



UNIVERSIDADE CATÓLICA PORTUGUESA

The Quality of Management through a Management Control perspective

A survey proposal

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by

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Resumo

Tendo por base a revisão das correntes de literatura cujo foco são, por um lado, as práticas de gestão empresarial e por outro, os sistemas de controlo de gestão, o trabalho tem como objetivo central propor uma ferramenta de análise do estado de desenvolvimento desses mesmo sistemas. O estudo incidiu sobre os diversos modelos teóricos existentes nas correntes literárias investigadas, de forma a criar uma ferramenta congruente.

Na primeira parte do trabalho são estudadas três correntes literárias: a análise de práticas de gestão e comparação entre empresas com base na investigação de Bloom et. al. (2007); os modelos existentes para os sistemas de controlo de gestão; e a importância dos *contemporary performance measurement systems* para as organizações.

Posteriormente, é proposto um novo inquérito organizacional de forma a investigar os mecanismos de controlo de gestão utilizados pela empresa. Esta ferramenta permitirá a comparação entre organizações e poderá também ser utilizada para análise internas das práticas de Gestão, que defendemos serem de controlo de gestão. Por fim, são também sugeridas algumas questões a serem trabalhada num futuro trabalho.

Palavras-chave: Práticas de gestão; Controlo de gestão; Contemporary performance measurement systems

Abstract

Having as an underlying basis the literature review, which emphasizes, on one hand, business management practices, and, on the other, systems of management control, the main goal of this dissertation is to propose an analytical tool of the state of play of the development of these very systems. The study focused on various models identified in the literature reviewed, in order to create a suitable survey tool.

In the first part of this work three different literature trends are identified: the management practices analysis and comparisons between firms, which is mainly based on Bloom et. al.'s (2007) research; the existing frameworks for management control systems analysis, and contemporary performance measurement systems and their importance to the modern organization.

Subsequently, a new organizational double-blind survey tool was created in order to investigate the management controls that are employed by any firm. This tool will allow for comparisons to be made across organizations, as well as internal analysis of management practices, which we argue as management control. Lastly, this work also highlights some issues that could be addressed in future research.

Keywords: Management practices, Management control, Contemporary performance measurement systems

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Introduction

“Management control is a critical function in organizations. Management control failures can lead to large financial losses, reputation damage, and possibly even to organizational failure” (Merchant and Van der Stede, 2007, p. 03). The optimal implementation of management control systems can allow managers to influence employee behaviour in desirable ways that will increase the probability of the organization achieving its objectives (Merchant and Van der Stede, 2007). Thus, it is important to analyse if a firm’s MCS is efficiently implemented and is contributing in a looked-for manner. Various researchers along the last few decades have done this. Whilst some authors just aimed to understand and categorize the process by which managers influence other members of the organization, others have attempted to classify what are good management control systems and how a firm can attempt to implement theirs (Ferreira & Otley, 2009).

The quality of management can influence firm performance, productivity and growth (Bloom and Van Reenen, 2007). The study of management practices has become a recent trend in managerial and economic research, which in turn has led to various studies that attempt to analyse managerial practices and how differences in these will lead to distinctive levels of productivity. The management practices literature reviewed suggests that the tools used are common to those considered by management control systems authors. One clear example is Bloom et al.’s (2007) double blind survey tool approaches various MCS concepts and tools that can allow for the analysis of an organization’s management control.

This research will attempt to adapt Bloom et. al.’s (2007) management practices survey to appropriately measure an organization’s management control systems. This thesis aims to contribute to management control literature, by comparing Bloom et. al.’s (2007) management practices with

management control practices. This comparison allowed for the creation of an adaptation of Bloom et. al.'s (2007) questionnaire that aims being guide for management control systems evaluation.

The paper has the following structure. In the first 3 chapters we review the literature for different research trends. In Chapter 1 we approach the management practice trend, where the main focus is Bloom et. al. (2007) survey tool and related research. The emphasis in this part of the work is on the difference in management quality and firm performance across firms and countries. Chapter 2 is an extensive review on Management Control systems research, where the main author's frameworks are reviewed. In this literature there are various frameworks and this thesis will focus mainly on the works of Anthony (1965), Simons (2000), Malmi & Brown (2008), Ferreira & Otley (2009) and Merchant and Van der Stede (2012). Chapter 3 is an in-depth review of Franco-Santos et. al. (2012) work on Contemporary Performance Measures and their importance to the modern organization, and studies their impact on firm performance. This work suggests the increasing importance of CPM's to firm's and how the tools used have an impact on people's behaviour. Most of these tools are considered a management control, thus it was crucial to study the impact they have on the modern organization.

Chapter 4 and 5 utilize these literature reviews to propose a new concept of double blind survey tool. Chapter 4 makes a broad comparison between MCS literature and Bloom et. al.'s (2007) survey. Chapter 5 concludes this analysis with the presentation of the new survey. Finally, there is a conclusion for the work presented in this thesis.

Chapter 1

Management practices

Business schools and popular discussions of the corporate world tend to identify as crucial the importance of good management in top performing companies (Bloom et al., 2007). One clear problem for research is that measuring management is impossible because it is unclear which management practices are “good” or “bad”, and there is always the possibility that all management practices are contingent on the business situation (Bloom et al., 2012).

However, due to their significance and differences across organizations, research has been carried to measure managerial practices. Measuring management requires codifying the concept of good and bad management into a measure applicable to different firms within the sector (Bloom et al., 2007). Bloom et al. (2007) believe that management practices can be systematically measured, which allows for investigation on their role in explaining differences in performance across firms. Thus, these authors have published some crucial research regarding management practices across firms, countries or even industries in various occasions (2007, 2009, 2011, and 2012).

To measure management practices, the authors created a double-blind survey tool (Bloom et al., 2007). The survey was run on randomly drawn samples of organizations across a range of different industries and countries, and uses open questions to obtain accurate responses regarding the quality of managerial practices inside each firm (Bloom et al., 2007). It is described as double blind as the interviewer is not aware of firm performance beforehand and the subjects are not aware that their answers were being scored.

The authors defined “ “best” management as those that continuously collect and analyse performance information, that set challenging and long-run targets,

and that reward high performers and retrain/fire low performers.”(Bloom et al., 2012: 03).

