed as providing solutions to many organizational failures, whether based on general concerns or specific challenges faced by individual organizations.

Most management ideas travel as “success models” (Sahlin-Anderson 1996; Strang and Macy 2001), and/or best practices (e.g., Westphal, Gulati and Shortell 1997). Mass media and the business press play an important role in the production and legitimation of management ideas and practices (e.g., Mazza and Alvarez 2000). Media stories and teaching cases provide simplified versions of success, which downplay discontinuous and messy aspects of learning and procedures developed in practice. Documenting these procedures and practices is complicated and time-consuming, often skipped by providing cases that purport to present ‘best practices’ and innovations (Strang and Macy 2001). Managers look for knowledge that can be readily translated into action, and what is relevant to them are concrete examples of what others have done; the publications of Kaplan and Norton are full of numerous success stories from well-known organizations with little said about any difficulties. All 76 cases presented in the *Balanced Scorecard Report* during our sample period are stories of success. An editor at Harvard Business School Press (interview) believes the success of Kaplan and Norton’s books is significantly due to the use of examples from well-known organizations.

(iv) *Using inscriptions and graphical presentations*: framing is more persuasive when it uses graphic representations to illustrate relationships and causality (Qu and Cooper 2011). The more complex the relationships, the more useful it is to graphically depict them using arrows (Quattrone 2009). Graphics are powerful in delineating patterns and introducing causality; inscriptions are ‘rhetorical machines’ (Busco and Quattrone 2015). Visual representations are a way of facilitating framing by rendering interactions visible, imposing order, and limiting externalities. Latour (1990) has argued that the use of graphs is an important means of rendering phenomena into compact, transportable, and persuasive form. A visual representation is argued to increase the readers’ comprehension and helps to persuade potential allies (Latour and Woolgar 1986). The success of the BSC is due in part to the extensive use of graphical representations to illustrate its key ideas (Norreklit 2003; Free and Qu 2011). A large volume of figures (on average about ten per chapter) are used in the four Kaplan and Norton books:

“One of my observations about them over the years was that Dave was an extremely visual thinker... Dave’s description of the book was all visual. He’d have these, if you’ve seen them, these charts and tables, and that would for him encapsulate the whole book, and then Bob was much more the writer who would go through and flesh things out” (HBS Press editor, interview).

Kaplan (interview) reiterated this point by suggesting that an event study diagram (for example, as in Ball and Brown 1968):

“is very powerful, you see a jump in the stock price... It’s incredibly powerful. If you saw that in a table it just doesn’t have anywhere near the impact”, and “We’re pitching new ideas and we’re pitching them to sceptical people: ‘Why should I do this?’ And just so if we can do something that helps them understand this, visualize it, you just improve the acceptance a lot.”

Graphs, tables and figures “redefine space, wiping clean all irrelevant details” (Myers 1988: 239) and structure claims and the objects of the illustration (Busco and Quattrone 2015). The use of graphics contributes to the generalization of claims; the “elimination of gratuitous details is part of the move from the particularity of one observation to the generality of a scientific claim” (ibid). This is illustrated in the introduction of strategy maps, where a causal chain appears to be a universal model rather than being specific to any individual or local organization. Strategy maps are described as a “dynamic visual tool to describe and communicate strategy” (Kaplan and Norton 2004a: 54). Strategy maps appear as an essential part of the management knowledge associated with the use of the BSC, an objectified, rather than a subjective, qualitative or imaginary, knowledge. Yet, such maps are inevitably subjective and based on the imagination of its authors, but their fixity obscures the contestability of the underlying objectives and strategies. “Graphs have an effect even when the data in them are subjective, qualitative or imaginary” (Myers 1988: 248).

Kaplan and Norton (2004a) suggest that explicit visual displays through strategy maps are important to make everyone in the organization see how they fit into the overall strategy. However the details of this proposition must be imagined by the reader of the map, who needs to consider the “cause-and-effect relationships that the strategy maps are argued to illustrate and the way they link desired outcomes in the customer and financial perspectives to outstanding performance in critical internal processes” (ibid: 55). Visual representations help to strengthen the theorization of the BSC and are particularly effective in winning over people with sceptical views and in mobilizing their support.

