

A Multiplicity of Management Systems: Performance measurement work, recognition and accommodation in a multi-national corporation

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Abstract

This paper is a study of the management and control systems in a large European Corporation and in particular the workings of the performance measurement systems used within and between a divisional unit and Headquarters (HQ). More specifically, we explore the emergence and co-existence of *multiple performance management systems* within the same divisionalized organization. In this study we investigate how an organization may be subject to many of these competing pressures for operative control and institutional conformity, but with particular regard to the tensions not only between an organization and its environment or field, but also internally: how these pressures and tensions may result in complex and variegated management control systems, all seemingly functioning but with different rationales and outcomes for corporate HQ and divisions. We explore how these variations not only arise, but also play out in complex tensions between the central HQ and the peripheral division. We show how a multiplicity of management technologies or elements not only emerges but how it is ‘managed’ inside the corporation by the various users. Central to our analysis are concepts of ‘work’, accommodation and recognition. We conclude by developing three research propositions drawn from our study.

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“The choice of performance measures is one of the most critical challenges facing corporations” (Ittner & Larcker, 1998: 205).

Performance measurement systems (PMS), scorecards and dashboards seem to be under constant review in the search for management control frameworks, levers and systems that accord with, and further, the strategic vision and direction of senior management (Otley, 1980, 1994; 1999; Eccles, 1991; Simons, 2000). Our research is concerned with the management systems in a large European Corporation, and in particular the workings of the performance measurement systems used within and between a divisional unit and Headquarters (henceforth HQ). Ittner and Larcker called for research that can provide “a rich description of emerging performance measurement practices,” (1998: 204) and that is certainly one aim of our paper. More specifically, we explore the emergence and co-existence of *multiple performance management systems* within the same divisionalized organization or other part of an organization, such as a plant or a sales unit – a phenomenon that has been noted by only a few recent studies (Ezzamel et al., 2004; Datar et al., 2009). Yet such studies have frequently stopped short of addressing the phenomenon of multiplicity, which is curious given potentially stimulating contrasts between the traditional views of management information and performance measurement models as holistic systems for rational action, and the apparent diversity that can exist within organizations. Diversity in practice alerts us to the complexity of rational action in practice and the possibility that different values and traditions produce different understandings not just of rationality but of the purposes of organizations.

Since the development of contingency approaches to management accounting and control (Cooper, 1981; Otley, 1980) there has been recognition that a control system comprises many elements and each of these elements may relate to different contingencies. These elements have been described as a control package, which has been defined: “A management control systems (MCS) package is a collection or set of controls and control systems. The individual control systems may be more traditional accounting controls such as budgets and financial measures, or administrative controls, for example organization structure and governance systems, along with more socially based controls such as values and culture. Organisations may have numerous controls present, and they all may be used to some extent to align individual’s activities with organisational goals” (Malmi and Brown, 2008: 287). Our interest in this paper is less in the “packages” metaphor as such but the fragmentation of

organizational tools that are available for use and used differentially in separate locales/spaces. Little empirical work has been conducted to explore the interaction and use in practice of control systems such as PMS, and what research has been done (as for example, the special issue of *Management Accounting Research* in 2008) tends to be focus either on specific types of organizations or particular management practices, or assumes some notion of ‘balance’ is desirable (Kominis and Dudau, 2012).

The existence of a multiplicity of management systems raises a number of intriguing research issues. First, it would be instructive to know more of the processes that explain how multiple management systems have diffused and co-exist in the same organization. Cooper et al (1996) refer to the idea of sedimentation to explain the existence and persistence of different control approaches in a legal firm, but we do not know if this argument holds in other settings. Second, this co-existence of multiple management systems is suggestive of a variety of possible relationships that may arise from interaction between these systems. As Malmi and Granlund (2009) suggest, we need research that examines in what ways and how multiple parts of a management control package overlap, replicate, collaborate, complement, or compete with each other. We seek to move beyond a concern with balance, and an assumption that balance is to be desired. Part of this concern about the nature of the interactions will involve consideration of how organization centres and sub-units rationalize multiple systems. Other than a few notable exceptions (Abernethy & Chua, 1996; Oakes et al, 1998; Ezzamel et al, 2004; Ezzamel and Burns, 2005; Kennedy and Widener, 2008; Campbell et al., 2009), we know little about how systems of management interact with one another, and with how they may get played out in specific organizational settings. Third, there is the issue of the possible impact of such multiplicity upon organizational actors; e.g. confusion, uncertainty, clarity, autonomy, etc. What is at stake for managers in affiliating with particular Performance Management Systems and in ignoring others? What kinds of interaction, allegiance or identification might different managers have with measurement systems, and why? In short, can we understand the logics of a multiplicity of management systems in units of the same organizations?

Mainstream management control systems theory highlights the centrality of performance measurement in rational planning and control of the enterprise (Merchant & Van der Stede, 2012). Furthermore, the economic reasoning underlying this prescription suggests that optimal control should be achieved when the benefits of avoiding control loss outweigh the

costs of implementing controls (ibid., p. 10). Where there are multiple and overlapping controls this might suggest issues of (in)efficiency or significant problems of organizational control - though it might also imply complementarity and/or the underscoring of the importance of certain measures. However, the cost-benefit argument occludes the point that the managers choosing a measurement system will not know in advance the costs and benefits of their choice – other than in a world of perfect information and certainty.

Neo-institutional theories suggest that the prevalence of rational systems of measurement and control may have more to do with rational myths and organizational legitimation than operative consequences (Meyer & Rowan, 1977; Covalleski & Dirsmith, 1988; Zilber, 2008). Much of the emphasis of neo-institutional work has been upon the pervasiveness of specific organizational forms and practices within societal and organizational fields: how models of the appropriate actions or structures come to diffuse and their meaning taken for granted (Powell & DiMaggio, 1991; Fligstein, 1993). In more recent times there has emerged a closer concern with variations in practices and forms, partly as a result of interest in logics and actors' rationales (Marquis and Lounsbury, 2007; Lounsbury, 2008), but also in regard to the channels of diffusion of models and practices, and how some organizations pick up particular models while organizations in the same field (and even organizational units in the same organization) appear to ignore them (Fligstein, 1993; Strang & Meyer, 1993; Fligstein & McAdam, 2012).

In this study we investigate how an organization may be subject to many of these competing pressures for operative control and institutional conformity, but with particular regard to the tensions not only between an organization and its environment or field, but also internal to the organization. Specifically, how these pressures and tensions may result in complex and variegated management control systems, all seemingly functioning but with different rationales and outcomes for corporate HQ and divisions. Moreover we explore how these variations not only arise, but also play out in complex tensions between HQ and divisions (Bartlett & Ghoshal, 1988). We show how a multiplicity of management technologies or elements not only emerges but how it is 'managed' inside the corporation by the various users. Central to our analysis are concepts of 'work', accommodation and recognition.

The term 'work' refers to a rational use in practice of systems to ensure performance, as discussed in most conventional writings on management control (Otley and Berry, 1980).

Recognition refers to the use of systems in more symbolic ways, often aimed to gain legitimacy and provide justification and rationalization for action (Burchell et al, 1980). Accommodation addresses the tensions between work and recognition and is based on the idea of being managers' sensitivity (and mediation between) to conflicting demands (Cooper, 1983; Covaleski and Dirsmith, 1986).

In the next section we consider the role of performance management systems in organizations and outline the questions guiding our research. This is succeeded by a discussion of the research methods and the research site. We detail the management systems that we found within our research subject/corporation and then outline in the central case section our analysis of the multiplicity of management systems that we observed. This is followed by a discussion section in which we develop the key concepts from the case and which we then discuss in relation to extant theories relevant to the role of management system in organizations. In the concluding section we suggest some research propositions for further research and the limitations of our analysis.

Theories of Performance Measurement Models and Organizational Performance

Modern management texts and research stress the importance of performance measurement models and management for organizational performance (Merchant & Van der Stede, 2012). Various commentators (eg., Malina and Selto 2004; Huff and Jenkins, 2003) note that the normative prescriptions of various consultants and academics predict that systematic performance management models and measures will achieve superior performance and strategic direction. From the early example of the ROI concept in Du Pont (Johnson & Kaplan, 1987) to modern models such as the BSC (Kaplan and Norton, 1992), and the EVA (Stern et al, 1995), models of business inputs, and outputs, and measures of operational, strategic, financial and non-financial performance have been tied together into systems of management control. Part of this trajectory has been an increased concern that 'traditional accounting measures' and budgetary systems should be supplemented with or replaced by non-financial measures (Johnson & Kaplan, 1987; Hope & Fraser, 2003; Neely et al., 2002; Libby & Lindsay, 2007; 2010).

In this approach, the benefits of performance measurement models are said to include strategic improvement (by development of the firm' resources), organizational learning (testing predictions and obtaining feedback on the relations between inputs and outputs) and

guiding/incentivizing employee decisions and behaviours, but only insofar as the attributes of the measures fit normative notions of decision-making/informativeness, completeness, objectivity, accuracy, balance, etc., (Milgrom & Roberts, 1995; Ittner & Larcker, 1998; 2002; Datar et al., 2001; Lipe & Salterio, 2000). Moreover, the benefits of such models are said to only accrue first when benefits outweigh the costs (Simons, 1987, 2000; Merchant and Van der Stede, 2012), and secondly that the design of such models does (or should) be affected by firm strategy (Porter, 1980, 1985; Hemmer, 1996; Chenhall, 2003; Baiman et al., 2010).

Within the broadly economics based literature on management control we note several key assumptions about the role and consequence of performance measurement models. Performance measurement models are often viewed from the perspective of the firm's owners rather than decision usefulness for managers/agents (Feltham and Xie, 1994). Thus while models may be chosen or designed in accordance with specific strategic or other contingent conditions (Chenhall, 2003), studies tend to assume that performance measurement models operate within organizations in accordance with the aims or strategic directions of the whole firm. As such performance measurement models are studied quite often as a unitary choice taken by senior management. The existence of multiple performance measurement systems is barely recognized or, assumed to be sub-optimal given the requirement for holistic, complementary and integrated management systems (Malina & Selto, 2004; Campbell et al., 2009). In Table 1 (below) we summarize this normative approach as the 'rational actor theory' of performance measurement systems.

Yet, the empirical evidence that supports the normative claims of the benefits of performance measurement systems, whether economic value (such as EVA) or 'multiple measure' centred (financial/non-financial, such as the Balanced Scorecard), is not robust (Ittner & Larcker, 1998; Ittner, 2008). Although evidence of the success of, for example non-financial measures, is often claimed, many studies rely on self-reporting in order to validate assertions of effectiveness (e.g., Rucci, et al., 1998; cf. Ittner & Larcker, 1997, 1998; Braam & Nijssen, 2004). Despite the recognition that the empirical evidence supporting the success of such models is insubstantial (Ittner & Larcker, 1998), failures of particular performance measurement systems are often explained by reference to general appeals to problems of "implementation" (Dambrin & Robson, 2011; e.g., Stern et al, 1995; Mooraj et al., 1999; Schneiderman, 1999).

This is not to say that performance measurement systems are not used, in the sense that managers and other organizational actors might not plan, decide and otherwise act upon the information that is given by such measures. Plainly managers at many levels of an organization ‘work’ with the PMS and the measures that it generates in informing, evaluating, and managing in general. The question raised is to what extent it is known that any particular PMS can be said to improve organizational performance over others, not that all performance measurement systems are in any sense unnecessary. For reasons associated with limited cognitive abilities, information search and bounded rationality for example, knowledge of the merits and the effects of performance measurement systems will not be complete, which would suggest that assessments of ‘costs’ and ‘benefits’ of management control systems are imperfect (Cyert & March, 1963; Spender, 2012). Our concern is to question the assumption that the prevalence of such systems is necessarily related to their ‘success’ in improving organizational performance. It is clear that in much of this modern management theory there exists a strong narrative that propels normative commitment to the idea that integrated performance management systems constitute vital components of management ‘best practice’ in the pursuit of optimal organizational performance (Solomons, 1985; Vancil, 1979). Moreover, it is a theory produced, supported and perpetuated by an economy of business schools, management consultants, business media and their corporate clients (Locke & Spender, 2011; cf. Kaplan & Norton, 1992, 1996; Stern et al, 1995). As Ittner and Larcker note:

“Consulting firms battle over the superiority of their economic value measures, charging that competitors’ measures have flaws that compromise their predictive ability. (Myers 1996; The Economist, 1996).” (1998: 213-4)

Although it is clear that performance measurement systems such as the Balanced Scorecard, European Foundation of Quality Management (EFQM), EVA or the Performance Prism have contrasting models and emphases, perhaps the battle for superiority, to which Ittner and Larcker allude, contributes to research overlooking the characteristics and informational contents that such systems have in common. Certainly, there are many examples of studies that compare and contrast systems, such as EVA versus the BSC (Jensen, 2001; Kaplan, 2012) or the benefits of EFQM over the BSC (Anderson et al., 2000; Wongrassamee et al., 2003), though few stress their underlying homologies; indeed the ability to differentiate models is often a commercial imperative for consultants e.g., (Lamotte & Carter, 2000). Most of these proprietary systems are committed to the idea that their role is ‘improving’ organizational actions.