Thus, the survey was comprised of 18 different dimensions that were scored from 1 to 5 based on the interviewer’s self-assessment of the firm’s practices. These dimensions were categorized into 3 different operation-focused groups:

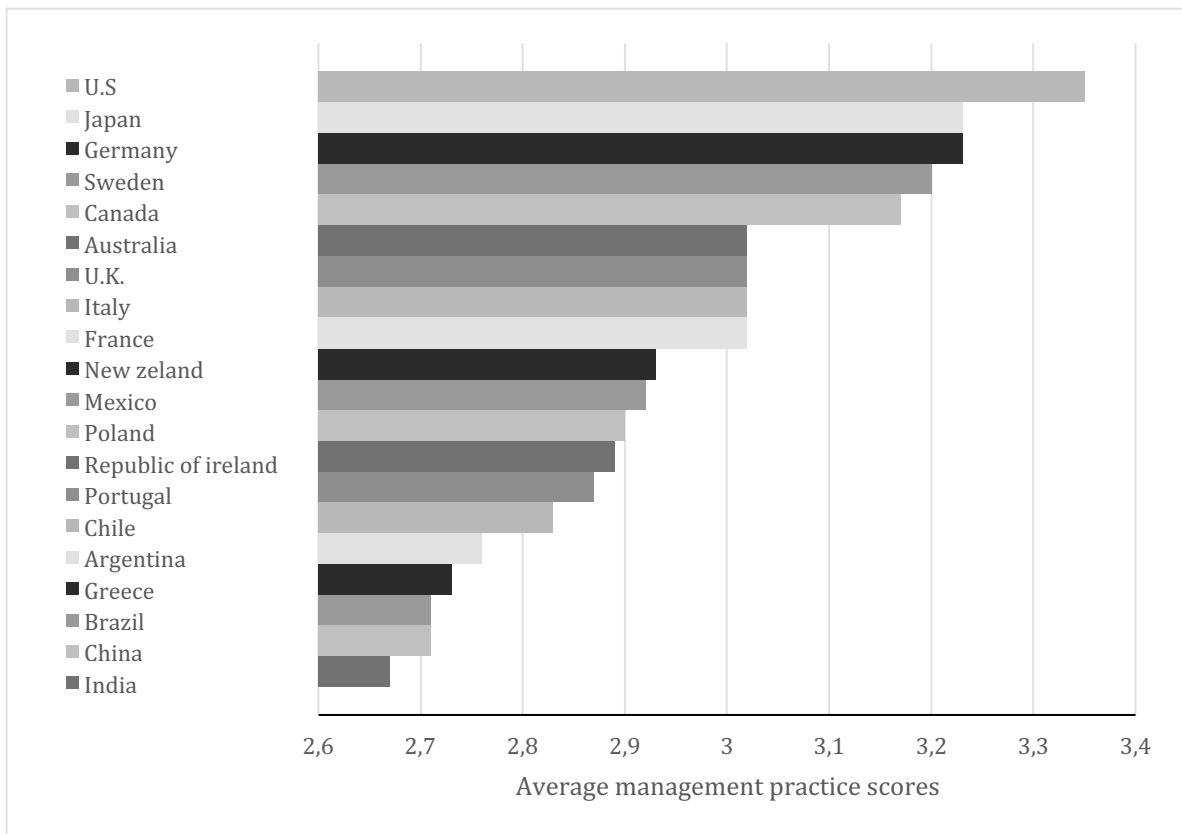
- Performance Monitoring (Dimensions 1-7)
- Target setting (Dimensions 8-12)
- Incentives/People management (Dimensions 13-18)

Bender et al. (2016) claim that while some management practices can directly impact productivity, many others – like monitoring, goal setting, and use of incentives are mediated through employee decision-making and effort. In their work, Bender et al. (2016) conclude that firms with higher management scores have higher average worker skills, they pay higher wages relative to the market as a whole and are able to build a superior stock of employees through selective hiring and attrition. These findings are consistent with recent research which suggests that much of the cross-firm variation in measured productivity is due to differences in the use of advanced management practices.

1.1. Management Practices in Portugal

In Bloom *et al.* (2012), 247 Portuguese firms were interviewed. This resulted in average scores of 2.87 (Overall Management), 3.27 (Monitoring Management), 2.83 (Targets Management) and 2.59 (Incentives Management). In comparison to the data obtained from other countries, Portugal scored in the bottom quarter for manufacturing firms (as seen in Figure 1). The more developed countries scored highest (U.S., Japan and Germany) whereas countries like Greece and Portugal scored in the bottom of the rankings alongside developing countries like China, India or Brazil (Bloom *et al.*, 2012).

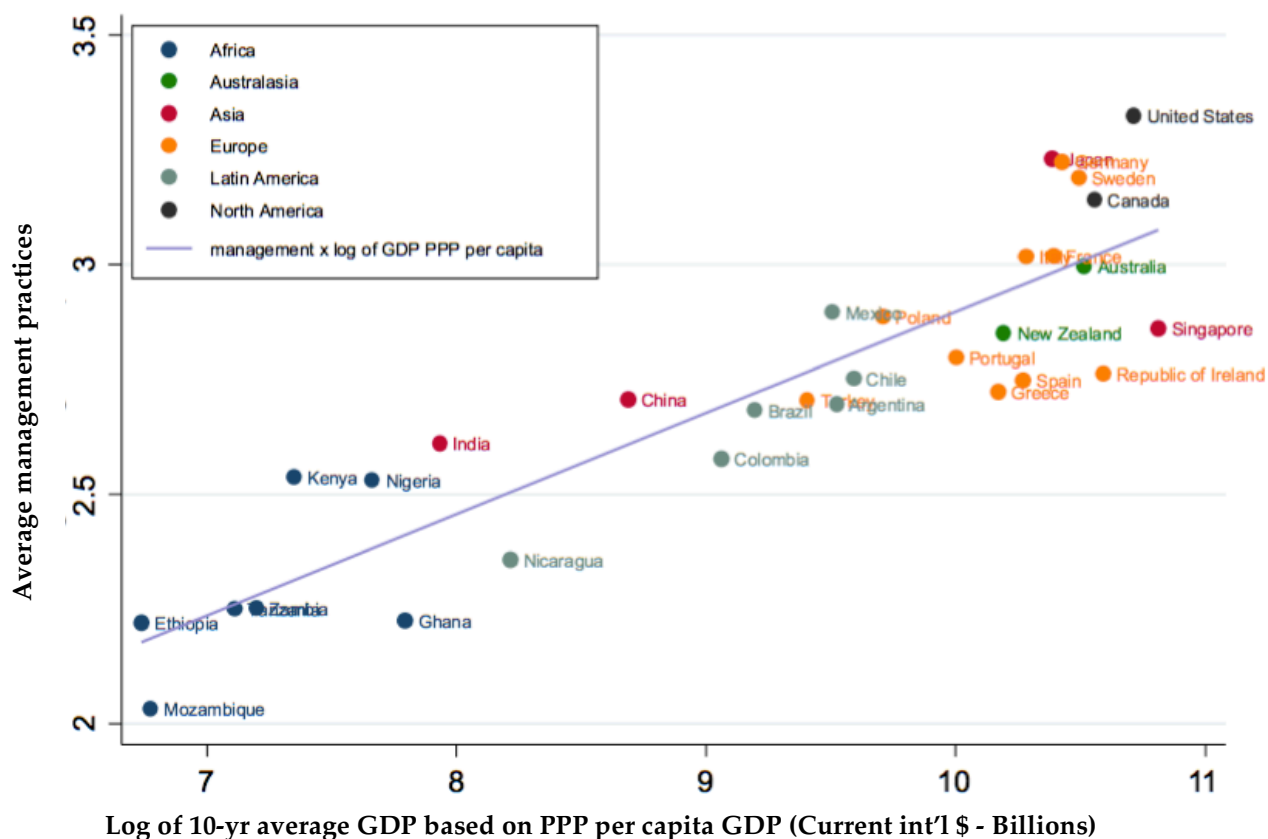
FIGURE 1
Management Practices scores in manufacturing firms by country