Episode four: OPPs, strategic agency and controlling networks

In this episode we further discuss the networks that helped to secure the BSC and Kaplan and Norton's efforts to keep control of the innovation. The concept of OPP highlights two broad themes- identifying and developing actors in a supportive network and convincing them that their interests connect to the network, that they can best attain what they want by associating with the network (Callon 1986). Thus we discuss a variety of actors, notably Kaplan and Norton, the BSCol, Palladium, software firms and the BSCol's Hall of Fame, and show how their interests were aligned with Kaplan and Norton and the BSC, notably through processes of continuous development and ideas of 'integrity'.

(i) Strengthening and extending the network.

As the BSC develops, more and more allies enter into the network, many of whom were not simply collaborators of Kaplan and Norton but organizations which experimented and elaborated the idea:

“The balanced scorecard concept evolved extremely rapidly, even faster than activity-based costing. The findings from the third round of implementations were soon written up and published in three new cases (Kaplan 1995; Kaplan 1996); a third Harvard Business Review article (Kaplan and Norton 1996a); and a book (Kaplan and Norton 1996b)... I believe the reason for the more rapid advance of knowledge was the leverage from Norton's consulting company (Renaissance Worldwide), for which the balanced scorecard represented a major deliverable (and differentiator). Therefore, we had the advantage of a dedicated cadre of trained, skilled and highly motivated consultants working and innovating with companies in North America and Europe. And we could directly access these experiences for presentations, articles, cases and a book” (Kaplan, 1998: 109).

The emphasis here is on the crucial role of consultants and consulting organizations. In 1992, Norton co-founded Renaissance Worldwide, which provided the capacity to undertake BSC related consulting work, but,

“Renaissance was a public company [with short term horizon so it] was not a great place to do research. So we took the balanced scorecard out of there and created the Collaborative [in 1999]. Okay, so the ... mission of the Collaborative was to develop the idea and to manage its integrity” (Norton interview).

Some of those consultants interviewed who were involved with Renaissance indicate that there were strains in the mid 1990s. Consultants in Renaissance could see Kaplan and Norton consulting with senior managers about the value of the BSC, but they worried that this would not generate enough follow up work to sustain a consulting organization. They also worried about Renaissance being too much of a one product consulting operation and worried about the longevity of what could be seen, at the time, as a fad or fashion. Some left, and those that remained in the network were convinced that a process of continuous innovation and a move towards training others could sustain their consulting careers. These developments are discussed later.

The establishment of the BSCol (subsequently part of Palladium) was intended to expand the network of alliances committed to the BSC in order to create: “a community of people who have a common interest, who will come together to collaborate ... and to create networks out there” (Norton, interview). As the BSC as a new idea was developed into a brand, this necessitated expanding the network internationally to promote it: “the new becomes a brand, in a sense....What we have done, and continue to do, is to create communities of people around the world. You know we created a profession in a sense, a profession a strategy management that really didn't exist” (Norton, interview).

The BSCol was a specialist consulting firm with an emphasis on spreading and managing the idea. In his interviews, Norton refers to many aspects of “integrity” in relation to the firm and the BSC:

“it’s ’98 when we built the Balanced Scoreboard Collaborative, and the goal there was very much around, as the mission stated, to improve, to enhance, to protect the integrity, and advance the awareness, use, enhancement, and integrity.....We had a software product but part of the real goal there was to help maintain the integrity, part of the mission was to maintain the integrity of a Balanced Scorecard so that a balanced scorecard meant a Kaplan Norton Balanced Scorecard, not a generic balanced scorecard” (Norton, interview).

This quote refers to maintaining the Kaplan-Norton vision of the BSC and the BSCol as a type of missionary organization, which includes ensuring that many other members of the network (including software designers, trainers and other consulting firms) subscribe to Kaplan and Norton’s ideas of the functionality, purpose and reputation of the BSC. Of course there is nothing sinister or surprising about this desire for integrity and protecting the brand, but it results in a strong focus on controlling a vision of the technology.

The BSCol became the education, training and certification component of the consulting company, Palladium; the BSCol was effectively “the intellectual assets, the body of knowledge” (Norton interview) of the BSC. The BSCol:

“Helped create a community of a hundred and eighty thousand people.....We had a consulting group that would help take the ideas and drive them down” (Manager, BSCol).