If the evidential basis for choice of performance measurement systems is uncertain and yet there exists an active economy for the supply of and demand for performance measurement systems, then what processes inform the choices that managers make in opting for and remaining with one system over another? What roles or functions do such systems play in the corporate field? Moving away from the rational actor paradigm, neo-institutionalist theorizing suggests that the administrative character of corporations is influenced by the dominant logics in a firm's environment. The focus upon organizational measurement and decision-making can be said to reflect a corporate logic (Friedland & Alford, 1991; Thornton and Ocasio, 1998) that is both global and globalizing in its enactment (Meyer, 2009; Cooper & Ezzamel, 2012). In this theory, the emphasis that corporations place upon performance measurement systems has to do with creating the semblance and recognition of rational and optimal management to external groups or societal fields' actors. In this way performance measurement systems can be thought of as part of a legitimising economy of management expertise that in their own way support the idea that corporate success depends upon appropriate management knowledge and technique (Augier & March, 2011).

Qualitative studies of, for example, budgeting have gone some way to confirming that management control systems hold symbolic meaning for corporate actors (Covaleski & Dirsmith, 1988; Berry et al, 1985). Organizational structures such as the Multi-Divisional Form have shown their popularity to be, in part, a consequence of *mimesis* between corporations, as corporations, facing an uncertain world copy those other corporations they consider successful. Such research has also indicated the importance of the types of expertise at senior levels of the corporate hierarchy in such choices (Fligstein, 1993; Fligstein & McAdam, 2012). The frequency of competing claims for economic value and non-traditional measurement systems suggests the need for studies to consider the fad and fashions dimensions of popular management innovations (Abrahamson, 1991, 1996; Abrahamson & Eisenman, 2008; Ezzamel & Robson, 2011). Performance measurement systems may be significant for the external recognition they give to the organization or sub-unit, rather than, or as well as, for their internal effectiveness.

In general terms, neo-institutional theory offers insights into the motives that companies and their divisions have in taking up particular systems or techniques of management control by exploring the processes and channels through which such 'innovations' disseminate and the

social movements that support them (Strang and Meyer, 1993). In our study our purpose is to explore closely the uses and roles of different measurement models, both in terms of their current operations, but also in terms of the processes that shaped the current configurations between multiple models. How performance systems are introduced into firms and by whom offer clues to understanding how in our case study we have a divisional unit using, in various ways, three overlapping performance management systems. As Strang and Meyer (1993) note, the diffusion of new innovations is heavily related to the type of ‘adopters’ of technologies (accountants, engineers, human resource professionals, IT staff), and the meanings shared and theorized by adopters in organizations, professional associations, managers, etc (cf. Zilber, 2002). Our study explores the influence of different organizational groupings and seeks to explain the choices they make as to which performance measurement system is important, and why.

Thus our research is sensitized by two contrasting theories of the performance measurement system process. One, the rational decision paradigm is underpinned by the idea that managers and other organizational actors are motivated by the belief that PMSs are useful to them in their everyday work and decision-making. The other, a theory of legitimation, is motivated by the idea that organizations adopt structures and systems that accord with more widely held notions of ‘good management’ or ‘modern and rational organization’. In Table 1 we summarize the key concepts of these two theories:

Insert Table 1 here

As we detail in the next section, our case study concerns the usage of multiple performance management systems inside one division of a large multi-national. Our study focuses on the nature and characteristics of three performance measurement systems, the purposes to which each was put within the division and in the relations between the division and company HQ. In broad terms our study attempts to explore this multiplicity of management systems and the various roles that each system assumed within the corporation. Questions as to how the firm managed to develop three systems and the relations between each system are analysed so as to explore the various practices and beliefs in which each system was embedded.

In the next section we set out the research method, and explain the research site and the context within which we explored the roles of multiple management systems.

Research Method

This paper is based upon a field study in two units in a division of a major European multinational. Our initial focus was on the (theory of the) spread of the Balanced Scorecard (BSC) and performance management across units within the firm (authors, xxxx). One purpose of the wider study was to analyze how management systems such as the BSC are impacted by national and professional traditions. In the course of this research we were struck by the variety of measures within these units, and their mutual interaction. Although our study looked at divisions in three different national settings, for the purposes of this paper it was sufficient to focus on one division in one national setting, albeit that the corporate headquarters are located in another national jurisdiction.

We adopt a qualitative research methodology (Denzin and Lincoln, 1994), but one where theory is a vital orientating framework that helps to guide both data collection and analysis (Silverman, 1985). Accordingly we use the organizing frame sensitive to both decision making and institutionalization to make sense of, and structure, our research data. First, over the five-year period 2005-2009 we conducted 97 semi-structured interviews at several locations in *Megacorp*. For the development of this paper, 46 interviews with employees from the divisional units at varying organizational levels as well as with the international headquarters were directly relevant. The precise content of the interviews varied depending on the experience and background of the subject, but interviews typically lasted about 90 minutes, were tape recorded and transcribed.

Each interviewee was asked to provide a brief description of his/her job and tenure within the division, before being asked more specific questions related to the focus of this paper. In particular, informants were asked to explain how their performance was assessed by their superiors, the extent to which PMS and specific key performance indicators (KPIs) were used to assess performance, and which management performance systems were especially crucial to the way they manage their day-to-day work. When informants mentioned the use of multiple performance measurement systems, they were asked by the authors to explain what each of these measures meant to them and how they reacted to this multiplicity in terms of their cognition and impact on their daily activities. We analyzed the interview transcripts and the contents of the various documents we inspected around the themes of specific

management measurement systems, their interactions, informant's cognition of these systems, reasons for their diffusion within the division, and their impact on the daily work of the informants. These themes were then connected to this and other theoretical framings.

Second, we collected a large number of internal documents relating to historical accounts of *Megacorp*, its organizational structure, the division to which the sub-units belong, and manufacturing and sales units, key performance indicators (KPIs) relating to each informant and their definitions, and performance reports. We also obtained other textual material on what informants identified as key processes and performance systems developed and disseminated by *Megacorp*, or those that emerged in manufacturing and sales units in the division. Third, we examined publicly available documents about *Megacorp*, including its annual reports (1998-2009) and press coverage. Most of the empirical material we quote from in the paper, however, comes from interviews and documents relating to the manufacturing and sales units in the UK as well as the division's international HQ. Additional material collected about *Megacorp* from visits to units in Germany, China and Japan are also used as background.

For reasons of confidentiality, the firm and its internal documentation must remain anonymous. However, some of the measurement systems used in our multinational are, unsurprisingly, somewhat generic (such as BSC), and hence we refer to them by name. The systems developed internally by the company are given pseudonyms.

The Research Company

In order to contextualize the emergence of multiple management systems in our case study, we provide a brief account of its history. *Megacorp* (a pseudonym) is a major multinational corporation with headquarters in a European country, half a million employees and a turnover of over £60 billion. *Megacorp* is a conglomerate with interests in various industries, organized around several major divisions, including the *Electron* Division (a pseudonym) that has around 70 factories distributed globally, and which, under the matrix structure is part of *ElectronUK*. *Megacorp* operated a form of matrix structure, where there are reporting and operating divisions for production, most investment and product development, and national divisions for sales and tax reporting. We focus on two linked units relating to the *ElectronUK* Division.

The factory within *ElectronUK* which we call *Automata* (a pseudonym), manufactures standardized, low complexity electrical products, about 400 people and has a turnover of approximately £50M. The other unit *Mercado* (a pseudonym) is the commercial unit of the national Division, *MegacorpUK*, which sells a wide range of electronics products including, but not limited to, the items produced by the *Automata* plant. It employs over 600 people and has an annual sales volume of about £150M. Our material focuses more closely upon the manufacturing unit, though the sales unit was in close proximity to *Automata* and shared the same characteristics in terms of the multiple management systems. Interviews with managers at *Mercado* proved helpful in validating the rationales that we noted for the ambiguous uses on different performance measurement systems. The fortunes of *Mercado* as a sales unit was essentially intertwined with the success of *Automata* and hence the latter unit's history had more significance in terms of the preferences for different measurement systems that we noted in the two units.

We start by first outlining, briefly, each of the three management systems that we encountered, before considering their uses, roles and inter-relations within the *Automata* plant, *Mercado* and *Megacorp*.

The Research Company's Performance Measurement Systems

In this section, as a prelude to the discussion of the case and associated research questions, we detail the three main PMS we encountered within *ElectronUK*. The accounts from our interviews and internal documentation that we examined identified three measurement systems at *Automata*.

1. *European Foundation for Quality Management (EFQM)*;
2. *Balanced Scorecard (BSC)*;
3. *Time & Process Improvement (PI)*;

The first two listed are associated with specific performance management systems that are 'external' in the sense that the underlying model was developed outside of *Megacorp* and are 'proprietary'. The other system, is in fact two technologies which we consider jointly and these were developed in-house by *Megacorp*. The two are strongly related; Process Improvement is effectively the project management add-on to the overall control system/scheme of Time. We devote more attention in this section to explaining the internal models, as the external ones are generally better known and publicly visible.

European Foundations for Quality Management (now known as EFQM): EFQM system has a quite specific regional identity to its emergence as a specific PMS ‘genre’. EFQM derives from a model generated by a consortium of European companies founded in 1988. The EFQM association is a global non-for-profit membership foundation based in Brussels, Belgium. Inspired by the global Quality Assurance movement in manufacturing in the 1980s (Conti, 2007: 113), EFQM was an attempt to establish a Total Quality Management forum for European companies to assess and share approaches to the management of continuous improvement. The foundation now has more than 500 members covering more than 55 countries and 50 industries. EFQM aspires to provide a ‘platform’ for organizations to learn from each other and improve performance. EFQM is the custodian of the *EFQM Excellence Model*, launched in 1991, a business model whose aim is to generate “Sustainable Excellence”. The model has three components: (eight) fundamental concepts of excellence¹, the causal model of the ‘9 Criteria’, and the RADAR² (results, approaches, deployments, assessments and refinements) logic. EFQM sponsor the European Quality Award for the best implementation, following the model of the *Malcolm Baldrige Award* in the US (Conti, 2007), which was in turn following the Deming Award of Japan (Bush & Dooley, 1989). The core is the cause and effect model between five enablers and four types of results, each weighted 50%; these scores are then allocated in precise ratios among the themes that make each set. The enablers include inspired leadership (10%); incorporation of quality values and concepts in policy and strategy (8%); releasing employees’ full potential through people management (9%); providing necessary resources, including financial, material and technologies (9%); and reviewing and revising processes (14%). The results set includes enhanced satisfaction of employees (9%); customer satisfaction (20%); better impact on society (6%); and improved business results (15%) (see Ezzamel et. al., 2004).

Insert Fig 1

As with many models (such as the BSC) the precise make up of the model is neither standard nor prescriptive in its specifics, and like the BSC, its common aim is helping organizations

¹ The ‘fundamental concepts are: “taking responsibility for a sustainable future, Achieving balanced results, adding value for customers, leading with vision, inspiration and integrity, managing by processes, succeeding through people, nurturing creativity and innovations, building partnerships” (EFQM web site, accessed November 2011).

² The RADAR logic is a variant upon the Plan-Do-Check approach of the Deming Cycle, an assessment framework that is also found in the Six Sigma approach of Motorola and General Electric.

define and then implement, monitor and assess a strategy in terms of the related processes and ‘balanced results’ that are designed to achieve the strategy.

Balanced Scorecard (BSC): The ubiquitous BSC is also a model viewed as a major component of the divisions’ processes that linked to strategy. As commonly known, the BSC has the four quadrants: customer/market; financial; internal processes; and people/innovation.

Insert Fig 2

Each quadrant is analysed in term of goals, targets, action plans and measures that are intended to help implement firm strategy and feed that strategy downwards throughout the organization in a cause and effect relation. Like the EFQM Excellence Model, the precise targets, measures, and the specifics of ‘balance’ are considered to be a matter for the individual organization to determine, and in that respect it is also non-prescriptive. The BSC has historically had a training arm, the Balanced Scorecard Collaborative, now Palladium.

Time & Process Improvement (PI):

In contrast to the EFQM and the BSC, Time and Process Improvement were PMS initiatives specific to *Megacorp*. The internally developed Time model is aimed at strategic cost control, increasing profitability by stimulating sales revenue, managing assets and reducing costs across the whole organization. To achieve these ends, Time relies heavily on innovation and benchmarking, so the focus is upon efficiency and productivity. Each business (such as *Automata*) within *Megacorp* has discretion to use Time in whatever way it deems to fit its business and market activities:

“It’s not prescriptive inasmuch as it doesn’t say that you have to do this and you have to do that. It says you have to look into these areas, but it’s up to you how you go about it” (Manager, Operations, Automata).

Time, perhaps reads most like a disaggregation of the BSC quadrants. ‘Success’ is premised on the capacity to disaggregate inputs and outputs into goals measures and consequences. Each model of goal, measures, etc is related to innovation, customer focus and global competitiveness in the seven-block model. By relating costs to innovations, competitiveness and customers, the model attempts to join up initiatives in terms of their multiple consequences within the organization or organizational sub-unit. The Time pillars of innovation, customer centricism and global competitiveness attempt to shape processes such

that external benchmarks are used as reference points for the goals, measures and results that influence internal cost reductions and profitability improvements – however achieved.