Source: Bloom et. al. (2012)

Bloom *et al.*, (2014) also found another correlation between a country’s GDP and its management scores. In this Portugal has also followed the pattern found by the authors with its GDP 10 year average based on PPP per capita is around 10 billion dollars, but having a higher average score (2.87) that Spain, Greece or Republic Ireland, countries that have a higher GDP.

FIGURE 2
Average Management Practices by country and their correlation with GDP



Source: Bloom, Sadun & Van Reenen (2013)

1.2. The “Management Practices” literature trend

The research for management practices has been rising in the last few years, mainly due to Bloom et. al.'s (2007) methodology granting the possibility for researchers to compare their data to a database¹ with over 10,000 firms. The trend has led to an increasing number of studies that measure and compare management practices across countries, and that have been focused mainly in a macroeconomic perspective.

This trend of literature also has primarily attempted to analyse the impacts of “good” and “bad” management practices in firm performance, growth and

¹ Available at www.worldmanagementsurvey.com

productivity. However, various limitations in the creation of the survey tool have emerged. The authors have promptly identified that the classification of managerial practices into “good” and “bad” is questionable, and have often suggested that these might be contingent for every business situation.

Furthermore, the selection of the survey’s questions is based on a practice evaluation tool developed by a leading international management consultancy firm (Bloom and Van Reenen, 2007). It’s an ongoing investigation, and changes are prone to happen. The survey tool has been modified from having practices being grouped in four areas in Bloom and Van Reenen (2007): operations, monitoring, targets and incentives. As previously stated, in Bloom et. al.’s (2012) version of the survey the dimensions are categorized into 3 areas: performance monitoring; Target setting; Incentives and People management. This suggests that the authors are open to modifications in the survey tool as this is not yet a consensual instrument to measure management practices.

This work will try to adapt the survey towards evaluating an organizations’ management control practices. Management control systems will be defined in the next chapter, as they will prove to be an integral part of Bloom *et al.* (2007) double-blind survey tool.

Chapter 2

Management Control Systems

A number of definitions and descriptions of management control systems exist; some of which contain overlaps, while others are quite different from each other. (Malmi and Brown, 2008). Anthony (1965) defined management control as the process by which managers ensure that resources are obtained and used effectively and efficiently in order to accomplish the organization's objectives. Merchant and Van der Stede (2007) define management control systems broadly to include everything managers do to help ensure their organization's strategies and plans are carried out or, if conditions warrant, that they are modified. Simons (1995) outlines management control systems as the formal, information-based routines and procedures managers use to maintain or alter patterns in organizational activities.

2.1. Management planning and control systems

The traditional framework for considering these issues was developed by Anthony (1965) at the Harvard Business School under the title "management planning and control systems", which distinguished "management control" from "strategic planning" and "operational control" (Otley, 1999).

This traditional framework by Anthony (1965, 2000) defines management control as the process by which managers influence other members of the organization to implement the organization's strategies. This process contains activities that include²:

² Adapted from Anthony & Govindarajan, 2000

- *Planning*: what will the organization do?
- *Coordinating*: The coordination of activities of the several parts of the organization
- *Communicating*: How is information transferred?
- *Evaluating*: How is information evaluated?
- *Deciding*: Are there any actions to be taken?
- *Influencing*: Attempt to change people's behaviour.

2.2. Control systems as a package

In their work, Malmi and Brown (2008) analyse the definitions already existent, and define management controls as all devices and systems managers use to ensure that the behaviours and decisions of their employees are consistent with the organization's objectives and strategies, but exclude pure decision-support systems. Consequently, they conceptualise management control systems as a package. This package includes different typologies of controls: cultural controls; Planning; Cybernetic controls; Administrative controls; Reward and Compensation.

- **Cultural controls** are defined as the values; beliefs and social norms established that influenced employee's behaviour (Malmi and Brown, 2008). It includes symbols, clans or values established or created by the organization.
- **Planning** includes both the long range planning and action planning. It utilizes three main functions: it establishes goals for the functional area of the organization; it enables congruence by aligning goals across the organization; it can provide standards to be achieved in relation to the goal.
- **Cybernetic controls** are identified by five different characteristics: measures that allow for quantification of phenomenon, activity or

system; standards of performance; feedback process comparing results with the standards; variance analysis that arises from feedback; the ability to modify the system's behaviour. The authors identify budgets, financial and non-financial measurement systems and hybrid measurements as the main types of cybernetic control.