The BSCol is an important element of the network. Organizations were able to learn from web-conferences, read material, and use BSCol resources to educate themselves on how to apply the BSC; “but never paid for an hour of consulting work”, because the BSCol created “a leverage that goes beyond the ability of a handful of people” (BSCol manager). Norton elaborates:

“So here’s the mission that’s on the back of our business cards. It’s a professional service organization that facilitates the world wide awareness, use, enhancement, and integrity of the balanced scorecard as a value added process. Palladium, you know, it’s a consulting company, of course we have to make money, pay bonuses, career paths, you know. All the things you’d find in a professional service firm, but there’s more [in the BSCol]. People have a passion for this.”

In addition, the BSC is secured by a network that also includes designers and user organizations, software companies, clients and trainers. This network not only promotes the technology, but also modifies it. For example, as well as the more popularized ‘American’ version of the BSC, other national versions have been competitors or collaborators in elaborating the BSC, such as the French Tableau de Bord (Bourguignon et al. 2004) and the Swedish BSC (Olve, Petri, Roy and Roy 2003; Ax and Bjørnenak 2005). The many cases in the *Balanced Scorecard Report* indicate and draw on these local variants. These versions, enhancements or adaptations are often bundled with other management ideas and the proponents (and even critics) become, in effect, allies of the BSC. For example, we have seen management consultants incorporate ideas about the learning organization and from business process engineering into their own tailored BSC (Qu 2006).

(ii) Controlling the BSC and connecting interests.

As Latour (1987) points out, innovations or ideas can assume a trajectory quite different from that anticipated by its inventors, and in the process can run out of their control:

“the idea is bigger than the people ultimately because it is owned in that sense by those that actually implement and improve it over time. That’s already been happening with the BSC, and we have people that offer scorecard services

and products. People write articles or other people write books on the scorecard, news, conferences.... So that the movement is bigger than Bob [Kaplan] and Dave [Norton]" (Manager, BSCol.).

So, how do innovators who wish to keep control try to influence ideas that can become bigger than them? One obvious response is to patent or copyright innovations, hoping thereby to protect the property rights of the fact builders, and minimizing the chances of others gaining control of it. This approach was rejected:

"That's [copyrighting] a waste of time. Because they spend all their time in court instead of doing research..... We did not copyright it [the BSC], but then, you know, it started to become an idea that had economic value, we made the decision to let it, you know, let it go" (Kaplan, interview).

"Letting it go" did not mean abandoning control. Kaplan and Norton strategized their own position in the network, deciding to emphasize continuous innovations:

"We never lost control of the methodology, and we could continue to create some best practices, which first validated the concept, but, more importantly, helped us to continue to learn. And the fact that we had eight or nine Harvard Business Review articles and five books, it's not like we were holding things back in the 1990s and gradually let them out. It's that they were really progress reports about where our thinking has evolved" (Kaplan interview).

"[We] control it [the BSC] by staying associated with it, by keeping it modern, by doing the research and keeping our names synonymous with it" (Norton interview).

Becoming an OPP requires strategizing to unify the diverse interests in the network. Kaplan and Norton tried to "continue to shape that [BSC] space" (manager, BSCol) in order to retain control over the BSC. It is not that they control all practices based on scorecard methodology, for other scorecard products exist, such as the European Foundation for Quality Management (EFQM) and Performance Prisms and Pyramids. Rather, control here refers to the ideas and innovations blessed and publicized by Kaplan and Norton; a scorecard movement that is associated with these two actors and their associated organizations.

A comparison was made between the rise and fall of Business Process Reengineering and the efforts to secure the BSC; the former likened to a one-off event and the latter to a movement:

"If you look at what Michael Hammer did with re-engineering, he lost control of the idea. It became synonymous with downsizing and layoffs. And, rest in peace Dr. Hammer, but the idea here is that the thing, this balanced scorecard thing, it's actually a movement" (Manager, BSCol).

In shaping the BSC space, Kaplan and Norton's names became closely associated with the BSC:

"We made sure that Bob and I identified with it as strongly as possible, so what we do is conferences, you know, it's the Kaplan Norton Balanced Scorecard" (Norton, interview).

Crucial in the quest to retain control of the BSC is its continuous reinvention, which makes it less susceptible to capture by others. Their attitude was:

"Continue to innovate. You make sure not only you are the source but you are the authority. And how do you do that? Well, you do that by having research programs that push the envelope, you do it by having conferences that are shaping the application of the market place, by continuing to write books, and so forth." (Norton interview).