Insert Fig 3 here

Like Process Improvement, Time was established within *Megacorp* and offered a linear process model of the relationships between strategic company programmes/goals and divisional strategy implementation. The annual policy and strategy review undertaken in *Automata*, combined with the BSC, are treated as “the principle mechanisms for identifying key business processes and the associated metrics to demonstrate control and progress against them” (Internal Document, 2004). Another Internal Document (2003, emphases in original) states “processes are *identified in and form part of* the Mission statement for the business”. This is summarized in the catch phrases ‘Proven choice for manufacturing’ and ‘Aiming for excellence’. The PI is a benchmarked best practice approach. Graphically, it is drawn as a set of seven blocks representing a Division’s business processes. The seven blocks are organized in the shape of two side blocks designated on the left ‘Process Management Methods’ and on the right ‘Process Management Roles and Responsibilities’. In between these two blocks, five blocks are stacked on top of each other: Management Process; Product Life Cycle; Supply Chain; Customer Relationship; and Support Systems. Management Processes and Supply Processes are believed to facilitate the attainment of the three processes in-between. The Time pillars framework could also be disaggregated into any specific unit process – e.g. ‘Customer Focus’, ‘*Megacorp* Competitiveness’ or ‘Innovation’.

Insert Fig 4 here

For each of the five processes stacked in the middle, one or more managers are designated as owner(s), and each process is split into a number of specific functions that are aligned with specific measures. For example, the MD, the Commercial Manager, and the Quality Manager jointly own (are responsible for) the Management Process. Examples of responsibilities within this process are communication and budgeting, for which information is measured in the EFQM, BSC, team brief data, and sample feedback. Supply Chain is owned singly by the Manufacturing Manager, and its responsibilities, for example, include reduction in assets employed, delivery performance, material on time delivery and process cycle time, and its measures are drawn from the BSC. As a final example, the HRM Manager, the Purchasing

Manager, the Manufacturing Engineering Manager, and the Quality Manager jointly ‘own’ the Support Process. Their responsibilities include recruitment and development, health and safety, and internal audits, and these are measured through training days per employee, staff turnover, sickness, number of accidents, and number of risk assessments.

Having outlined the three management control systems in the next section we consider the workings, practical rationales and interactions that each system seemed to display within *Automata*. Our interest is to explore the relationships between the multiple performance systems in operation within the *Automata* factory and *Mercado*.

A Multiplicity of Management Systems: the performance measurement systems of Automata

Working with Management Controls: the emergence of EFQM in Automata

In this section we consider the performance measurement systems from the perspective of the ‘work’ to which each was put inside the *Automata* plant. Our starting point is the accounts of their usages. We use the term ‘work’ to signal the daily ‘functions’, responsibilities and general activities that rely in some manner upon management control systems in organizations; decision-making, performance evaluation and motivation, planning, etc., (Merchant & Van der Stede, 2012), although we make no assumptions about the nature of these roles or their relationship to organizational efficiencies or performance. Rather our interest is in the actors’ accounts of their interaction and relationship to each kind of performance system.

We begin with EFQM as this was the measurement system our factory informants discussed most frequently, and which they considered the most relevant to their work as divisional unit managers. The EFQM was the earlier of the two external performance measurement systems (PMMs) used by *Automata*. It was introduced within the divisional unit as the rating method of the total business and to analyze key processes during the 1990s, a turbulent time in the plant’s operations. Use of the EFQM was also the choice of the *Automata* staff and strongly associated with their attempts to operate as a ‘business unit’. To understand this we need briefly to describe *Automata*’s recent history.

The *Automata* plant's performances had been volatile, having had four Managing Directors during 1996-2004, "each one having different leadership styles" (EFQM Report, 2004). It began in the late 1970s as an automated "switchboard manufacturing business with our own paint shop, with our own metal shop, so very highly mechanical, or mechanical electrical" (Commercial Manager), consisting of a manufacturing workshop facility and a sales office. In the 1980s, it was a profitable business as it secured major contracts from the Ministry of Defence, but as its major customer began to shop around for the cheapest supplier, the *Automata* plant was considered by senior management as under-performing, with sizeable spare capacity. To overcome this problem, *Automata* diversified into subcontracting printed circuit boards (PCB) to various external suppliers, which eventually outgrew the core product (switch board systems). This, however, did not meet with *Megacorp*'s approval, since it wanted *Automata* to concentrate on manufacturing, rather than subcontracting. This intervention by *Megacorp* led to the reconfiguration of *Automata* as a 'factory', attached to a large manufacturing division, with the mission to develop a "world centre of competence" in standard electronic products. *Automata* was to focus on high volume, low complexity products to exploit its available capacity and the expertise gained while working as a subcontractor. This decision was interpreted by *Automata* staff as a major positive signal:

"To get that factory volume was quite a big thing for us and really the story has been a roller coaster from then on." (Senior Manager, Finance).

By 1991 the *Automata* plant had changed from "a basic metal bashing activity into a very high tech, clean environmental assembly area" (Manager, Finance), within a very cost conscious strategy. By the mid-2000s the *Automata* factory was increasingly viewed as a success story with *Megacorp*.

From the mid-1990s, *Automata* was designated a semi-independent business entity and given increased scope for autonomous action. For two years it functioned "like clockwork" (Manager, Operations), producing £5M profit to HQ each year as it had control over manufacturing, sales, design, and marketing. However, a reorganization was prompted by HQ because of difficulties faced by one of its other major divisions, resulting in centralizing sales, which took the *Automata* factory "back again into the days of the factory with the design activity attached" (Commercial Manager).

Within the re-organization, *Megacorp* determined the transfer price for *Automata*'s products using a top-down calculation. The process began with customer price in the field, which was

then taken down to sales prices (as offered by *Megacorp* sales units) and from which gross margin was deducted to arrive at an ex-works transfer price (meant to cover full works costs). However, given the structure of the full costs at *Automata*, this meant that while it was possible to have margins of up to 40% on the larger, high power rated, drive products, most of their manufacture was on low power rate products which had a transfer price of minus 10% of the plant's costs. Moreover, a significant decline (by more than one third) in the value of one European currency against Sterling worked against the financial performance of *Automata*: “despite our volume in pieces growing, our volume in turnover wasn't growing. ... our profitability was getting hit very hard because of the exchange rate” (Senior Manager, Finance). This prompted HQ to issue an ultimatum that unless *Automata* turned these figures around, the plant would be closed.

Managers recalled that period as one in which employees lacked any sense of ownership in the plant, and management had no strategic vision for the unit, nor careful production plans. While *Automata*'s products had willing customers, the plant took the view that it should overproduce (“go for volume”) in order to improve productivity. This proved costly to the plant: when there was a downturn in sales, *Automata* was left with “a massive risk” because the design was not stable, leading to frequent recall of faulty products from customers and making the necessary corrections in all remaining units of inventory.

Automata's senior management recognized the seriousness of this pressure:

“The pressure [from HQ] has always come back on the factory, ‘you've got to do more, you've got to do more, you've got to do more’ and we responded... because if we hadn't responded we would have been shut down... without any question whatsoever” (Factory Manager, *Automata*).

Automata's managers now had to justify its survival by being benchmarked against the cheapest producer internationally:

“Along came China and we were literally told... ‘guys you either meet the cost level that China can offer or you know it could be curtains’” (Commercial Manager, *Automata*).

Further, HQ began negotiating with a Japanese company the possibility of outsourcing the development project whose aim was to map out future products that would replace existing products. The future for the *Automata* plant seemed desperate.

To deal with these challenges, the strategy of *Automata* managers was to convince HQ that they knew what “costs are for all our product lines”, and hence they should “make money or at least break even on every product line” (Finance Manager). They, however, also asked that HQ refrain from manipulating transfer prices by following a straight pricing strategy across the whole product line, and thus for HQ, rather than *Automata*, to take the risk of making profits or losses on products.

“Whatever gains that we were making in the manufacturing side tended to be passed on to the sales with a view of growing market share. So the pressure on manufacturing is always there, you earn it one year, you give it away at the start of the next year, and you have to start again” (Manager, Manufacturing, *Automata*).

Automata’s managers:

“turned around and said ‘we’re not here to play around with transfer prices because if I increase the transfer price by three hundred per cent it doesn’t tell me that somebody in the factory is working more efficiently or we’re getting better productivity” (Senior Manager, Finance, *Automata*).

The aim of *Automata* therefore was to secure a stable transfer price that was not get adjusted every year to swallow the efficiency savings it made. This they have been successful in securing, which left the management of *Automata* to concentrate on efficiency savings.

As part of the changes to encourage ‘continuous improvements’ in processes and design, one managing director (MD) introduced the EFQM *Business Excellence* Model into *Automata* during 1995, the start of a consistent engagement with EFQM through which the turnaround of *Automata* was often explained to us by our interviewees. The MD was in favour of EFQM as he believed the EFQM reflected a more ‘engineering’ approach than rivals such as the BSC – which were viewed as more ‘accounting’ or financial in orientation (Manager, Operations) . In the context of such engineering initiatives the plant managers decided they would need in order to shave costs and make the sales prices of their outputs competitive internationally. This engineering slant allied with the new MD’s own engineering background. *Automata* then developed their own system of measures using the underlying EFQM *Business Excellence* Model in order to help implement changes that might reduce costs but also improve quality and process.

To do this *Automata*’s management began to study more closely their cost structures and where they might save costs in the factory. Materials (such as ‘boards’ for circuits) began to be sourced from *Megacorp*’s China operations (*MegacorpChina*). Quality, cost and speed of

throughput initiatives ('process') started both to shave operational costs (mainly overheads) and raise reliability standards. Factory layout and product re-design initiatives started to aim for a 10% cost reduction per annum. These changes, coupled with subsequent favourable exchange rate movements, meant that *Automata* began to generate "something in the region of about two million pounds net productivity a year, cost productivity reduction per years in those elements of design to cost, material cost and process" (Commercial Manager). These improvements paid off, as HQ called off the deal that was being negotiated with the Japanese company, and *Automata* remained in operation. By 2000 *Automata* was fully committed to using EFQM and had taken up membership of the EFQM association, which offered feedback, assessment and inspection services, on a regional basis. And significantly, EFQM was very strongly linked to the improvement programme that proved ultimately successful and forged identification with this system of performance measurement.

Corporate Rationalization: The introduction of further Measurement Systems

In 2000 *MegacorpUK* introduced the Balanced Scorecard into *Automata* and *Mercado* as a result of a wider *Megacorp* initiative to roll it out throughout the whole group. A BSC was then developed in *Automata*, and its KPIs cascaded down to the level of each department. In *Automata's* EFQM annual document, the BSC was depicted as a major component that directly linked to the plant's strategy and the annual review (which in turn feeds into strategy). One Internal Document from the plant (2003) stated that "All measurable business performance data is recorded on the Balanced Score card".

EFQM documents from the *Automata* plant (2004) stated that:

"Some 40 individual measures exist on the top level Business Balanced Score card. These measures are considered the key indicators for the 'health of the business'. Each measure has a target that reflects either agreed business goals or stretch goals to achieve improvement.... In addition, a 'target for excellence' that is considered to be a truly world class target which should be expected by companies operating within our field is also shown on the Balanced Score card for each measure."

Actual performance is monitored monthly against the relevant measure/target depicted on the BSC at the Process Managers' Meeting and is also used as a key input to the Policy & Strategy Review. At that Review, the measures stated on the BSC are checked for relevance and changed/replaced accordingly, and new targets are agreed and set.

The KPIs identified as key to the four perspectives are the same KPIs routinely used for the EFQM Business Excellence Model Key Results (see Figure 1). The EFQM was favoured by managers as more ‘improving’ of processes than BSC. Hence, managers in *Automata* in particular had little difficulty in working with both systems and reformatting information from one *Automata* information template (for EFQM) to another (the BSC) for *Megacorp* and *MegacorpUK*. These common KPIs were also the basis for the division’s incentive compensation scheme for management.

In *Mercado*, there seemed to be more resistance to the BSC. As one manager in the *Mercado* sales department noted:

“Our BSC doesn’t really mean an awful lot to most people... at the [Divisional] level we’ve got a BSC but we don’t ever review it. We have the charts in our management information pack which people look at and you know take some comfort from, or otherwise, but we’ve never actually reviewed its content and said are we still measuring the right things. It just kind of exists... What is the point of having a metric that no-one ever uses?” (Manager, Sales, *Mercado*)

The BSC was viewed as something that “doesn’t really mean an awful lot to most people”; it could be that it is not considered as adding to the information or measurement process. As one *Mercado* manager stated: “the BSC exists, it has data, but as a meaningful indicator of how well [the unit] is performing I don’t think it’s all that meaningful.” The questioning of the importance or extra value of the BSC was reflected in the way that managers could speak of the interrelations or overlap between the EFQM and the BSC.