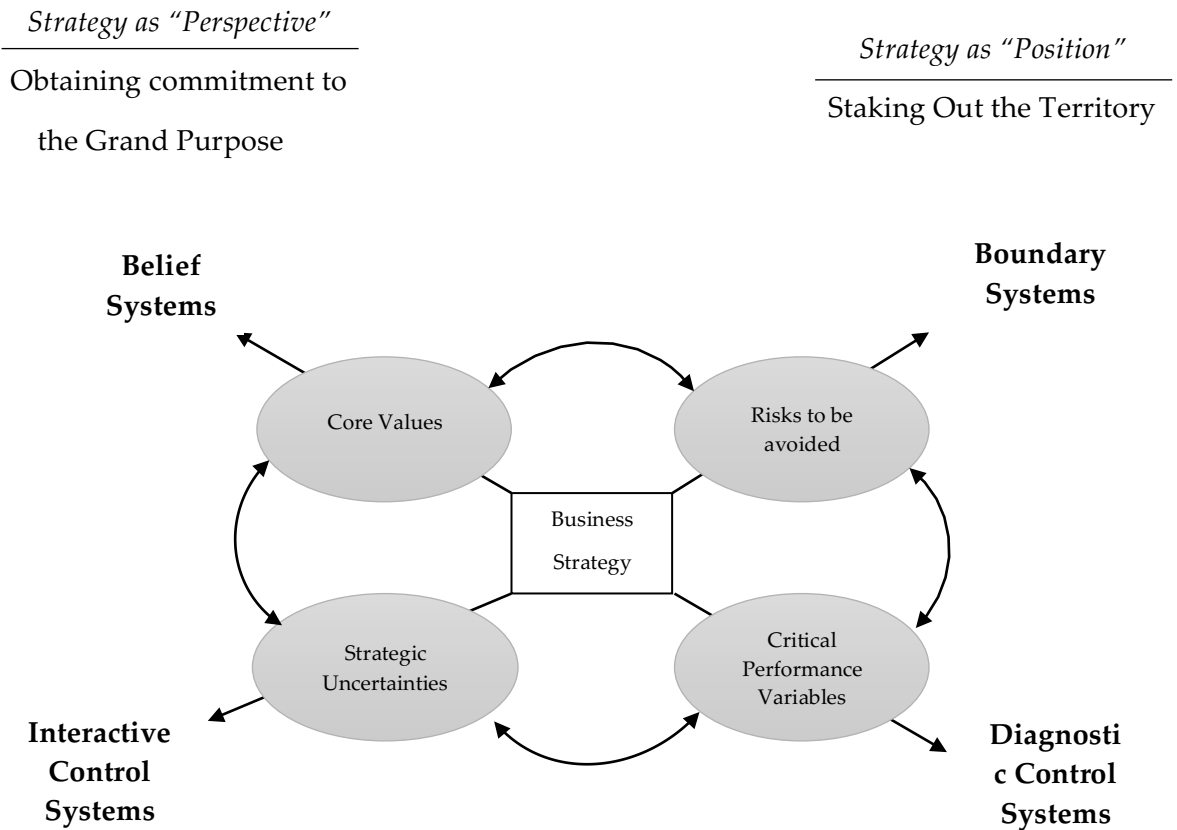
- **Reward and compensation** allows for motivation and increasing the performance of individuals and groups through attaching rewards to control effort direction, effort duration and effort intensity.
- **Administrative controls** include the control system that directs employee behaviour through the organisation of individuals, the monitoring of behaviour, the accountability of employee behaviour. It can also include the process of specifying how tasks or behaviours are to be performed or not.

The concept of management control systems as a package aims to stimulate and facilitate discussion and research in this area, rather than suggesting a final solution to all related conceptual problems (Malmi and Brown, 2008).

2.3. Simons' "Levers of Control" concept

Simons (1995) created the concept of "Levers of control" that state that control of business strategy is achieved by integrating the four levers of beliefs systems, boundary systems, diagnostic control systems, and interactive control systems (Simons, 2000). The strength of these levers in implementing strategy does not lie in how each is used alone, but rather in how they complement each other when used together, thus the interplay of positive and negative forces creates a tension between opportunistic innovation and predictable goal achievement that allows stimulation and profit growth control (Simons, 2000).

Figure 3
Levers of Control



Source: Simons

(2000)



Diagnostic control systems: The essential management tools for transforming intended strategies into realized strategies: they focus attention on goal achievement for the business and for each individual within the business (Simons, 2000). "Diagnostic control systems relate to strategy as a plan." (Simons, 2000: 303).

Interactive control systems: The tools that allow managers to influence the experimentation and opportunity seeking that may result in emergent strategies. (Simons, 2000). "These systems relate to strategy as *patterns of action*." (Simons, 2000: 303)

Beliefs systems: These can inspire both the intended and emergent strategies, and can include management's vision, which motivates organizational participants to search for and create opportunities to accomplish the overall mission of the firm. (Simons, 2000). "These systems relate to strategy as perspective." (Simons, 2000: 303)

Boundary systems: These ensure that realized strategies are within the acceptable domain of activity, and control strategy as a position (Simons, 2000).

The strategic control achieved by a firm is made possible by these four systems working together to control the implementation of intended strategies and the formation of emergent strategies (Simons, 2000). This control is achieved when the tension of creative innovation and predictable goal achievement is transformed into profitable growth (Simons, 2000).

2.4. Performance measurement, Evaluation and Incentives

Merchant and Van der Stede (2007,2012) aimed to understand "What is it about the employees on whom the organization must rely that creates the need to implement MCSs?" (Merchant & Van der Stede, 2007), and defined the causes of the needs for controls into three main categories: lack of direction, motivational problems and personal limitations. The authors developed their framework by classifying the MCS into four different mechanisms of control: Results; Action; Personnel and Cultural controls.

Results controls are usually used for controlling the behaviours of employees at many organizational levels, and are more commonly used when controlling the behaviours of professional employees (those who have professional employees). Well-defined results clearly inform employees what is expected of them and encourages them to do what they can to produce the desire results

(Merchant & Van der Stede, (2007)). The elements of these types of controls include defining performance dimensions, measuring performance, setting performance targets and providing rewards.

Action controls are the most direct form of management control as they involve taking steps to guarantee that employees act in the organization's best interest by making their actions themselves the focus of control (Merchant & Van der Stede, (2007)). These types of controls have four basic forms: Behavioural constraints; Pre-action reviews; Action accountability and Redundancy. Behavioural constraints are a negative form of action control, as they make it harder, or even impossible for employees to do things that should not be done in order to take in consideration the organization's best interest. Pre-action reviews are the analysis of the action plans elaborated for employees being controlled. Action accountability is simply holding the employees accountable for their actions, and has to be done through four steps: defining what actions are acceptable or unacceptable; communications these definitions to employees; observing or tracking what happens; and rewarding good actions or punishing actions that deviate from what is defined as acceptable.

Personnel controls are based on the employees' natural tendencies to control and motivate themselves. These types of controls are based on three basic purposes: clarify expectation; ensuring that every employee has the opportunity to do a good job; and the engagement of self-monitoring. To serve these purposes personnel controls have to be implemented through selection and placement; training and job design and provision of necessary resources (Merchant & Van der Stede , 2012).

Finally, *cultural controls* are designed to encourage mutual monitoring, which is defined as a powerful form of group pressure on individuals who deviate from group norms and values. These types of controls are, in fact, more efficient when the employees have greater emotional ties to one another. Organizations attempt to create and shape organizational culture in various ways, both by words and setting examples. Codes of conduct and group rewards are the most

common controls utilized to shape and achieve the desired organizational culture. The attempt to shape culture through codes of conduct includes various different types of formal, written documents. Codes of conduct, codes of ethics, organizational credos, statements of vision, mission or management philosophy are all formal ways to influence the culture of the organization. Group rewards prove to be effective when providing incentives based on collective achievements. The most common types of examples are bonus, profit sharing, or gain-sharing plans that provide compensation based on corporate or entity performance (Merchant & Van der Stede, 2007).