This emphasis upon continuous innovation was thought to be an important option to keep control of the innovation:

"I think what Dave and Bob have done is redefining what it means to be, what the Balanced Scorecard means. I would call it the Kaplan and Norton management system. The shorthand and this is the challenge, it's the Balanced

Scorecard management system, it's the Kaplan and Norton Balanced Scorecard.... It's a philosophy of management' (Manager, BSCol.).

The path that Kaplan and Norton followed in providing 'continuous innovation' of the BSC can be traced through the various publications they developed over the years. Kaplan and Norton summarize distinct cycles of evolution of the BSC between 1990 and 2009. The first stage (1990-1996) is what they call the BSC as a "measurement system". The second phase (1996-2002) conceptualizes the BSC as a "performance management system". In the third phase (2002-2009) the BSC is recast as a "core competency" with emphasis upon strategy execution and, "it has now moved from being an external phenomenon where you get a consultant to help you, to a competency that you have to build yourself" (Norton interview).

To make their names synonymous with the BSC, Kaplan and Norton invested their time and intellectual capital to shape the BSC space, to keep the movement dynamic, by continuously developing the BSC, speaking at conferences around the world, writing numerous papers and books, offering advice to organizations seeking to implement the BSC, listening to and learning from the experience of organizations that have worked with the BSC, and being directly involved in organizations set up to promote the BSC such as BSCol, Palladium, Renaissance and the BSC Hall of Fame. The BSC Hall of Fame (HoF) is a related means of building a network of organizations that support and experiment with the BSC. Founded in 2000, the HoF program has over 150 members from more than 20 countries, including the FBI, Merck & Co., Hindustan Petroleum, Infosys Technologies, Siemens, and Volkswagen do Brasil. More actors have been enrolled, professional accounting associations encouraged to incorporate the BSC into their training and products, and academic research stimulated on the topic (including our own). Kaplan also drew on his (negative) experiences with Activity Based Costing, believing that he and Robin Cooper 'lost control' of that innovation through the simplification of the idea so that junior consultants could implement a standardized technique. Thus, although others wrote books and articles on the BSC, Kaplan and Norton tried not to replicate the 'errors' of BPR and ABC. Kaplan and Norton became OPPs by linking the BSC to their personal names, creating effective problematizations for which the BSC could be a solution for many network members, connecting with many potential allies and sceptics, and presenting themselves, and convincing many others, that they are 'thought leaders'.

Continuous innovation of a technology runs the risk of undermining itself. An element of stability is also necessary or the technology can be considered trivial, confusing or superfluous. This was clearly recognized by Kaplan and Norton from early on; hence their enthusiasm for continuously framing the BSC to have the same taxonomy of four perspectives, and also by maintaining the same cause-effect logic. Insisting on some measure of stability and taxonomy was one way by which Kaplan and Norton tried to overcome the risk of undermining the BSC if it is regarded as an ever changing technology. Convincing the target audience that continuous BSC innovations had to be taken seriously was challenging, but Kaplan and Norton's approach to managing this difficulty is based on claiming the practical usefulness of the new developments by appealing to best practice and also by suggesting that the newly developed bits should have been there from the beginning. The BSC is reconfigured as distilled from the practices of the most successful companies. Target audiences who become enrolled tend to accept this statement at face value; Kaplan and Norton neither offer clear evidence of why these companies are deemed successful, nor state what measures of success they use. The potential members of the network must trust and accept as fact the claims made. "So if it succeeded in four places, why wouldn't it succeed in four hundred? So I'm not going to waste my time studying

failures. I study successes and what did they do” (Norton, interview). Sceptics might seek more direct evidence to be convinced and hence a series of efforts are required by the fact builders and their close allies to bind the interests of sceptics to the cause (Callon 1986).

The development of new ideas or objects, such as the BSC, tends to be greeted with criticism and scepticism. This was a concern that the designers of the BSC were aware of:

“You come up with a new idea, say the Balanced Scorecard, the natural scepticism of academics and the competitive reaction of other consultants is to denigrate your vision of it, talk about the bad things that have happened with it, and then kind of describe their own particular version of this, and you can’t shut that off, nor is it desirable to shut it off” (Kaplan interview).