“I think it was also something that [*Megacorp*] used and that’s something that the HQ would like *Automata* to use so everything was uniform throughout.” (Production Group Leader, *Automata*)

For production line staff, awareness of the BSC and its perceived role was present, though in most cases that knowledge was only relevant to the extent that specific KPIs against which they were held accountable was part of the BSC. As the Shift Leader comments below, her main concerns about the performance measurement system focussed its lack of use:

Researcher: “I mean, so why would anybody look at the [BSC]?”

Interviewee: “They wouldn’t, they wouldn’t, somebody’s just put a suggestion for it to be on A3 because nobody could read it on A4 paper and so it’s on A3 now. It’s still in the same place [on a noticeboard], it’s on A3 paper. But still nobody really spends a lot of time on it, *they* [Management in *Automata*] don’t seem to spend a lot of time on it... .” (Production Shift Leader, *Automata*)

Our informants in *Automata* frequently referred to this multiplicity of management systems circulating at work. Many saw this multiplicity in terms of overlap, or overlay of parts of one system upon another. In commenting on the multiplicity of measures at *Automata*, one manager (Operations) said

“I’m not sure that we need all [of the]. For example the BSC and EFQM, there’s overlap between those two.”

For this manager, the BSC and EFQM duplicate each other, hence that there is no need for both. Similarly:

“The results side of the EFQM model does really measure the effectiveness of what’s on the left hand side [enablers], and the BSC is measuring the effectiveness at the higher level of the organization. The two are the same.” (Manufacturing Manager, *Automata*).

The marketing manager at Mercado similarly viewed the BSC and EFQM as harmonious in terms of their everyday operations, but greater emphasis was accorded to EFQM:

“The EFQM is you know the wide ranging umbrella that you’re within, the balanced scorecard is just a name for how you decide to monitor and you know just a cockpit chart. The balanced scorecard in itself I don’t perceive, and I’m certainly not an expert on it, as the under-arching, you know it’s the EFQM model that we’re following as the under-pinning, under-arching principle that we’re following.” (Business Manager, *Mercado*)

Interviewees explained how the BSC was valued as a checklist for results to see that “we are covering all areas...” but the four quadrants, although referred to, were not ‘weighted’ in accordance with the underlying BSC philosophy: the weighting of factors was performed through the criteria of the EFQM.

“the balanced scorecard is literally four segments ... we don’t really weight it. I mean, we give every segment its own importance in its own right but we don’t measure it against finance and sort of say, ‘you know this is twenty percent, this is eighty’, not like EFQM...” (Commercial Manager, *Automata*)

Nevertheless, while the BSC and the EFQM were commonly seen as overlapping, for *Automata* managers the relationship of the BSC was subsidiary to the EFQM, in the sense that BSC slotted in to the Results side of the EFQM Business Excellence Model. While the BSc and EFQM were considered harmonious, there was a clear hierarchy relationship between the two: the EFQM was the more significant.

However, attention to the BSC was structured by the view that it was a model staff needed to know more about (even seven years after implementation) in order to ‘get on’ in the

company. Hence, a Production Shift Group leader spoke of the apparent need to know more about the BSC if one's career was to advance:

“yeah like I do want to stay at *Megacorp* and I do want to further my career, we're doing a line management course at the moment... and they put the group leaders on it and now they've put all the shift leaders on it. So there's nothing they want to hide from you, they want everybody singing from the same hymn sheet so to speak, so the group leaders have been on it, now the shift leaders are going on it, so we all know what each one's talking about. So I'm doing that at the moment and *Megacorp* are funding that for us to go on, it's up to you if you want to go on it, it's purely voluntary, it's ten weeks and then [there's] another one for thirty-two weeks.”
(Production Shift Leader, *Automata*).

As we note below, the MD of *Automata* relied heavily on the BSC in his monthly reporting meetings with his superiors in Germany, and was quite insistent that the BSC should be disseminated widely within *Automata*. Here we see the kinds of mechanisms by which central initiatives, such as BSC, slowly diffuse to the periphery units through their impact upon training and associated beliefs about subsequent career development.

The issue of system overlap, however, becomes even more salient when *Automata* was required to introduce the Time system that had been trialled in *Megacorp*'s other units during the late 1990s. In 2000, after *Automata* was granted semi-autonomous business status within *Megacorp*, *Megacorp*'s HQ started to roll-out its own performance measurement system that all divisions were required to implement. Time and Process Improvement were joint initiatives designed to address performance measurement, quality management and business improvement programmes in ways that managers thought was strikingly similar to EFQM. The language of the two (Customer Focus, Innovation, Competitiveness) and the linking to specific design channels or programmes with specific goals and measures, matched significantly the linear process, categories and criteria of the EFQM Business Excellence Model. As one manager reported, any distinctions between the two, which counted for little in everyday work, had commonly to be explained to staff within *Automata* and *Mercado*:

“I had somebody in here yesterday saying, ‘explain this [Time] and EFQM thing because we've got two systems’... People get a bit hung up on it by saying ‘should we do an EFQM or should we be doing [Time]’? And really if you're doing EFQM, you're doing [Time]... So it's an on-going story.” (Commercial Manager, *Mercado*)

In these quotations, working with the BSC and EFQM, or Time and EFQM is assumed to lead to the same results, so that the two systems are assumed to be almost identical in their effects. Combining the three quotations above would seem to suggest that there is little

difference between the BSC, EFQM and Time. Some differences were recognized, but for the managers working with EFQM they were considered minor:

“[Time] ...has some structure to it, some toolsets, some things that you can use to help you identify opportunities for improvement. And that’s where it starts overlapping a little bit with EFQM ‘cos EFQM has got ... that sort of stuff as well.”
(HR Manager, *Mercado*)

In which case, given the similarities or complementarities, and lack of overt conflict or contradiction between the two, why did *Automata* persist with EFQM?

Multiple Measurement Systems: Recognition and Identification

In this section we move away from the usages (the work) of each system in *Automata* to explore the ‘recognition’ that each performance measurement system offered within *Megacorp* and *Automata*. The term ‘recognition’ refers to the manner in which the presence of a system was considered important in terms of its status and profile outside of the immediate work context, whether this be the factory, division, or central HQ of *Megacorp*, rather than simply the ‘work’ that the system was considered to perform within the organizational unit (Ruef & Scott, 1998).

As is apparent from the account of *Automata*’s recent history from the 1990s onwards, many interviewers suggested to us that the *Automata* plant had substantial pride in its implementation of EFQM during a difficult period for the business and through which it negotiated successfully. *Automata*’s turnaround was considered so spectacular within *Megacorp* that, “they now, whenever they quote anything as far as manufacturing is concerned, they refer to [*Automata*] as being the Benchmark” (Factory Manager). The site was considered to be the most cost effective manufacturer within its division (EFQM Report, 2003). Yet, amid this pride, the message from HQ for the immediate future was not necessarily secure. During the visit to congratulate *Automata* for their turnaround, a senior HQ manageris reported as stating:

“‘Productivity is your life insurance.’ That had more of an impact on the people sitting round the room than the previous two hours of congratulations, because he told us that you may be successful today, but, once I go away and if you stop being successful, the situation will change. So we know we can’t sit back and relax... because everybody else is going to be working twice as hard to try to knock us off that position” (Senior Manager, Finance).

Other interviewees recalled the chilling effect of the HQ manager's comment. Pressure for continuous improvement was likewise expressed in formal documents: "The ability of [*Automata*] to deliver annual productivity gains will decide its future... Continuous improvement driven by the excellence model assessment is our way of managing our future" (EFQM Report, 2003). These aspirations are reflected in *Automata*'s declared mission and strategy, which emphasize growth, productivity through continuous improvements, quality, and customer focus.

An important element of the *Automata*'s turnaround was considered by its own managers to be due to the implementation of the EFQM Business Excellence Model. EFQM, as we noted previously, operates as a members' association to offer and share advice between companies, benchmark data and consulting assessments. It has attributes similar to the BSC Collaborative (now Palladium) with membership, advice, and awards for successful implementation. Within EFQM, there are various levels of 'credit' for the programmes that member firms introduced. The 'Excellence Award' is based on a submission to the EFQM, followed by a five hundred hour visit by an expert assessor team. Each year EFQM nominated a member for a competitive Award for Excellence based upon these assessors' visits.

From 1998, *Automata* had prepared self-assessment documents to submit for the Excellence Award, and had received it on multiple occasions. As well as this recognition, considered prestigious by *Automata*'s management, the assessor team from the EFQM provided an improvement report with relevant data for benchmarking from other EFQM members (over 500 corporations).

"[That is] why EFQM is quite good actually, because we get information that's outside our industry" (Operations Manager, *Automata*).

The premier motto of the EFQM is "Share what works" (EFQM: <http://www.efqm.org/en/Default.aspx>). In this way not only did *Automata*'s management take pride in their turnaround of the divisional unit, but also attributed it in part to their success, externally validated, with a business improvement/excellence model and the feedback they received from its implementation.

Yet *Automata*'s membership of the EFQM was on a local rather than European corporate basis; *Megacorp* was not a member. Indeed, *Megacorp*'s HQ were known for their antipathy to EFQM. For example, the Divisional Chief who introduced the BSC into the *Electron*

division and *Megacorp* had difficulty recalling the name of the EFQM in our discussion of performance measurement systems:

“The name of the award.. the one that [long pause] ... EFQM.”

The association with gaining awards seemed to structure perception of EFQM by senior management levels in *Megacorp* as more about awards than practical use. This divisional manager acknowledged that EFQM had similarities with the Time system in *Megacorp*. But EFQM was discussed with scepticism – particularly in suggesting that the “award issue” (the EFQM Quality Award) made it confusing and a distraction:

“You may compare it with the EFQM but ... there are similar areas yeah, EFQM I think, I’m not quite sure but the EFQM, it must be eight areas?”

Q: No nine areas, there are five processes and four enablers.

A: Oh nine, and if you make a translation from this aspect to [Time] it is similar, and some of our groups use it .. and they found out all these awards things ... And what you have of course is that the people are really focused on some points, getting some scores ... a lot of activities were focused on this award issue.” (Divisional Chief, *Megacorp*)

Megacorp senior management showed a lack of trust in EFQM’s measurements as a result of earlier internal events. A few years prior to *Automata*’s membership of EFQM, we were told, two other European businesses within *Megacorp* won EFQM awards. This demanded some explanation:

“And then twelve months later [after these units won the EFQM award], and obviously a bit of a fanfare was made and a fuss and all the rest of it, and then twelve months later both of those businesses ran into serious financial difficulties....someone at a higher level had some egg on their face having promoted the fact that ‘look how good we are’ [based on the EFQM awards], and then next thing you know is the [bad] news from a financial point of view and had some explaining to do... it’s a case of once bitten, twice shy [for them]” (Finance Manager, *Automata*).

Automata’s continued success as a production plant, recognised within *Megacorp*, was not, it seems, acknowledged by the HQ to be related to its use of the EFQM Business Excellence Model. This apparent lack of credit, which is comprehensible also in the sense that it is difficult to attach definitively performance improvements to any model, did not play well with *Automata*’s managers and their identification with the EFQM.

To the extent that the BSC was viewed as a centrally mandated initiative, to senior managers the Time/Process Improvement system was the guiding system for the implementation and

use of the BSC. In the same way that EFQM was viewed by *Automata* plants managers as superior to the BSC, for *Megacorp*'s senior management, the BSC was a tool in the service of Time. Speaking about the role of the BSC in *Megacorp*, the senior manager responsible for introducing the BSC into *Megacorp* commented:

“From our perspective the future is Time and the balanced scorecard is one of the tools to help us to realise the Time philosophy ... it could be another tool, there is some more. ...[but] nine of ten group divisions use the balanced scorecard for steering their own business” (Divisional Chief, *Megacorp*)

Here the BSC is referenced explicitly as a subsidiary tool of the overlying TIME philosophy. Moreover, in our discussion of the EFQM, the same senior manager acknowledged that it was open to divisional units to bring in any other tools that they considered valuable:

“the balanced scorecard fits perfect in this Time philosophy ... then it wasn't a big deal to also bring these kind of tools [EFQM] in the toolbox.” (Divisional Chief, *Megacorp*)

Other interviewees suggested that *Megacorp*'s senior management were playing out corporate status issues with other major European corporations and the sponsors of EFQM. As noted earlier, EFQM was founded in 1988 as a non-profit association of premier European Corporations that came together to develop and promote an Excellence Model for European businesses. Managers within *Megacorp* and *Automata* both reported that senior *Megacorp* staff had a long standing antipathy towards EFQM that derived from the genesis of the EFQM foundation, and interviewees suggested that this was due to *Megacorp* not having been invited as a founding member of the EFQM. The *Megacorp* Corporation at HQ level continued to maintain a distance between EFQM's self-styled 'European Model of Excellence' and its own corporate wide management systems.

This antipathy between EFQM and *Megacorp* shaped much of the approach that *Automata*'s managers took towards *Megacorp*'s own management systems – in particular towards Time and Process Improvement. Noting the similarities between Time/Process Improvement and EFQM was at once an acknowledgement that there was significant similarity in key concepts and general structure, but also a way of criticizing implicitly the requirement to 'foist' Time/PI onto *Automata*, when what they had already seemed to them to be working well.