2.5. The design and use of management control systems: An extended framework for analysis

Ferreira & Otley (2009) created an extended framework for management control systems. For this they utilized both Otley's (1999) original work and Simons (1995) levers of control. Their extended framework aims to provide a broad view of the key aspects of Performance management systems and to form the basis upon which further investigations can be developed (Ferreira and Otley, 2009). The authors describe their framework as a progression from Otley's 5 "what" questions towards 10 "what" and 2 "how" questions. They named it as performance management systems and is composed of the following *12 questions*:

1. What is the vision and mission of the organization and how is this brought to the attention of managers and employees? What mechanisms, processes, and networks are used to convey the organization's overarching purposes and objectives to its members?
2. What are the key factors that are believed to be central to the organization's overall future success and how are they brought to the

- attention of managers and employees?
3. What is the organization structure and what impact does it have on the design and use of performance management systems (PMSs)? How does it influence and how is it influenced by the strategic management process?
 4. What strategies and plans has the organization adopted and what are the processes and activities that it has decided will be required for it to ensure its success? How are strategies and plans adapted, generated and communicated to managers and employees?
 5. What are the organization's key performances measures deriving from its objectives, key success factors, and strategies and plans? How are these specified and communicated and what role do they play in performance evaluation? Are there significant omissions?
 6. What level of performance does the organization need to achieve for each of its key performance measures (identified in the above question), how does it go about setting appropriate performance targets for them, and how challenging are those performance targets?
 7. What processes, if any, does the organization follow for evaluating individual, group, and organizational performance? Are performance evaluations primarily objective, subjective or mixed and how important are formal and informal information and controls in these processes?
 8. What rewards — financial and/or non-financial — will managers and other employees gain by achieving performance targets or other assessed aspects of performance (or, conversely, what penalties will they suffer by failing to achieve them)?
 9. What specific information flows — feedback and feed forward —, systems and networks has the organization in place to support the operation of its PMSs?
 10. What type of use is made of information and of the various control mechanisms in place? Can these uses be characterized in terms of

various typologies in the literature? How do controls and their uses differ at different hierarchical levels?

11. How have the PMSs altered in the light of the change dynamics of the organization and its environment? Have the changes in PMSs design or use been made in a proactive or reactive manner?
12. How strong and coherent are the links between the components of PMSs and the ways in which they are used (as denoted by the above 11 questions)?

Management control systems have been a trending topic in research literature. Since Anthony's (1965) original framework, considerable further research has been made in this area that originated the various frameworks previously described. The overlapping of definitions occurs when mentioning organizational objectives, and the increasing importance of these systems in the modern firm has prompted research that tries to identify what actions; resources; activities; etc. are used and classified as MCS's. These increasing needs are what motivated this work and the creation of a new double-blind tool to identify MCS and their components.

All the frameworks reviewed in this chapter have outstanding importance in the MCS literature. Many concepts utilized by these authors are mentioned, in some way, in Bloom et. al.'s (2007) questionnaire. Various tools that make up the management control systems are also known as contemporary performance measurement systems. CPM's are explained in the next chapter of this work, in order to understand their role on organizations.

Chapter 3

The impact of performance measurement systems

This chapter reviews contemporary performance measurement mainly focusing on Franco-Santos et. al.'s, (2012) work. This aims to provide insight on the importance of CPM and their impact on firms and organizations.

“Contemporary performance measurement (CPM) comprises the use of financial as well as non-financial performance measures linked to the organization’s business strategy. “(Franco-Santos et. al., 2012) Franco-Santos, Lucianetti and Bourne published their research with two main purposes: to integrate their knowledge on the consequences of CPM systems with existing literature and to explain the different mechanisms by which CPM is presumed to affect people’s behaviour, organizational capabilities and performance. In their work, they state that a CPM system exists if financial and non-financial performance measures are used to operationalize strategic objectives. Furthermore, in accordance to their scoping study the authors came up with four types of CPM system³:

- **CPM A:** Performance measurement systems that include financial as well as non-financial performance measures implicitly or explicitly linked to strategy and that are used to inform managerial decision-making to evaluate organizational performance.

- **CPM B:** Performance measurement systems that include financial as well as non-financial performance measures linked to strategy, showing explicit cause-and-effect relationships among the measures and that are used to inform managerial decision-making and to evaluate organizational performance

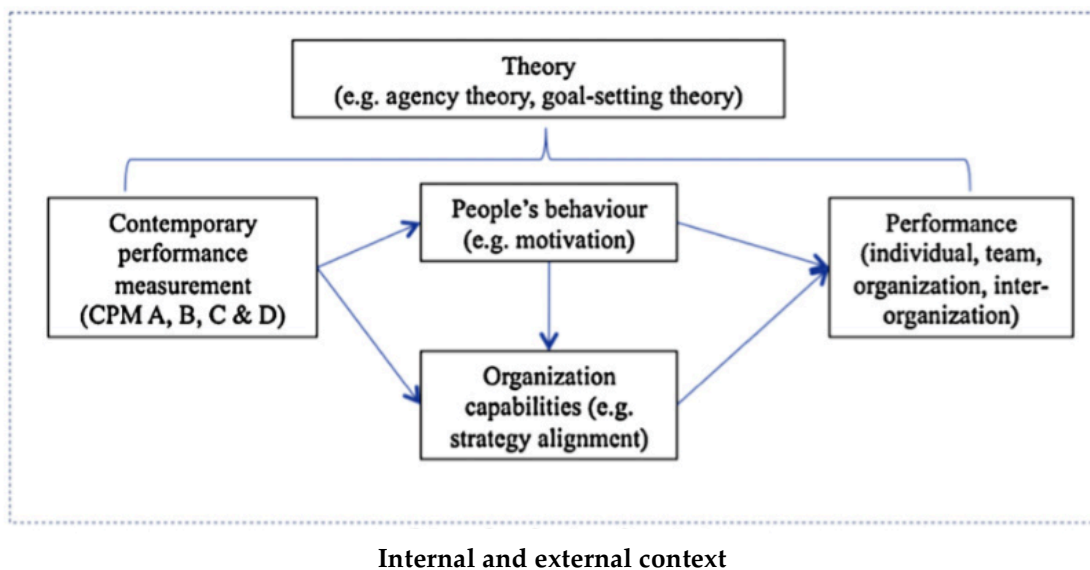
³ Adapted from “Contemporary Performance measurement systems: A review of their consequences and a framework for research”

- **CPM C:** Performance measurement systems that use financial and non-financial performance measures explicitly or implicitly linked to strategy and are used to inform decision-making and evaluate organizational and managerial performance (with no links to monetary rewards).