A key response to this kind of reaction, and also one of the main reasons for the staying power of the BSC is aligning the interests of various actors who might support the development and spread of the BSC. As well as organizations already discussed, such as the BSCol, Palladium, and Renaissance, other actors were mobilized, such as the Hall of Fame, software developers and an international consulting network. These various associations are network allies to both the key actors and the actant (the BSC) that helped to render both parties effective and competent.

“The software companies would come and say, look, uh, we’re building a balanced scorecard, would you come and speak at our conference? Would you give a testimonial about our product? And so you could see this was the first step down a slippery slope. So what we said, yes, we’ll do that but we’re going to publish those standards as to what we mean by balanced scorecard and if your product meets those standards we’ll certify it and post it on our website and allow you to advertise it in whatever way is appropriate. And the standards are – they’re not going to be technical standards, they’re going to be functional standards, you know, ‘so can your application link objectives together in a cause and effect sequence?’ ‘Can your applications show the relationship of an initiative to an objective?’ So we defined maybe 10 functional characteristics ... and then we would certify them. So that turned out to be one of the smartest things that we’ve done.... And we would review functionality and then the other criteria is, ‘you have to have a customer and the customer will answer certain questions’. We’re not going to certify stuff that’s in a laboratory” (Norton, interview).

More recently, Palladium and the BSCol have initiated a strategy of developing a variety of certification programs, justified in terms of maintaining integrity but having the effect of strengthening the network around the BSC. There are certification schemes for software designers, BSC trainers and even consulting firms in various parts of the world who are ‘licensed’ to promote, consult and develop the BSC. These international networks are partnerships or affiliates who are trained and certified by the BSCol, and pay royalties. They can join the network if they are deemed to maintain or enhance the integrity of the BSC.

Winners of the Hall of Fame Awards are selected “based on the quality of their BSC implementation and the results they demonstrate over a period of at least two years” (HoF website).

“The Balanced Scorecard Hall of Fame gave us a mechanism and incentive in a way to reward the enterprises that really have done it [applied the BSC] well and are proud of it and want the recognition” (Kaplan, interview).

A Harvard Business School Press editor comments on the importance of the HoF for network building and keeping control of local experiments in many organizations:

“One of the things that the Balanced Scorecard Collaborative did that I thought was an ingenious marketing strategy, but it actually had real integrity in keeping with the role of the ideas, was the creating of the Hall of Fame. And their

conferences, where the presenters were the people who were using the content.... , they were creating case studies and raw materials that Bob and Dave would then use in consulting with other clients, but also in writing their books.”

The HoF is more than a mechanism to provide support and recognition. Organizations have to submit an extensive application (and fee) to be recognized as a HoF member. This application material is acknowledged by Kaplan and Norton to provide detailed information about successful experiments that seek to extend and improve the BSC:

“Our Hall of Fame ... we go in and study these organizations and, you know, what we have learned is a set of best practices, things that each of them do, and in the Hall of Fame application ... they tell us their approach. And so ... now we’re starting to build the next level of knowledge of ‘what are the best practices?’” (Norton interview).

A prominent example is the experiment by Chrysler to develop an Office of Strategy Management, which has now been incorporated into several of Kaplan and Norton’s publications (2005; 2008). Kaplan and Norton have worked with some of these organizations in developing cases that are used in subsequent publications and other BSCol activities, such as training workshops and conferences. Senior managers and champions from HoF members are often presenters at the BSC Summits organized by Palladium. The HoF program is a powerful example of how Kaplan and Norton have become OPP in the BSC story and how the experiments and innovations at multiple sites are fed back to Palladium, the BSCol and Kaplan and Norton, in a manner similar to the informal and distributed laboratories of many scientific and technological innovations (Knorr Cetina 1992). Knowledge about experiments at sites around the world which may be otherwise unconnected to Palladium and the BSCol, can be distributed to the BSCol and can form the basis for new writing by Kaplan and Norton and revised BSC consulting practice by Palladium.

6. Discussion and Conclusion

Drawing on actor-network-theory (ANT), this paper has examined the processes that result in the development of an innovation and the trials through which innovations become defined. We have identified four episodes that highlight different aspects of the emergence of the BSC as an innovation that travels the world (Czarniawska and Sevón 2005). Our history indicates the appeal to science that is significant in the spread of the BSC and how the language of trials and experiments is an important part of the translation process. Our analysis also explores the framing of the BSC, indicating how local trials are abstracted and generalized, how networks are developed and the scorecard idea and the various experiments are redistributed to multiple places. We have also explored the strategies and tactics through which innovators as fact builders control the problematization of the innovation and the strategies to make themselves OPPs. These can be regarded as the types of mechanisms that Dirsmith (2007) encourages us to examine in making a technology appear to be practical and useful.