Several informants spoke of the parent's drive to assert its identity through the development of its own initiatives that imitate the performance management systems available in the business world, but repackaging them as a special brand of the parent:

“When Time was first introduced it was introduced as [*Megacorp*'s] business excellence program. And the significant word there was [*Megacorp*] as all we'd done really was take EFQM out and put [Time] in. So, because [*Megacorp*] is big enough and ugly enough to do its own thing, it did, instead of saying, 'OK we've evaluated all the different tools around for improving the business and we think EFQM is the way to go, therefore, [*Megacorp*] is going to buy wholeheartedly into EFQM'.... *I suppose it was just typical of [*Megacorp*'s] arrogance to things we're using.*” (Senior Operations Manager, *Automata*; emphasis added)

Other managers were also critical of Time in comparison to their familiar management systems:

“We've got a [Time/PI] toolset, and these were meant to be tools that you used to try and tease out the improvement opportunities. But it just didn't translate very well to English, and so I looked at them and just remember coming away totally confused by what the hell they were supposed to be used for... It lost something in the translation, and I remember looking at it in the early days of me doing this job thinking, 'well is this the tool set I need to drive the change'. And I just remember looking at it thinking, 'I don't understand this, I don't really know what I'm supposed to be doing with it'. *And from my involvement with other people in jobs like mine they all basically feel the same way.*” (Manufacturing Manager, *Automata*; emphasis added)

If EFQM seemed to be tied to *Automata*'s identity and recognition of its achievements, then Time seems similarly to be an initiative that was tied to the identity of *Megacorp HQ*; rather than simply buying into existing management systems, such as EFQM, *Megacorp*'s (self-) image is thought to be affirmed and promoted by a repackaging of EFQM into its own system Time/PI. *Megacorp* could now parade Time as its own brand of control system.

“I think they [*Megacorp*] want that to be part of their identity, they want financial institutions to realise that they have an improvement programme.” (Quality Control Manager, *Automata*).

The above reasoning is compatible with playing out of corporate image and prestige issues by *Megacorp*, as is the view that specific management systems could be promoted as a statement of independence, in the face of perceptions by the company of being ignored by the EFQM business grouping:

“Someone once told me 'well the reason why [*Megacorp*] never pursued EFQM as a global initiative is because the fourteen companies or heads that formed the original EFQM group wasn't represented by [*Megacorp*].' If you were to list the top fourteen European companies I think [*Megacorp*] would be in there. So for some reason, why weren't they in there and may be someone was a bit offended that [*Megacorp*]

weren't involved and thought, well OK we'll do our own thing." (Senior Marketing Manager, *Mercado*) {Move to p 29?}

One quality manager, from *Automata*, also remarked:

"[TIME] is a [*Megacorp*] improvement initiative, and I'll make a comparison with GE if I could. GE are pushing Six Sigma as their total business improvement [model]. [*Megacorp*] I would suggest are pushing [Time]. They're similar methodologies, they're all about not being satisfied with the norm and having structured approaches to improved business performance... I think they [HQ] wanted [Time] to be part of their identity, they wanted financial institutions to realize they have an improvement program." (Quality Manager, *Automata*)

Yet the same manager also acknowledged that Time and Process Improvement were of little practical importance to the performance measurement systems of the plant:

"Q: ... [W]hy if you have EFQM and you're using it so well and effectively, why do you need to use Time?

A: Well we don't really use Time, that's the point, Time is the *Megacorp* global improvement programme and we are required to improve what we do, it's down to us as businesses how we do it. ... Really there isn't room for three improvement programmes." (Quality Manager, *Automata*)

These multiple explanations offer a glimpse of the complexity faced by informants when attempting to justify or rationalize why certain management systems are favoured, or marginalized, or even ignored altogether. But they also speak to issues of status and recognition that managers were sensitive to in explaining their choices and those of others with respect to their favoured management system.

In the final section of the case we discuss how the operation of multiple management systems functioned between different units within *Megacorp*.

Working Across Multiple Management Systems: Accommodation and Conformity

In the previous section we saw how relationships between the organizational units and their environment, and the divisional unit and the centre are major undercurrents in comprehending how multiple measurement systems can co-exist, if not necessarily co-function. The organizational etiquette of working across or handling such tensions took on a variety of forms. One form would be to avoid making any reference to performance management systems developed locally and which may be considered offensive to the parent:

"I do believe that when some of our people go to [parent HQ] and they get involved in these types of discussion they keep it pretty low key, the EFQM activity in the UK,

simply because in [HQ] it's not necessarily smiled upon as an improvement tool. They would rather talk about [Time] than EFQM." (Senior Quality Manager, *Automata*)

Managers consulting or meeting with HQ managers would tend to make no explicit mention of their use of EFQM, knowing that only Time was approved officially.

Part of this accommodation might be to 'talk the talk'; that is to speak the management control language that HQ prefers to hear:

"I think when we've had very senior heads [here] we've made sure that we've got our [Time] badges on, and as soft [weak] as that [is], I mean we're playing the game." (Operations Manager, *Automata*)

What is emerging from these empirical details is a situation where parent initiatives are viewed as simply a badge at local levels. Yet managers at the *Automata* plant show the skills necessary in order to be able to both interact meaningfully and credibly with the senior managers in *Megacorp*, and keep faith with their own commitment to EFQM by removing its role from their discussions with senior management ("playing the game"). As Fligstein remarks, this accommodation is an illustration of the social skill central to maintaining a status quo:

"social skill is the ability to read the current level of organization in a field and respond to it by taking the position of other actors in the field." (1997: 5)

But what about the units geographically closer to the international HQ? Our interviews suggest that such initiatives are much more explicitly promoted at the international HQ level and in units close to it. Geographical distance between *Automata* and *Megacorp* HQ seemed to lessen the oversight *Megacorp* gave. In response to the question "In day-to-day activities does [Time] figure out in your thinking explicitly?" one Factory manager (*Automata*) responded:

"No, I think it's a logo. If you were in the (X) factory [near international HQ], and you were asking that question you'd get a very different answer, you'd get it that [Time] probably guides all of their improvement approaches."

More importantly, however, we noted how the managers at *Automata* worked across the management control divide, such as it was, between HQ's preference for Time and BSC, and their own preference for EFQM, using a strategy of accommodation. 'Accommodation' here refers specifically to the linguistic act of modifying speech and talk to the language or dialect

of another person outside of your immediate context so as to be understood and accepted (Miller, 2005). Here the practice described is ‘talk Time’ to *Megacorp* HQ, ‘talk EFQM’ to your immediate colleague. As we noted earlier, the homologies between the categories of the two systems made this kind of cross-over relatively unproblematic, and our informants noted that it was a skill at which they were well practiced. As one manager noted:

“[Time] is quite [country-specific] in its structure and in its objectives.”

Managers at *Automata*, however, expressed concern that the *rapprochement* between HQ systems and their unit’s systems might be ending. And, as we would expect from rational economic theory, the question of cost of multiple systems was at the centre of these concerns.

Megacorp HQ has recently been viewed by local managers to be ‘flexing its muscle’, with a change emphasizing greater homogeneity of practice across the organization worldwide. This is manifest, for example, in a recent (2007) drive to ensure that all local units embrace Time:

“[Things] are changing now and [Time] is being mandated by [the] UK CEO. That’s all business improvement activities in [*Megacorp*] in the UK across all activities have to be branded as [Time]” (HR Manager, *Mercado*).

Local units now are asked to submit periodic reports on their objectives on the Time initiative, what it means, and what improvements have been attained (Manager, *Automata*). To reinforce this focus, the *Megacorp*’s in-house magazine published regular articles on Time so that: “you can see it starting to permeate” (Marketing Manager, *Mercado*). The assessment documents produced by *Megacorp* demand transparency, clear responsibility, measurement, and process understanding. This seems to be pushing the local businesses within the group towards more compliance:

“we felt that we needed to push processes a little bit more for a number of reasons. One, we can improve our scores on excellence assessments, two we get more people talking about processes, three we tend to push towards compliance with unwritten [*Megacorp*] edicts, you know their good practices, and four the requirement of ISO9000 2000 was one where you needed transparency of processes” (Manufacturing Manager, *Automata*).

Also, a new web publishing technology has been actively promoted by *Megacorp*, which,

“can be from one extreme a very simple flow chart, to a full blown demonstration of compliance linking all the documents that we use within the business” (Operations Manager, *Automata*).

For example, one-day seminars on Six Sigma were launched by *Megacorp* where managers from local units were expected to attend, with the aim of enhancing compliance within the group worldwide. One Quality Manager (*Automata*) noted,

“It’s one day seminar yes and again you can see that’s also a little bit of political pressure It would have been subtly pushing us towards that conformity, you know the e-mail that invites you doesn’t say you shall go.”

“more and more, we’re getting the influence of [Time] and things like that are coming through, yeah. Another example would be a thing called [Project Spirit] within this company now. What’s happening is that across the whole world [*Megacorp*] is trying to harmonize its processes, and the way it’s structured, so in Northern European countries [sites] are doing this. So right now we’re engaged with the likes of Holland and Finland and Sweden and Ireland to agree common processes. Now you think about that, that’s just so difficult, I mean you can’t even imagine how you’d go about doing that. But nevertheless we’re doing it, and the reasons are that if we get common platforms we reduce variations, we can save a lot of money.” (Sales Manager, *Mercado*)

This pressure for the group to become globally competitive may be driven partly by the desire to reduce costs, although whether this is a product of calculation of the costs and benefits of each system is unclear. This partitioning of the world by *Megacorp* in the name of conformity is beginning to be seen by divisional managers as making a difference in the sense that greater centralization and conformity in use of control systems is felt to be closing in on them. Managing in the name of greater conformity is seen by the local businesses to be threatening to their identity, disruptive to local best practices, and costly to them, even though it may produce significant savings for *Megacorp*:

“It’s coming straight down the track, it’s a bit of a scary thought really because what’s going to happen is that right now, because we’ve had SAP since about 1992...we’ve had two or three versions of SAP in that time and we’ve become good with it, it meets our business needs... And it does what we want, and now just to make an extreme example, we have a very good SAP returns process, which we think is best in class. Now [if] in harmonizing these processes we have to employ four more people to do the extra work this doesn’t make us more competitive. But the answer is that at the higher level in the organization this is expected to save us tens of millions of pounds, so it’s worth doing at that level. We just have to live with the consequences.” (Finance Manager, *Automata*)

Another concern raised by local businesses in the face of the new sustained drive by the parent to secure compliance is the loss of local autonomy, flexibility and independence:

“Once we [harmonize] what we’ve got is what we’ve got, and if we want to make a change then ten other countries have got to agree, it’s a bit like the EU. So it’s a

worrying thought really ‘cos you know we’ll have lost a lot of the flexibility.’” (Sales Manager, *Mercado*)

HQ-based initiatives, such as Time, and to a lesser extent the BSC, seem to draw remote sites in the direction of international HQ, and these seem to be having some impact. Locally-selected systems, such as EFQM, increase the distance of local sites from international HQ, and by implication enhance local autonomy and identity. This centre-local interaction is a dynamic process with the force of centralization and decentralization fluctuating across time and space.

Although our interviews with *Megacorp*, *Mercado* and *Automata* concluded in 2007, in 2012 we noted that *Automata* continued to have membership of the EFQM, and continued to be recognized as successful in its implementation of the Business Excellence Model. Fears of centralization that managers at *Automata* reported to us, seemed to have remained fears, and the rationale of cutting costs by reducing the multiplicity of management systems seems thus far not to have been followed through.

Concluding Discussion: Work, Recognition and Accommodation in the uses of performance measurement system(s)

Our motivation for this study was an attempt to understand and to contribute to the theorizing of the multiple instances and multiple roles that performance management systems assume in organizations. In a situation where a divisional unit can be employing several competing and overlapping systems of measurement and appraisal, our concern was to try and map the processes that lead managers to work with several systems.

The meaning that systems have for those who interact with them is central to understanding how multiplicity is understood. In *Megacorp* we have noted two interpretations and recognitions of the relationship between the role and relevance of the Balanced Scorecard and the EFQM Business Excellence Model. For the managers of the *Automata* plant, the BSC was viewed as overlapping but subservient to the importance of the EFQM. There the BSC was interpreted as being similar to the ‘Key Results’ section of the EFQM model. To the extent that the KPIs were the same (and our informants indicated that they were) then the BSC could be envisioned as effectively enclosed within a working model of the EFQM.

Insert Figure 5

This sense of the hierarchical relationship between the BSC and the EFQM did not mean that plant managers were not unaware of how significant the BSC was considered in the wider *Electronica* UK division or by *Megacorp* senior management. *Automata* and *Mercado* managers communicated their KPIs to senior managers outside of the factory in the language of the BSC, rather than refer to the guiding framework or model of the EFQM. On the other hand, as we noted, senior managers in *Megacorp* had little sense of the role of the EFQM among sub-units and considered it to be a contributor to the ‘internal processes’ quadrant of the BSC. The hierarchical relationship is reversed from that in Figure 5. For *Megacorp*, the EFQM could be envisioned as effectively enclosed within a working model of the ‘internal business processes’ perspective of the BSC, as shown in figure 6.