- **CPM D:** Performance measurement systems that utilize financial and non-financial measures explicitly or implicitly linked to strategy and are used to inform decision-making, evaluate organizational and managerial performance and influence monetary rewards.

Upon classifying CPM into 4 types, Franco-Santos et al. (2012) reviewed 76 empirical papers in order to create their own conceptual framework (Figure 1) on how CPM systems impact people’s behaviour, organizational capabilities and performance.

Figure 4
Four types of Contemporary performance measurements



Source: Franco-Santos et. al. (2012)

As shown in Figure 4, the authors link the four types of contemporary performance measurements directly to people’s behaviour and organization capabilities. This impact is, in fact, what will result in differences in

performance (either individual, team, organization or even inter-organizational.)

By referring to their scope study, Franco-Santos et al. (2012) analysed the impact of different types of CPM's on people's behaviour. The consequences that were studied on people's behaviour were categorized into different groups: Strategic focus; Cooperation, coordination and participation; Motivation; Citizenship behaviours; Role understanding; Decision making, learning, and self-monitoring; Leadership and culture; Satisfaction; Perceptions of subjectivity, justice and trust; Judgement biases; Conflict and tensions.

The consequences of CPM systems on organizational capabilities were also approached in their work. The impact was also categorized into different groups: Strategy processes: alignment, development, implementation and review; Communication; Strategic capabilities; Management Practices; Corporate control.

Finally, the impact of CPM systems on performance that were analysed were grouped as follows: Organizational and business unit performance; Perceived performance (based on responses from research participants); Team performance; Managerial performance; Inter-firm performance.

After analysing the impact of CPM systems, Franco-Santos et al. (2012) conclude that these significantly affect people's behaviour, organizational capabilities and performance. This translates into these systems playing a crucial role in strategy, communication and management processes, which provide the organization with capabilities to excel.

The authors state that CPM systems "facilitate the development, implementation, and review of business strategies by focusing people's decisions and actions on strategic goals and by encouraging a continuous dialogue about strategic endeavours. " They also affect the communication process by providing the relevant information to influence how people think, act and interact. Nevertheless, CPM systems can also impact the way

organizational leaders behave which will influence organizational routines and practices. This will result on consequential impacts on performance.

Further evidence that CPM systems create value can be gathered from De Geuser (2009). In his research he attempted to evaluate the value created by the balanced scorecard, as an effective tool to improve organisational performance. De Geuser et al. (2009) stated that the BSC provides relevant, balanced, and concise information to managers and thus reduces time for processing information and increases time for decision making. It also facilitates the overall management of the value chain of an organisation. Furthermore, it allows for the delegation of authority and creates an environment that is conducive to learning.

In management control strategy research the implications of MC practices are usually accessed through some measure of firm performance such as profit, return on investment or simply financial returns (Bedford et al. (2016), Otley (2016)). However, these criteria are not always the most suitable to determine contingency fit for MCS as these are affected by a wider range of factors than just MCS design or use (Otley, 2016). Bedford et al. (2016) argue that MCS deal with three main problems: goal alignment, adaptability and integration. Thus to measure the effectiveness of MCS in resolving these systems, the authors asked their respondents to indicate the importance of each MC function as well as how effective their MC package is in relation to achieving each function.

The research done in these areas has proven that there are various impacts from management control systems on the organization they are used in. Franco-Santos et al., 2012) prove that CPM tools have an impact on people's behaviour; organizational capability and performance. This has been proven by the extended literature on positive impacts from tools like the BSC (Kaplan & Norton, 1992, 1996, 2001, 2008; De Geuser et al. (2009). This literature suggests that organizations should implement CPM's to achieve a change on people's behaviour. Therefore, besides some tools being common to both CPM and MCS, there is a direct correlation on their impact to the organization.

Chapter 4

Management Practices Survey & MCS literature

As previously stated, a correlation between Bloom et. al.'s (2012) survey structure and contents and MCS concepts has been identified. This is easily explained by simply looking at the 3 different groups of practices that are identified by the authors in their survey.

1. Performance Monitoring (Dimensions 1-7)
2. Target setting (Dimensions 8-12)
3. Incentives/People management (Dimensions 13-18)

1. Performance Monitoring (Dimensions 1-7)

Performance monitoring is considered important by most MCS authors in their work, but Malmi & Brown (2008), Merchant and Van der Stede (2012) and Simons (2000) have included them in their frameworks. These types of controls focus on the accomplishment of organizational objectives.

2. Target setting (Dimensions 8-12)

Management control systems are consistently implemented with an objective in mind and thus targets are also identified as important by the MCS literature. Malmi & Brown (2008), Merchant and Van der Stede (2012) and Ferreira & Otley (2009) have all addressed targets in the conceptualization of their framework.

3. Incentives/People management (Dimensions 13-18)

The last dimensions of the survey aim to address incentives and people management by the firm. Incentives are obviously an essential component of management control systems and MCS authors encourage their implementation for the achievement of organizational objectives. Merchant and Van der Stede (2012) and Ferreira & Otley (2009) especially incorporate incentives within their framework.

To further establish the connection between Bloom et al. (2007) methodology survey and the management control systems literature, a comparison between all the 18 questions that compile the survey against the frameworks established by the main MCS authors has been made. Even though the majority of the dimensions have clear correlation with MCS, not all of them are considered types of controls. Table 1 shows Bloom et al.'s (2007) 18 questions with the management control systems frameworks where they can be found.