This paper makes three contributions. First, it identifies and illustrates how the BSC as a management accounting idea is made practical through its travel in time and space. We have shown how it travels from local practices and experiments to a global movement, where further local experiments are incorporated back as improvements and further innovations. Secondly, it examines the process of emergence and transformation of the technology with an explicit focus on human–technology interaction and processes of framing (abstraction, naming, labelling, establishing interactions) rooted in experimentation and ‘best practice’. Finally, it underscores the importance of strategic agency by identifying and discussing strategies followed by

fact builders to maintain control of the innovation and become OPPs. We add to prior literature that has articulated OPPs as programs (e.g. Callon 1986), cities (Law 1986), and laboratories (e.g. Latour 1988) by conceptualizing humans as an OPP. This is more than a further example of what an OPP can be; rather in attending to innovators we highlight the role of their strategic agency (Said, 1975) in the translation process. Leading proponents of ANT (e.g., Law 2009: 147) acknowledge that the non-humanist relational emphasis of ANT is controversial, and has been criticized by those who seek to emphasize the role of humans and agency, and the framing of the social in terms of meaning and intersubjectivity. Focusing on humans as OPP also emphasizes the importance of strategic agency and its role in the development, translation and diffusion of innovations.

The experiments and trials which the BSC experienced were rooted in a political struggle between different conceptions of the organization, specifically linked to quality or financial issues. The BSC that emerged is disinfected from these attributes. During the process of translation, negotiation is commonplace and instability is routine (Bloomfield et al. 1992). A focus on translation emphasizes how measurement and strategic technologies are organizationally-embedded rather than stand-alone technical objects that are decoupled from organizational structures, processes and values. We have also underscored the fragility of the BSC and how Kaplan and Norton managed to convert this fragility into greater stability (Law, 2009). An important response to Dirsmith's recommendation (2007) that accounting research examines the shifting nature of discourse is to point out that "If the final trial is successful, then *it is* not a text, there is indeed a real situation *behind* it, and both the actor and its author are endowed with a new competence" (Latour 1999: 124). The BSC is not simply seen as a success, but it becomes a more or less accepted management system, around which many other techniques are connected (Martinez and Cooper 2012). It is not always clear whether these new tools are delivering their promise of enhancing organizational performance (or at least, reducing managerial anxiety). What is important is how ideas get labeled as successes (or failures) or innovations (or fads), and what impact this has on management practice, ideas and organizational performance.

As the BSC travels across time and space, its popularity does not stop it from being transformed. Paradoxically, its development has been kept open-ended with many potentialities and possibilities of modifications (Busco and Quattrone 2015). The BSC can be seen as a boundary object (Briers and Chua 2001), something that is "simultaneously concrete and abstract, specific and general, conventionalized and customized" (Star and Griesemer 1989: 408). The terms of the BSC, such as 'strategy', 'goals', 'measures', 'targets' and 'intangibles', can have "different meanings in different social worlds but their structure is common enough in more than one world to make them recognizable" (ibid: 393). These different interpretations and understandings enable diverse interests to feel connected to the BSC, and keeps the process of re-defining and re-presenting these terms somewhat open-ended, thus facilitating its travel (Spee and Jarzabkowski 2009). The BSC becomes real and accessible through reports of organizational practices and actions and these reports mobilize followers.

Though there could be a concern that focusing on the BSC limits the validity of our conclusions, we find that other ideas enter into our history (such as intellectual capital, strategy, and knowledge management), as various actors customize the BSC to suit their own needs and traditions. Rather than attempt to examine many such ideas and practices, we argue that it is better to focus on one. We make no claims to empirical generalization, for example about the attributes of the BSC or other accounting technologies and innovations. Nor do we offer general prescriptions about strategies of innovators or promoters of ideas.

However, we do make theoretical generalizations about the translation processes, and the role of problematization in producing strategic agency as OPPs. For us, the history of the acceptance of a management accounting technology is rarely a story of the smooth unfolding of the inherent merits of a technology or based on some special attributes, but is the result of framing strategies, the self-conscious actions of innovators and the responses of skeptical audiences.