Insert Figure 6

For the senior managers of the *ElectronicaUK* division, Time and Process Improvement were viewed as the dominant dashboard for all of *Megacorp*, with the BSC as a potential ‘tool’ nested within them.

Three concepts help to explain the functioning of multiple management systems in organizations. In Figure 7 we map out what we understand from our study to be the relationships between the two theories of performance measurements systems, and their role (Table 1) and the differential manner in which EFQM, the BSC and Time/Process Improvement operate in *Automata* and *Mercado*, and three concepts that are central to explaining how and why these systems operate in this way.

Insert Figure 7

The first, which is the subject of much of the existing research on the role of performance measurement and management systems, refers to their ‘**work**’ in the sense that the systems work, and are worked on by managers, as tools of monitoring, analysis and decision-making. In the case of *Megacorp*, EFQM, BSC, PI and Time were all deployed as monitoring, measuring and evaluation tools, but not equally inside the units of the organization that we examined. Each system had an active role for monitoring and evaluation within the

organization; they were deemed useful and informed interactions between managers, units and the central HQ.

The work of these management systems however, depended upon a degree of interchangeability between their terms, frames and categories. Of the three systems we explored, the BSC was considered the most flexible – mainly as a result of its seeming malleability, a point critics have noted previously (Busco & Quattrone, 2010). *Automata* staff found little difficulty in nesting BSC within a Business Excellence framework.

“EFQM is all about drive, it’s not focusing on the result which is what the balanced scorecard is. A result. It’s about focusing on the enablers which will then results happen. So if we focus, continually strive to make sure those enablers are doing as best as possible and continue to improve and drive that change, then those results should start to deliver, those results are what’s on the balanced scorecard. So by focusing on the people, which is again in the balanced scorecard etcetera, the processes, all that enabling stage, and the results will start to happen. ... if we can do all the parts of the EFQM that will deliver the balanced scorecard” (Manufacturing Manager, *Automata*).

Automata plant managers found a way to rationalise a link between BSC and the EFQM: BSC showed the results from the EFQM’s enablers (EFQM also had results) so there was a folding of BSC into EFQM. This gave the BSC possibly the least contentious profile among managers of any of the systems. However, we clearly noted differences in usage regarding the process improvement management systems. *Automata* strongly favoured EFQM, a system to which the central HQ had limited tolerance. *Megacorp*’s desire to develop their own system encountered antipathy from *Automata* staff that had been using EFQM for almost five years already, with apparent success. We suggest that the continuing commitment of *Automata* staff to EFQM is *path dependent* (Mahoney, 2000) in that it is founded and reinforced by their historical trajectory from a struggling ‘factory’ to successful semi-autonomous business within *Megacorp*. Willingness to shift management systems was undermined by the apparent historical experience and accomplishment of using EFQM. What sustained the multiple systems were their overlapping terms, whatever their different governing diagrams and figures would seem to suggest.

This leads to our **first research proposition**:

R1: The usages of performance measurement systems cannot be determined independently of pre-existing systems.

The paths that *Megacorp* took in arriving at the current position in which sub-units use multiple systems also reveals something of the desire for meaning and **recognition** that organizations and their autonomous sub-units seek from organizational structures and management systems. Whether the EFQM was functionally effective, or in some ways superior to other improvement systems (such as Time or Process Improvement), it is clear that *Automata*'s reluctance to move to *Megacorp*'s internal system is related to their positive history and experience with EFQM, and the recognition that EFQM Awards had brought to their endeavours. This recognition was also not simply about legitimation, but the feedback received from the award assessment process was regarded as a useful source of both feedback and benchmark data from other members – suggesting 'rational information' justifications also. Further, issues of recognition are at the same time matters of identification and meaning, and of being recognized as successful implementers of the Business Excellence model. Such recognition helped to reinforce *Automata* staff's commitment to the system.

Recognition can also be seen in the stance of *Megacorp*'s central HQ's reluctance to embrace EFQM. *Megacorp* HQs' lack of involvement with EFQM at the founding stage, and the apparent ambiguous response they now had to the Award process, given that other sub-units had been awarded and then struggled financially, shaped corporate disapproval of this management system. Yet the desire for status and prestige among major corporations seemed to shape *Megacorp*'s decision to develop their own management process systems and to seek their implementation throughout the corporation. The momentum to develop Time and Process Improvement illustrates some of the norms that senior management perceive as appropriate features, systems and structures of a prestigious corporation. Similarly, *Megacorp*'s reluctance to embrace EFQM was also suggested to be connected to their unwillingness to join the foundation once the model had been formulated.

This leads to our **second research propositions**:

R2a: The use of a specific management control system is positively related with the *recognition* that a management control or measurement system provides its users.

R2b The use of a specific management control system is intertwined with the *identification* that managers and other users bring to and take from the use of the system.

The continuing existence of the multiple management systems also owes much to the capacity of *Automata* staff to speak the language of Time and PI when dealing with corporate

headquarters. We describe this as a process of ‘**accommodation**’ referring to ways that speakers across languages or dialects adapt their own speaking voice, vocabulary, pronunciation, etc., to each other’s way of talking to facilitate their interactions . Most notably *Automata* openly described the social skill that they deploy in ‘talking the talk’ of time and BSC when interacting with *Megacorp* HQ staff. The approved language of Time and BSC replaced all reference to usage of the ‘local dialect’ of EFQM.

This leads to a **third research proposition**:

R3: Management systems *co-exist* to the extent that users within organizations are able to apply their *social skills* to *accommodate* each other’s performance measurement languages, meanings and concepts.

Finally, we noted the beginnings of a questioning that we expected to find much more prevalent within *Megacorp* over the five years of our study: is not the existence of multiple management systems cost ineffective? *Megacorp* HQ was starting to inquire whether it might be more efficient to standardize and harmonize management processes. At the same time, we also noted, however, worries that the imposition of an imposed, overarching management system of performance measurement moved the organization away from the kind of autonomy that divisionalization is supposed to foster. Moreover, five years after we last conducted our research interviews at *Megacorp*, *Automata* is still using EFQM within its division.

Our initial literature review noted some of the divergence of research styles into the uses and consequences of management systems within organizations. For example, while Banker et al, (2004) stresses the rational design and use of the BSC, Berry et al, (1985) emphasise the symbolic and ritualistic elements in performance measurement. One clear implication of our study is that within organizations there might exist some variety of systems located at different levels and geographical sites within large corporations and this variety reflect differing roles and uses of these systems. It might be premature to assume that ‘organizations’ have a coherent management system that they deploy in a uniform style (Dearden, 1972). This suggests that accounting researchers need to more carefully consider what it also means to talk about a ‘control package’, since this term also implies a notion of coherence or complementarity that may or may not be achieved in practice.

Whilst we have shown the differences between commitments and the meanings or theorizations given to the various performance management systems in our case, this should not occlude the point that most of these technologies share underlying measures and assumptions. It is also clear from our study that overlying the reach for more than one measurement system is a shared belief in the 'logic' of performance measurement systems (of whatever kind) that guides senior and middle managers to seek and pick between proprietary and internally generated: beliefs in the 'improving' nature of performance measurement, the furtherance of rational organizational strategy, and collective injunctions to 'plan, do and check'. Indeed, each of the systems used in our study seems to us indicative of specific genres of organizational control technologies with similar underlying structures, maps and processes. Moreover, apart from these shared PMS characteristics, our study indicates something of the way in which managers can use their social skills to shift between usage of systems seemingly without significant disruption.

We propose that commitment to a management system will be structured by the historical conditions of its diffusion within the organization and the formative experiences with its use. Significantly, the historical channels of diffusion are important antecedents to issues of use, recognition and identity that shape managers' preferences for particular management systems (Strang & Meyer, 1993).

References

- Abernethy, M. A. & Chua, W. F. (1996), A Field Study of Control System “Redesign”: The Impact of Institutional Processes on Strategic Choice. *Contemporary Accounting Research*, 13: 569–606. doi: 10.1111/j.1911-3846.1996.tb00515.x
- Abrahamson, E. 1991. Managerial fads and fashions: the diffusion and rejection of innovations. *Academy of Management Review*, Vol. 16 (3), pp. 586-612.
- Abrahamson, E. 1996. Management fashion. *Academy of Management Review*, Vol. 21 (1), pp. 254-285.
- Abrahamson, E., & Eisenman, M. (2008). Employee-management Techniques: Transient Fads or Trending Fashions? *Administrative Science Quarterly*, 53(4), 719-744.
- Andersen, H., Lawrie, G., & Shulver, M. (2000). The Balanced Scorecard vs. the EFQM Business Excellence Model—which is the better strategic management tool. *2GC Active Management*, ..., (June), 0–16.
- Augier, M. & March, J.G., (2011) *The Roots, Rituals and Rhetoric of Change* Stanford Business Books.
- Baiman, S., Netessine, S., & Saouma, R. (2010). Informativeness, Incentive Compensation, and the Choice of Inventory Buffer. *The Accounting Review*, 85(6), 1839.
- Banker, R. D., Chang, H., & Pizzini, M. J. (2004). The balanced scorecard: judgmental effects of performance measures linked to strategy. *Accounting Review*, 79(1), 1–23.
- Bartlett, C.A., and S. Ghoshal. 1988. Organizing for worldwide effectiveness: The transnational solution. *California Management Review* 31(1): 54–74.
- Berry, A.J., Capps, T., Cooper, D.J., Ferguson, P., Hopper, T., & Lowe, E.A. 1985. Management control in an area of the NCB: Rationales of accounting practices in a public enterprise. *Accounting, Organizations and Society*, 10, 1, 3–26.
- Braam, G. J. M., & Nijssen, E. J. (2004). Performance effects of using the Balanced Scorecard: a note on the Dutch experience. *Long Range Planning*, 37(4), 335–34.
- Burchell, S., Clubb, C., Hopwood, A., Hughes, J., & Nahapiet, J. (1980). The roles of accounting in organizations and society. *Accounting, Organizations and Society*, 5(1), 5–27. doi:10.1016/0361-3682(80)90017-3.
- Busco, C. & Quattrone, P. (2010) The art of making best practices: a recipe for success, Working paper.
- Bush, D. & Dooley, K. (1989), “The Deming Prize and Baldrige Award: how they compare”, *Quality Progress*, January, pp. 28-30.
- Campbell, D., Datar, S. M., & Sandino, T. (2009). Organizational Design and Control across Multiple Markets : The Case of Franchising in the Convenience Store Industry. *The Accounting Review*, 84(6), 1749-1779.
- Chenhall, R.H., 2003. Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting Organization and Society* 28, 127–168.
- Cyert R., & March, J.G. 1963. *A Behavioral theory of the firm*. Prentice Hall.
- Conti, T. A. (2007). A history and review of the European Quality Award Model. *The TQM Magazine*, 19(2),

- Cooper, D. J. (1981). A Social and Organizational View of Management Accounting, in M. Bromwich and A.G. Hopwood (eds), *Essays in British Accounting Research*, Pitmans, pp. 178-205.
- Cooper, D.J. (1983) Tidiness, Muddle and Things, *Accounting, Organizations and Society*, 8 2/3 269-283.
- Cooper, D. J., Brown, J.L., Greenwood R. & Hinings C.R. (1996). Sedimentation and Transformation in Organizational Change: The Case of Canadian Law Firms. *Organization Studies*, 17: 623-647.
- Cooper, D.J. & Ezzamel, M. (2012) Globalization discourse and performance measurement systems in a multinational firm, Working paper.
- Covaleski, M. A. & Dirsmith, M.W. 1986. The budgetary process of power and politics. *Accounting, Organizations and Society* 11(3): 193-214.
- Covaleski, M., & Dirsmith, M. W. (1988). An institutional perspective on the rise, social transformation and fall of a university budget category. *Administrative Science Quarterly*, 33, 552–587.
- Dambrin, C., & Robson, K. (2011). Tracing performance in the pharmaceutical industry: Ambivalence, opacity and the performativity of flawed measures. *Accounting, Organizations and Society*, 36(7), 428–455. doi:10.1016/j.aos.2011.07.006
- Datar, S., Kulp, S., and Lambert, R. 2001. Balancing performance measures *Journal of Accounting Research* 39 (1): 75-92.
- Dearden, J. (1972). MIS is a mirage. *Harvard business review*, (1), 90-99.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2005). *The SAGE Handbook of Qualitative Research* (Third Edit., p. 1232). Sage Publications, Inc.
- Eccles, R. G. (1991). The Performance Measurement Manifesto. *Harvard business review*, (February), 131-138.
- EFQM Web site: <http://www.efqm.org/en/>
- Ezzamel, M. and Burns, J. (2005) 'Professional Competition, Economic Value Added and Management Control Strategies', *Organizations Studies*, Vol. 26, No. 5, 2005, pp: 756-776.
- Ezzamel, M. & Robson. K. (2012) On the institutionalization of accounting changes: the cultural fields of accounting, Working paper.
- Ezzamel, M., Lilley, S. & Willmott, H. 2004, Accounting Representation and the Road to Commercial Salvation, *Accounting, Organizations and Society*, Vol. 29, pp. 783-813.
- Ezzamel, M., Willmott, H. & Worthington, F. 2004. Accounting and management-labour relations: the politics of production in the 'factory with a problem'. *Accounting, Organizations and Society*, Vol. 29, pp. 269-302.
- Feltham, G. A. & Xie, J. (1994). Performance measurement congruity and diversity in multi-task principal/agent relations. *Accounting Review*, 69(3), 429–453.
- Fligstein, N. (1993) *The Transformation of Corporate Control* Harvard University Press.
- Fligstein, N. (1997). Social skill and institutional theory. *American Behavioral Scientist*, 397(9), 1–5.
- Fligstein, N. & McAdam, N. D. (2012) *A Theory of Fields* Oxford University Press.