Categories	Score from 1 to 5 based on:	Management Control Systems Literature
(1) Introduction of modern manufacturing techniques	What aspects of manufacturing have been formally introduced, including just-in-time delivery from suppliers, automation, flexible manpower, support systems, attitudes, and behavior?	
(2) Rationale for introduction of modern manufacturing techniques	Were modern manufacturing techniques adopted just because others were using them, or are they linked to meeting business objectives like reducing costs and improving quality?	
(3) Process problem documentation	Are process improvements made only when problems arise, or are they actively sought out for continuous improvement as part of normal business processes?	
(4) Performance tracking	Is tracking ad hoc and incomplete, or is performance continually tracked and communicated to all staff?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Cybernetic Control • Merchant and Van der Stede (2012) - Results Control • Simons (2000) – Diagnostic Control System
(5) Performance review	Is performance reviewed infrequently and only on a success/failure scale, or is performance reviewed continually with an expectation of continuous improvement?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Cybernetic Control • Merchant and Van der Stede (2012) - Results Control • Simons (2000) – Diagnostic Control System
(6) Performance dialogue	In review/performance conversations, to what extent are the purpose, data, agenda, and follow-up steps (like coaching) clear to all parties?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Cybernetic Control • Merchant and Van der Stede (2012) - Results Control • Anthony (1965) - Evaluating • Simons (2000) – Diagnostic Control System
(7) Consequence management	To what extent does failure to achieve agreed objectives carry consequences, which can include retraining or reassignment to other jobs?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Administrative Control • Merchant and Van der Stede (2012) - Action Control
(8) Target balance	Are the goals exclusively financial, or is there a balance of financial and nonfinancial targets?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Planning Control • Merchant and Van der Stede (2012) - Results Control • Ferreira & Otley (2009)
(9) Target interconnection	Are goals based on accounting value, or are they based on shareholder value in a way that works through business units and ultimately is connected to individual performance expectations?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Planning Control • Merchant and Van der Stede (2012) - Results Control • Ferreira & Otley (2009)
(10) Target time horizon	Does top management focus mainly on the short term, or does it visualize short-term targets as a “staircase” toward the main focus on long-term goals?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Planning Control • Merchant and Van der Stede (2012) - Results Control • Ferreira & Otley (2009)
(11) Target stretching	Are goals too easy to achieve, especially for some “sacred cow” areas of the firm, or are goals demanding but attainable for all parts of the firm?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Planning Control • Merchant and Van der Stede (2012) - Results Control • Ferreira & Otley (2009)
(12) Performance clarity	Are performance measures ill-defined, poorly understood, and private, or are they well-defined, clearly communicated, and made public?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Cybernetic control • Merchant and Van der Stede (2012) - Results Control • Anthony (1965) - Communicating • Ferreira & Otley (2009)
(13) Managing human capital	To what extent are senior managers evaluated and held accountable for attracting, retaining, and developing talent throughout the organization?	<ul style="list-style-type: none"> • Merchant and Van der Stede (2012) - Personnel Controls
(14) Rewarding high performance	To what extent are people in the firm rewarded equally irrespective of performance level, or is performance clearly related to accountability and rewards?	<ul style="list-style-type: none"> • Malmi & Brown (2008) - Reward and compensation • Merchant and Van der Stede (2012) - Results Control • Ferreira & Otley (2009)
(15) Removing poor performers	Are poor performers rarely removed, or are they retrained and/or moved into different roles or out of the company as soon as the weakness is identified?	<ul style="list-style-type: none"> • Merchant and Van der Stede (2012) - Action Control • Ferreira & Otley (2009)
(16) Promoting high performers	Are people promoted mainly on the basis of tenure, or does the firm actively identify, develop, and promote its top performers?	<ul style="list-style-type: none"> • Merchant and Van der Stede (2012) - Results Control • Ferreira & Otley (2009)
(17) Attracting human capital	Do competitors offer stronger reasons for talented people to join their companies, or does a firm provide a wide range of reasons to encourage talented people to join?	
(18) Retaining human capital	Does the firm do relatively little to retain top talent, or does it do whatever it takes to retain top talent when they look likely to leave?	

Table 1
Survey questions and their reference in management control systems literature

(1) Introduction of modern manufacturing techniques; (2) Rationale for introduction of modern manufacturing techniques; (3) Process problem documentation

The first three questions of Bloom et al. (2007) are not directly linked to management control systems literature. The frameworks that were described in the MCS's chapter do not contain types of controls that aim to introduce modern manufacturing techniques. Continuous improvement is also not a direct concern when implementing control systems. Even though most managers would agree that continuous improvement process are crucial for the long-term objectives of the organizations, it is not usually carried out by the implementation of a control.

(4) Performance tracking; (5) Performance review; (6) Performance dialogue

Nevertheless, various MCS authors include in their frameworks a type of control that is associated to all performance tracking, review and dialogue. All three are incorporated in Malmi & Brown's (2008) framework of MCS being categorized as a package, as performance is part of the cybernetics type of controls. Merchant and Van der Stede (2012) incorporate performance under their results controls, as they argue that it encourages employees to produce desired results. Simons (2000) in concept of levers control integrates critical performance variables into the diagnostic control systems, which results in strategy being elaborated as a "plan" in order to achieve the organizational performance goals. In Anthony's (1965) original framework evaluating performance was already a concern, as he considered crucial making information clear to all parties.

(7) Consequence Management

As the type of control that holds the accountability of employer behaviour, administrative controls are used, according to Malmi & Brown (2008), to direct behaviour. Merchant and Van der Stede (2012) include in their type of actions

control the steps to guarantee that employees only act in the organization's best interest, which includes consequence management.

(8) Target Balance; (9) Target Interconnection; (10) Target time horizon; (11) Target stretching

The target questions of the double-blind survey tool are also incorporated in various authors' frameworks when analysing MCS's. Target balance, interconnection, time horizon and stretching are all mentioned by Malmi & Brown (2008), Merchant and Van der Stede (2012) and Ferreira & Otley (2009). Malmi & Brown (2008) categorize targets in planning controls as they establish the long range and action planning for both short and long term strategies. Merchant and Van der Stede (2012) have also related results with targeting and thus goal setting is also categorized into results control. Ferreira & Otley (2009) have various questions that aim to understand the organizations targets and goals, both their typology and time horizon.

(12) Performance Clarity

The clarity of information is included by various authors in their work, and not only in the performance demonstrations, but any type of information. Malmi & Brown (2008) include performance setting standard under cybernetics control and thus the well definition of these standards has to be done to achieve performance clarity. Merchant and Van der Stede (2012) categorize performance under results thus it is only clear that the clarity of goal setting for the performance is part of these types of controls. Anthony (1965) included communicating as a crucial type of control, and thus clarity is an important characteristic when informing employee of performance standards. Ferreira & Otley (2009) have direct questions to measure information clarity: "5. What are the organization's key performances measures deriving from its objectives, key success factors, and strategies and plans? How are these specified and communicated and what role do they play in performance evaluation? (...)".

(13) Managing human capital

Managing human capital, namely attracting, retaining and developing talent is mentioned by Merchant and Van der Stede (2012) in their Personnel Controls. To serve their purpose of clarifying expectations, ensuring that employee has what is necessary to do a good job and the engagement of self-monitoring, the authors argue that an organization has to aim at a high standard of selection and placement and training.

(14) Rewarding high performance; (15) Removing poor performers; (16) Promoting high performers

Employee performance is a crucial part of MCS's. To improve employee performance bonus and rewards are established. These types of controls are included in Malmi & Browns (2008) rewards and compensations, which are types of controls simply established to reward high performance. Merchant and Van der Stede (2012) promote and reward high performers with controls that they categorize also as result controls (encourages employees to achieve the desired results). Poor performers, however, are held accountable in accordance to action controls that establish the line of action that employees are supposed to follow and held the accountable if they are not fulfilling what is expected of them by the organization. Ferreira & Otley (2009) also include on their framework questions aim to understand performance rewards and bonuses put in place by the organization in order to promote good performance and consequently rewarding it. Furthermore, they also aim to understand what penalties are set for if there are failures to achieve desired targets of performance.