Thus, this research illuminates the processes through which management accounting ideas and techniques are transformed and reconstructed by various managers, consultants, academics and others. This paper suggests that the BSC changes the way performance is measured, how business processes are managed, whether management is seen as strategic, and so on. The reach of the BSC as a general theory spreads over time, partly as a result of its attention to success and partly from the complexity that it introduces. For example, it proposes ever changing problems to be attended to, from multiple performance measurement, to strategic management, to the management of intangibles, and to mapping, aligning and executing strategy. As the problems change and are re-presented, so too are the extensions and developments of the BSC.

Our history of the development of the BSC could be applied to other management ideas, tools and practices. With its assumed use in strategic planning, resource allocation, human resource management, and operations management, it is difficult to identify any management activity that could not be claimed to be within BSC's ever-expanding scope. What started out as a very specific performance measurement tool has been transformed into management knowledge and even management itself. Further, histories of the development of other popular accounting and audit technologies, not least double entry book-keeping, new identifications and assessments of assets and liabilities, the use of market values, analytical sampling in auditing, strategic audits and so on, would provide not only a richer understanding of our past, but also provide insight into the effects of how future developments might unfold. Our historical account of the BSC is important in showing how things could be different. There is nothing inevitable about the nature, direction, or future of a management accounting innovation. All those who have made the BSC what it is today did so in the context of the history of modern society and economy. Yet the outcome has been a product of their local manoeuvrings and understandings. Management accounting innovations can have a future different from what would be suggested by assuming a linear extrapolation of the past. What is involved in the development of the BSC is likely generalizable to other accounting ideas, techniques and practices.

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TABLE 1
List of Major BSC Articles and Books Published by Kaplan and Norton

Year	Title	Article / Book	Published by*
1992	The balanced scorecard - Measures That Drive Performance	Article	HBR
1993	Putting the balanced scorecard to Work	Article	HBR
1996	Using the balanced scorecard as a Strategic Management System	Article	HBR
1996	The balanced scorecard: Translating Strategy into Action	Book	HBSP
2000	Having Trouble with your Strategy? Then Map It	Article	HBR
2001	The Strategy-Focused Organization: How balanced scorecard Companies thrive in the new business environment	Book	HBSP
2004	Measuring the Strategic Readiness of Intangible Assets	Article	HBR
2004	Strategy Maps: Converting Intangible Assets into Tangible Outcomes	Book	HBSP
2005	The Office of Strategy Management	Article	HBR
2006	How to Implement a New Strategy Without Disrupting Your Organization	Article	HBR
2006	Alignment: Using the balanced scorecard to Create Corporate Synergies	Book	HBSP
2008	Mastering the Management System	Article	HBR
2008	The Execution Premium: Linking Strategy to Operations for Competitive Advantage	Book	HBSP
2010	Managing alliances with the balanced scorecard	Article	HBR

(*) HBR= *Harvard Business Review*; HBSP= *Harvard Business School Press*.

TABLE 2
Data Collection

Date	Interview/ Event	Length (hrs)
1/ 2005	Junior management consultant, Renaissance	2
8/06	BSC Training session (Chicago)	12
	*BSCol Senior consultant (formerly in BP) (2)	1 and 0.7
	*BSCol Senior consultant (formerly in Mobil Oil)	1
	*Certified software vendor	0.5
	Senior Manager at ADI	2.5
	Kaplan	1.5
	Norton	2
12/06	2 BSCol Senior consultants, London	1.5
2/ 07	*Telephone interview with senior manager of winner of Hall of Fame award	1
08/08	BSC Training session (Boston)	12
2/09	Kaplan	2
	Norton	1.5
	BSCol Senior consultant and partner	2
	BSCol manager	1.5
	*BSCol manager	1.0
	Book publisher	1.5
02/12	Senior Canadian consultant	1.5