- Friedland, R., & Alford, R. R. (1991). Bringing Society Back In: Symbols, Practices, and Institutional Contradictions. In W. W. Powell & P. J. DiMaggio (Eds.), *The New Institutionalism in Organizational Analysis* (pp. 232-263). University of Chicago Press.
- Hemmer, T. 1996. On the design and choice of "modern" management accounting measures. *Journal of Management Accounting Research* 8 (Fall): 87-116.
- Hope, J. & Fraser, R., 2003. *Beyond Budgeting: How Managers Can Break Free from the Annual Performance Trap*. Harvard Business School Press, Boston.
- Huff, A. & Jenkins, M. (Eds.), 2003. *Mapping Strategic Knowledge*. Sage Publications, Thousand Oaks, CA.
- Ittner, C.D. (2008). Does measuring intangibles for management purposes improve performance? A review of the evidence, *Accounting and Business Research*, 38:3, 261-272.
- Ittner, C. D. & Larcker, D. F. (1997). Quality strategy, strategic control systems, and organizational performance. *Accounting, Organizations and Society*, 22(3-4)
- Ittner, C.D. & Larcker, D. F. (1998). Innovations in performance measurement: trends and research implications. *Journal of Management Accounting Research*, 205-238.
- Ittner, C.D. & Larcker, D.F., 2002. Determinants of performance measure choices in worker incentive plans. *J. Lab. Econ.* 20 (2), 58.
- Jensen, M. (2001) "Value Maximization, Stakeholder Theory, and the Corporate Objective Function," *Journal of Applied Corporate Finance*, (Fall): 8-21.
- Johnson, H.T. & Kaplan, R.S. (1987) *Relevance Lost: The Rise and Fall of Management Accounting* Boston, MA: Harvard Business School Press.
- Kaplan, R. S. (2012). The Balanced Scorecard: Comments on Balanced Scorecard Commentaries. *Journal of Accounting & Organizational Change*, 8(4), 7-7.
- Kaplan, R., & D. P. Norton. 1992. The balanced scorecard—Measures that drive performance. *Harvard Business Review* 70 (1): 71-79.
- Kaplan, R.S., & D.P. Norton. 1996 *The Balanced Scorecard: Translating strategy into action*. Boston, MA: Harvard Business School Press.
- Kennedy, F.A. & Widener, S.A. (2008) A control framework: Insights from evidence on lean accounting *Management Accounting Research*, 19, 4: 301-323.
- Kominis & Dudau (2012) Time for interactive control systems in the public sector? The case of the Every Child Matters policy change in England *Management Accounting Research* Volume 23, Issue 2, June 2012, Pages 142-155
- Lamotte, G. & Carter, G. (2000), *Are the Balanced Scorecard and EFQM Excellence Model mutually exclusive or do they work together to bring added value to a company*, Balanced Scorecard Collaborative.
- Libby, T. & Lindsay, R.M. (2007) Beyond Budgeting or Better Budgeting? *Strategic Finance*, 89 (2) August , pp. 46-51
- Libby, T., & Lindsay, R. M. (2010). Beyond budgeting or budgeting reconsidered? A survey of North-American budgeting practice. *Management Accounting Research*, 21(1), 56-75. doi:10.1016/j.mar.2009.10.003

- Lipe, M., & Salterio, S., 2000. The balanced scorecard: judgmental effects of common and unique performance measures. *The Accounting Review* 75, 283–298.
- Locke, R.C. & Spender, J-C., (2011) *Confronting Managerialism*. Zed Books.
- Lounsbury, M. (2008). Institutional rationality and practice variation: New directions in the institutional analysis of practice. *Accounting, Organizations and Society*, 33(4-5), 349–361. doi:10.1016/j.aos.2007.04.001
- Mahoney, James (2000), "Path Dependence in Historical Sociology", *Theory and Society* 29:4, pp. 507–548.
- Malina, M., & Selto, F. (2004). Choice and change of measures in performance measurement models. *Management Accounting Research*, 15(4), 441-469.
- Malmi, T. & Granlund, M. 2009. In search of management accounting theory. *European Accounting Review* 18(3): 597-620.
- Malmi, T. & D.A. Brown. 2008. Management control systems as a package—Opportunities, challenges and research directions. *Management Accounting Research* 19 (4): 287-300.
- Marquis, C., & Lounsbury, M. (2007). Vive la resistance : competing logics and the consolidation of u . S . Community banking. *The Academy of Management Journal*, 50(4), 799–820. Retrieved from <http://aomarticles.metapress.com/index/132239323345985G.pdf>
- Merchant, K.A., & Van der Stede, W.A (2012). *Management Control Systems*. Harlow, Essex: Prentice Hall, 2012).
- Meyer, J. W. (2009). Reflections: Institutional Theory and World Society. (G. S. Drori & K. Georg, Eds.) *World Society The Writings of John W Meyer*, (2008), 36-63. OUP Oxford.
- Meyer, J. W., & Rowan, B. (1977). Meyer, John and Rowan - Institutionalized Organizations, Formal Structure as Myth and Ceremony . *American Journal of Sociology*, 83, 340-363.
- Milgrom, P., & Roberts, J., 1995. Complementarities and fit: strategy, structure, and organizational change in manufacturing. *Journal of Accounting and Economics* 19 (2/3), 179–208.
- Miller, K. (2005). *Communication theories: Perspective, processes and contexts* (2nd ed). NY: McGraw Hill.
- Mooraj, S., Oyon, D., & Hostettler, D. (1999). The balanced scorecard: a necessary good or an unnecessary evil? *European Management Journal*, 17(5), 481–491.
- Neely, A., Adams, C., & Kennerley, M. (2002) *The Performance Prism: The Scorecard for Measuring and Managing Business Success*. Financial Times Prentice Hall.
- Oakes, L., Townley, B., and Cooper, D.J. 1998. Business planning as pedagogy: language and control in a changing institutional field *Administrative Science Quarterly*. June: 257-292.
- Otley, D. (1980) The contingency theory of management accounting: achievement and prognosis, *Accounting, Organization and Society*, 5(4), pp. 575–607.
- Otley, D. 1994. Management control in contemporary organizations: Towards a wider framework. *Management Accounting Research*: 289-299.
- Otley, D. (1999) Performance management: a framework for management control systems research, *Management Accounting Research*, 10(4), pp. 363–382.

- Otley, D. & Berry, A. (1980) Control, organisations and accounting, *Accounting, Organizations and Society*, 5(2), pp. 231–244.
- Porter, M., 1980. *Competitive strategy* The Free Press, New York.
- Porter, M., 1985. *Competitive Advantage: Creating and Sustaining Superior Performance* Free Press, New York.
- Powell, W & DiMaggio, Introduction, in Powell, W. W., & DiMaggio, P. J. (1991). *The New Institutionalism in Organizational Analysis*. University of Chicago Press.
- Rucci, A.J., Kirn, S.P., Quinn, R.T., 1998. The employee–customer–profit chain at Sears. *Harvard Business Review* 76 (1), 82–97.
- Ruef, M. & Scott, W. R. (1998) ‘A Multidimensional Model of Organizational Legitimacy: Hospital Survival in Changing Institutional Environments’, *Administrative Science Quarterly* 43: 877–904.
- Schneiderman, A. (1999). Why Balanced Scorecards Fail, *Journal of Strategic Performance Measurement*, January, 6-11.
- Silverman, D. (1985) *Qualitative Methodology and Sociology* Aldershot: Gower.
- Simons, R., 1987. Accounting control systems and business strategy: an empirical analysis *Accounting Organization and Society* 12, 357–374.
- Simons, R., 2000. *Performance Measurement & Control Systems for Implementing Strategy: Text & Cases*. Prentice-Hall, Upper Saddle River, NJ.
- Solomons, D. (1985). *Divisional performance: measurement and control* Irwin.
- Spender, J. (2012) Herbert Alexander Simon: Philosopher of the Organizational Life-World *Oxford Handbook of Management Theorists* (Malcolm Warner & Morgan Witzer), forthcoming Oxford University Press, 2012.
- Stern, J. M., G. B. Stewart III, and D. H. Chew, Jr. 1995. The EVA® financial management system. *Journal of Applied Corporate Finance* 8 (Summer): 32- 46.
- Strang, D. & Meyer, J. W. (1993). Institutional conditions for diffusion. *Theory and society*, 22(4), 487-511.
- Thornton, P. H., & Ocasio, W. (1999). Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958-1990. *American Journal of Sociology*, 105(3), 801–843.
- Vancil, R. F. 1979. *Decentralization, managerial ambiguity by design*, Dow Jones-Irwin, Homewood Illinois.
- Wonggrassamee, S., Simmons, J. E. L., & Gardiner, P. D. (2003). Performance measurement tools: the Balanced Scorecard and the EFQM Excellence Model. *Measuring Business Excellence*, 7(1), 14–29.
- Zilber, T. B. 2002. Institutionalization as an Interplay Between Actions, Meanings and Actors: The Case of a Rape Crisis in Israel. *Academy of Management Journal*, February, 45 (1): 234-254.
- Zilber, T. B. 2008 The work of meanings in institutional processes and thinking. in *Handbook of organizational institutionalism*. R. Greenwood, C. Oliver, R. Suddaby and K. Sahlin- Andersson (eds). Sage.

Table 1: Two Theories of Performance Management Systems

Theory of PMS	Modes of Use	Roles of and for PMS
Rational-Actor	Work	Decision-making; Evaluation; Strategy; Directing; Planning & innovation.
Neo-Institutional	Recognition	Symbolic; Identification of 'proper management' and expertise; Contemporary: up-to-date with current management ideas

Figure 1: the EFQM Model

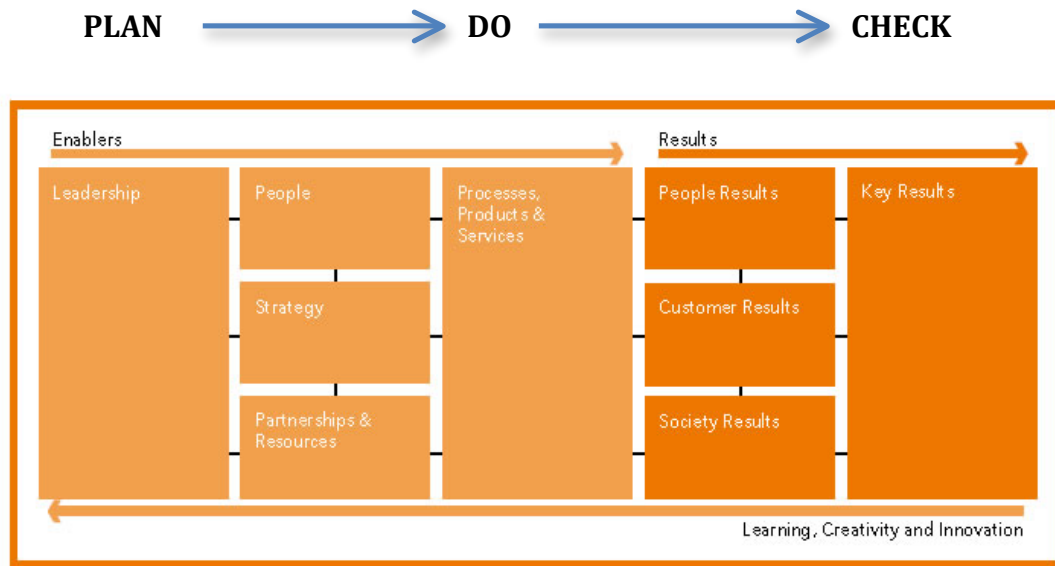


Figure 2: BSC

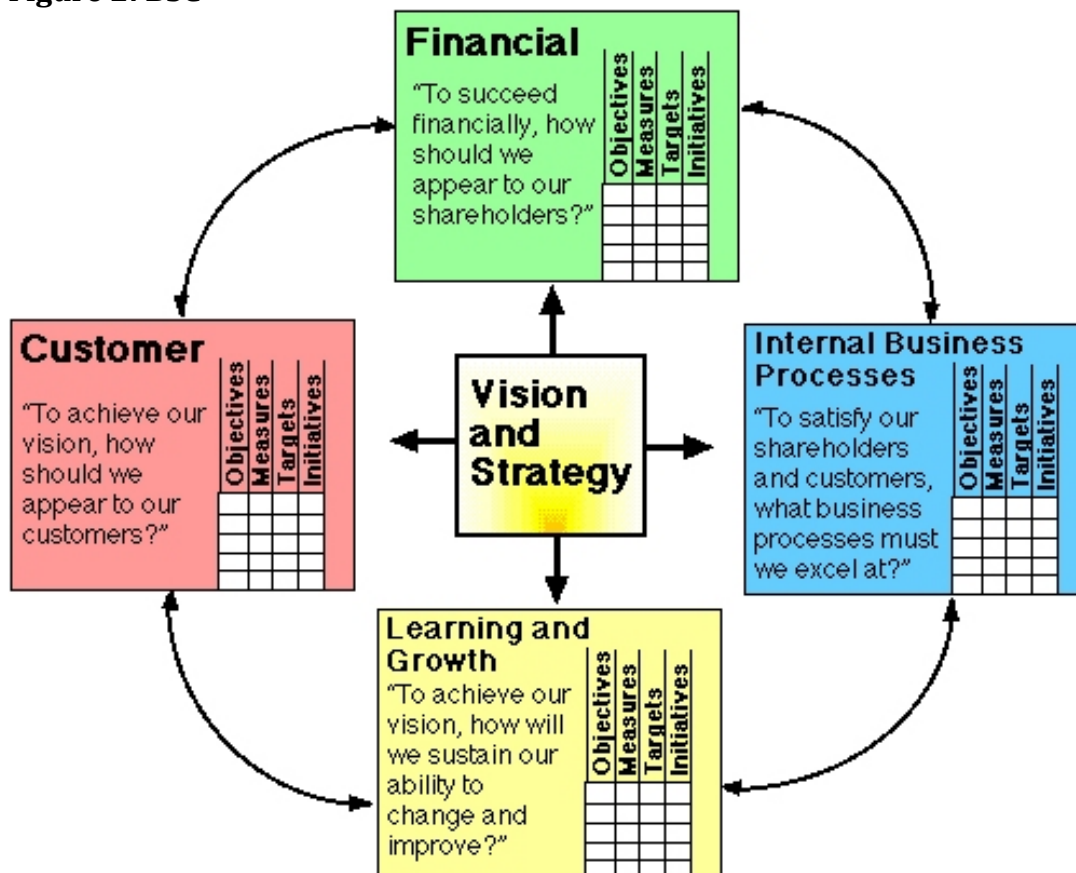


Figure 3: Process Improvement

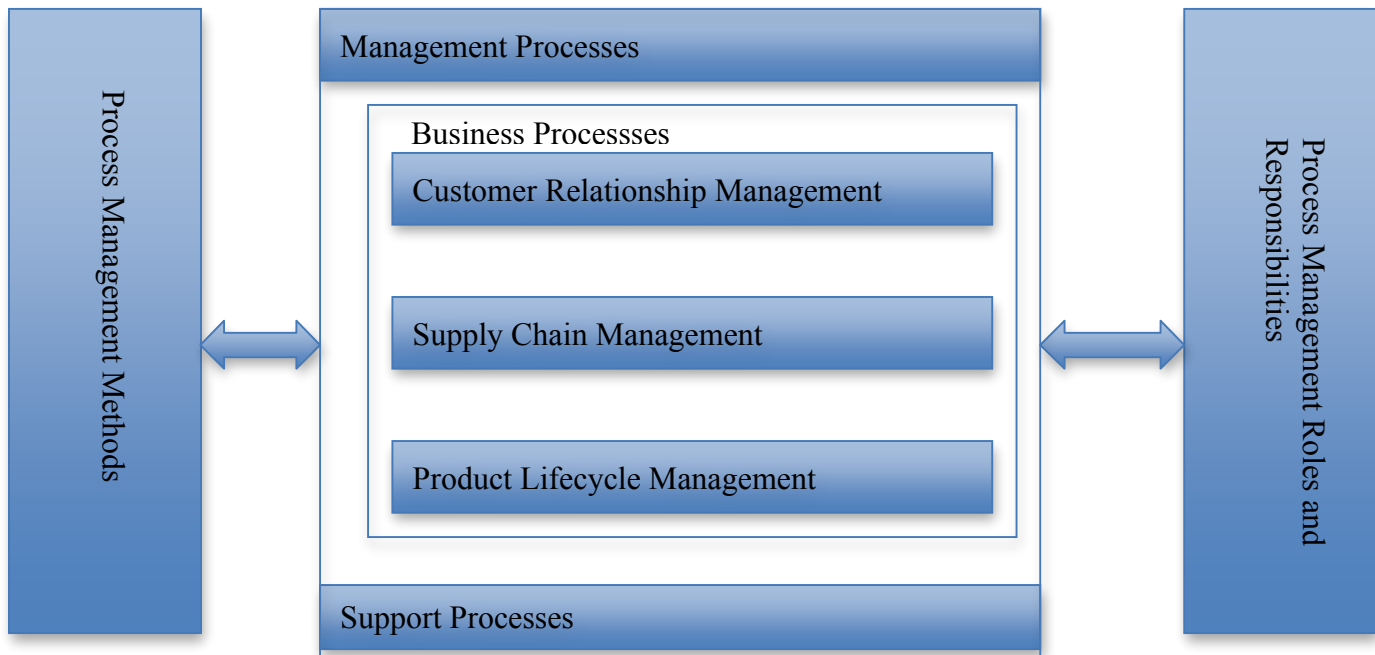


Figure 4: Time: Goals-Measures-Consequences

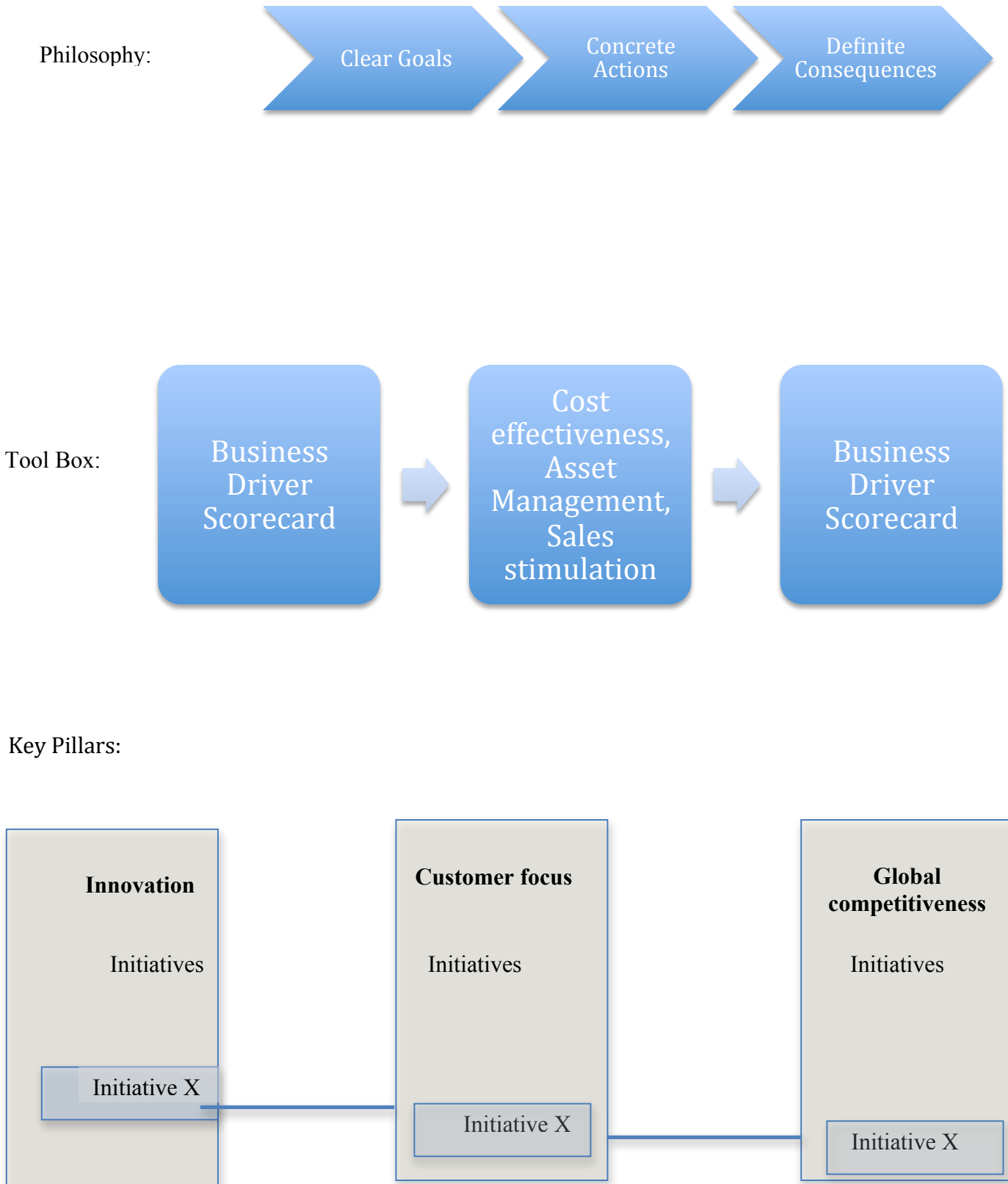


Figure 5

The relationship of the BSC to EFQM in Automata Plant

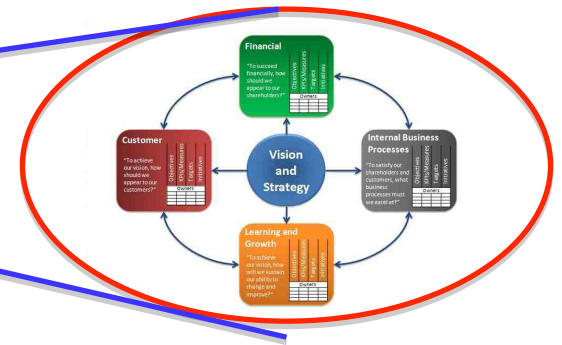
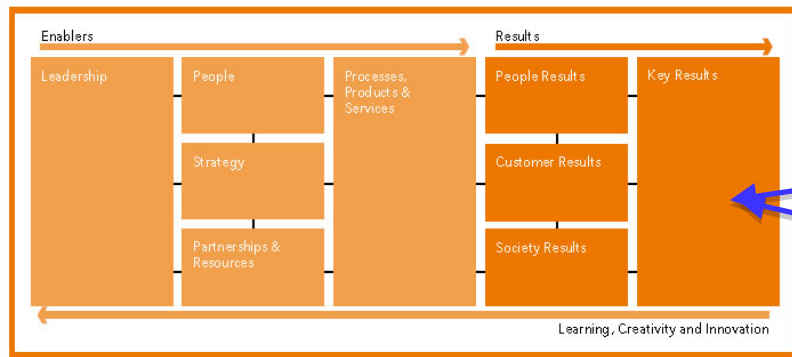


Figure 6

The relationship of the BSC to EFQM in Megacorp

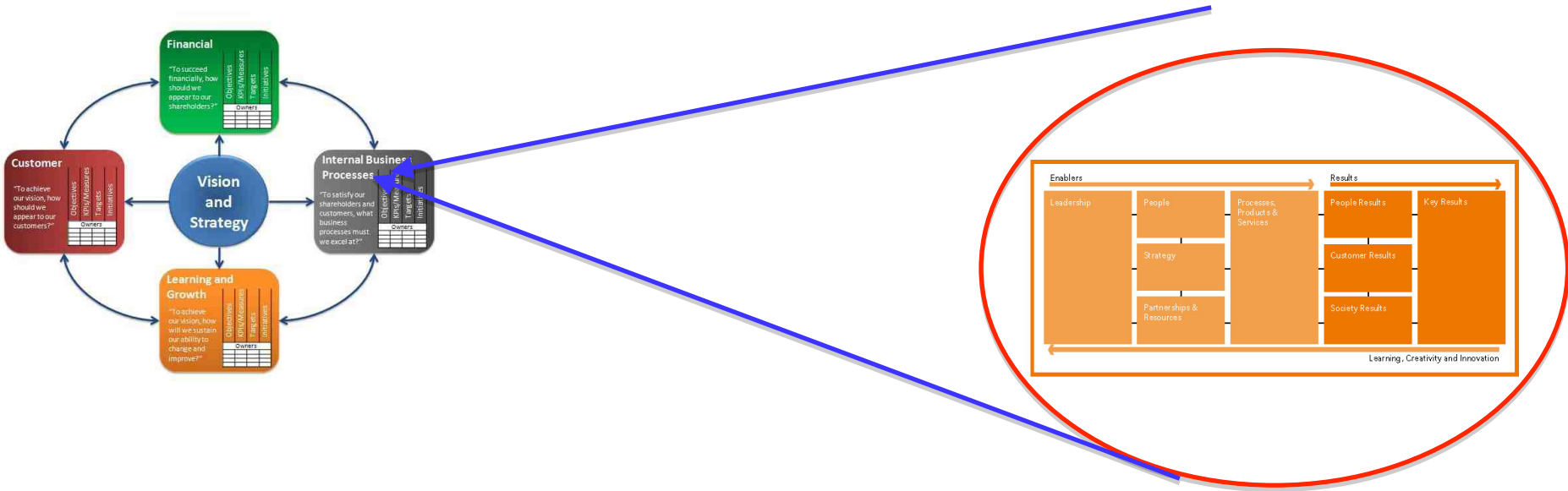


Figure 7

Two Theories, Three Concepts

'Use'?