* Interview not recorded or transcribed

Figure 1 Emergence and Globalization of the Balanced Scorecard

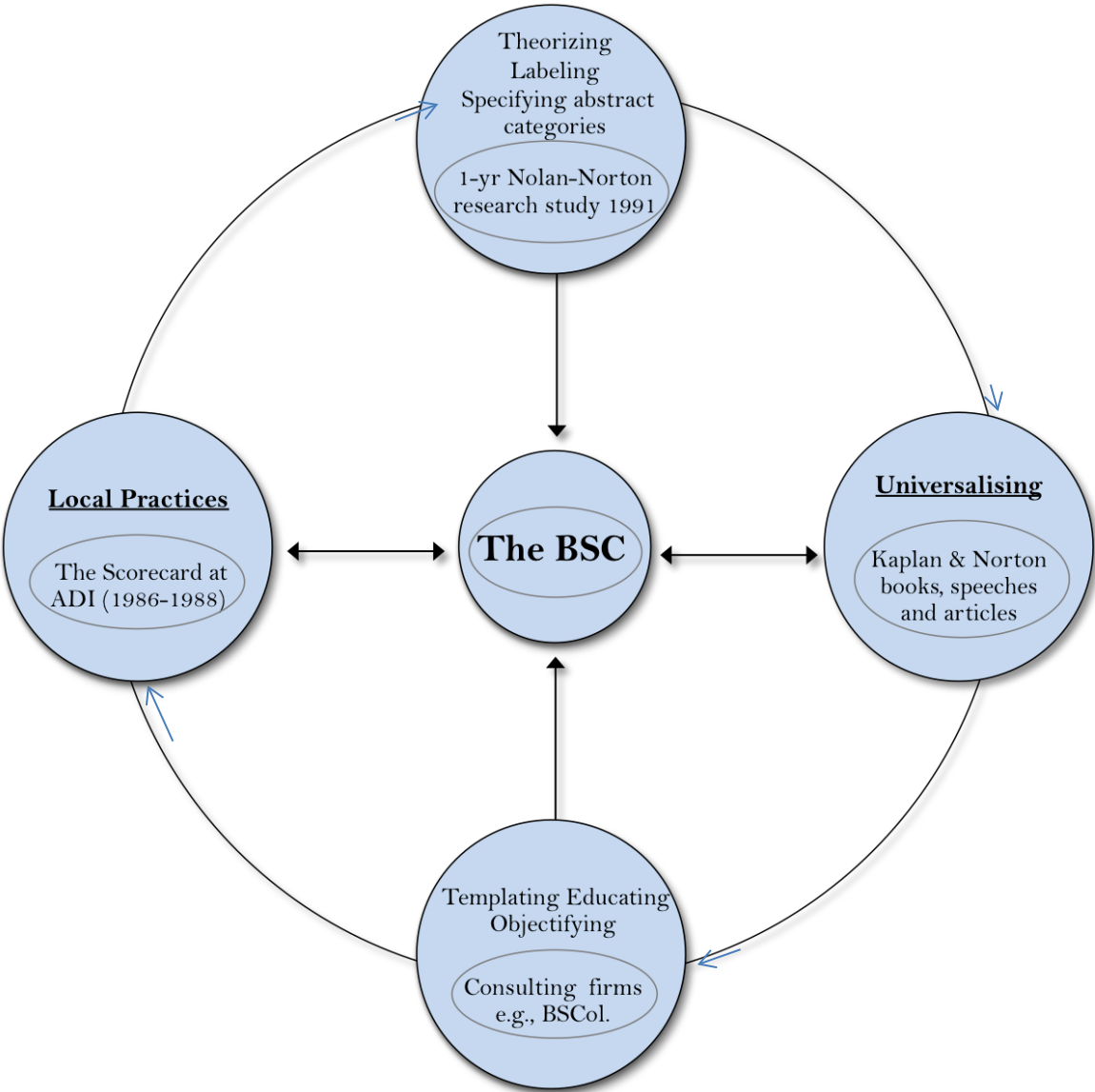


Figure 2 A balanced Corporate Scorecard at ADI in 1987 (Source: Adapted from Schneiderman, undated)

Corporate Scorecard	
	YEAR QUARTER
<u>FINANCIAL</u>	
•	Revenue
•	Revenue growth
•	Profit
•	ROA
<u>NEW PRODUCTS</u>	
•	NP intros
•	NP bookings
•	NPBR
•	NP ave. 3rd year rev.
•	Time to market
<u>QIP</u>	
•	On time delivery
•	Lead time
•	Cycle time
•	Yield
•	Outgoing PPM
•	Process PPM
•	Cost
•	Employee productivity
•	Turnover