(17) Attracting Human capital; (18) Retaining Human capital

While some high-performing firms may attract human capital, there are no controls put in place that the MCSs literature authors consider in their frameworks. It is more often considered a task of the HR department of the

organization. Furthermore, retaining human capital is also not a primary goal for the types of control that are most common. Although you can argue that some types of cultural controls (Merchant and Van der Stede, 2012) can achieve the desire from the employees to remain at an organization, it is not necessarily the primary objective as described by these authors.

After analysing if the main authors of the management control systems' literature mention each of the 18 questions, the next part of this chapter will approach each of the questions that were designated to remain for the new version of the survey. After linking them to researchers and their concepts, now there is a need to understand if they fully address every point that authors mention in their frameworks. For instance, for results controls (Merchant and Van der Stede, 2012) there is a need to know if the targets established are long-term or short-term which should then influence the rest of the MCS's implemented by the firm, thus including it would make sense to adapt the question to gather the optimal efficient.

4) Performance Tracking - Is tracking ad hoc and incomplete, or is performance continually tracked and communicated to all staff?

- **Malmi & Brown, 2008 (Cybernetic Control)** – In cybernetic controls, Malmi & Brown (2008) include the process of feeding back information about unwanted variances in the system. However they do not specify how and when this feedback should be done, therefore this question is adequate to their framework.
- **Merchant and Van Der Stede, 2012 (Results Controls)** - For Merchant and Van der Stede (2012), "(...) organizations must know what results are desired in the areas they wish to control, and they must communicate those desires effectively to the employees working in those areas." As they do not specify further on the tracking of performance, this question would effectively fit our purpose.

- **Simons, 2000 (Diagnostic Control System)** – Simons (2000) suggests that these types of controls can be specific to each individual, however for this survey's purpose this would not be necessary. It would be too specific and it wouldn't allow for cross-organizational comparisons.

5) *Performance review – Is performance reviewed infrequently and only on a success/failure scale, or is performance reviewed continually with an expectation of continuous improvement?*

- **Malmi & Brown, 2008 (Cybernetic Control)** – Malmi & Brown (2008) include in their cybernetic controls various tools that measure and aim for continuous improvement. However, they do not require more detailed information than the one that will be obtained by asking this question.
- **Merchant and Van Der Stede, 2012 (Results Controls)**- These authors present their concept for timeliness as a characteristic of results control. They state that results should be proposed with short term goals and thus causing an improvement by “(...) stimulating creativity as employees will be encouraged to search for new and better ways of improving results (Merchant and Van Der Stede, 2012; 34)” This could suggest asking how short-termed goals are implemented, however this is the integral part of question 10 of Bloom et. al.'s (2012) survey.
- **Simons, 2000 (Diagnostic Control System)** – Simons (2000) defines diagnostic control system as seeing strategy as a plan, thus they should include the performance review. However, he does not go further on when and how often performance is reviewed.

6) *Performance dialogue – In review/performance conversations, to what extent are the purpose, data, agenda, and follow-up steps (like coaching) clear to all parties?*

- **Malmi & Brown, 2008 (Cybernetic Control)**– Malmi & Brown (2008) also suggest that clarity of performance measures are vital for cybernetic

controls, however they do not specify further than what will be gathered by the question above.

- **Merchant and Van der Stede, 2012 (Results Control)**- Merchant and Van der Stede (2012) include the concept of *understandability* as a characteristic of results controls. They mention two aspects as important: the fact that employees are able to identify what they are being accountable for, and that employees must understand what they must do to influence the measures. As this question has an open range of answers it will allow for interviewees to explain if performance conversations are clear to all parties and if employees understand what they can be accountable for.
- **Anthony, 1965 (Evaluating)** – Anthony's (1965) evaluating question is very broad "How is information evaluated?". In this case, the scope of responses for this question is included within the "performance dialogue" answers; thus there is no need to enlarge the scope of question six.
- **Simons, 2000 (Diagnostic Control System)** – As Simons (2000) specifies the individual as a specific component of diagnostic control systems; this question could include a segment for analysing individuals within the organization. The open question is enough for the purpose of this survey, however we could include the specification aimed at individuals in the framework for interviewers.

7) *Consequence management – To what extent does failure to achieve agreed objectives carry consequences, which can include retraining or reassignment to other jobs?*

- **Malmi & Brown, 2008 (Administrative control)**- Malmi & Brown (2008) take behaviour management into account in their administrative controls. They define it as "(...) the monitoring of behaviour and who you make your employees accountable to (...)". In their typology they

consider three groups of administrative controls: organisational design and structure, governance structures within the firm and procedures and policies implemented. Thus it is important to understand how the organisation is structured to make their employees accountable for their behaviour. Furthermore, this question was found to specific to the achievement of objectives instead of taking in consideration the behaviour of employees, which is of relevant importance to MCS authors. This prompted the need of adjusting question 7 to have broader understanding of the organization.

- **Merchant and Van Der Stede, 2012 (Action Control)**- Merchant and Van der Stede (2012) understand consequence management as action accountability and they suggest that it requires: 1) defining what action are acceptable or unacceptable; 2) communicating those definitions to employees; 3) observing or otherwise tracking what happens and 4) rewarding good actions or punishing actions that deviate from the acceptable. Once again, these authors specify the behaviour of employees as important which reinforces the need to alter this question.

8) Target Balance – Are the goals exclusively financial or is there a balance of financial and non-financial targets?

- **Malmi & Brown, 2008 (Planning control)** – For Malmi & Brown (2008) planning controls include both action and long range planning. They do not stipulate if goals should or not be financial, however they do distinguish between strategic and operational planning. They suggest strategic planning is able to create strategic projects and other initiatives all of which may be effective in directing what people do. Operational planning is comprised of tasks list that aim to provide guidance on what to do. Due to the length of this question, it was possible to make this distinction in question 8 as it can be important to understand the organisation's type of planning controls.

- **Merchant and Van Der Stede, 2012 (Results control)**- The balance of financial and non-financial is a critical question for most MCS's authors, and Merchant and Van der Stede are no exception. However, they add the fact that results measures should be precise, objective, timely and understandable. This analysis could be made after the interview is made and is clearly a point to have in consideration when implementing the survey.
- **Ferreira & Otley, 2009** – There are at least 3 questions easily identified in Ferreira & Otley's (2009) methodology that enquire about the organizations' targets and goals. They are open answered questions and thus can induce the reply that is looked for in this question. There is no need to have a different question according to their framework.

9) *Target interconnection – Are goals based on accounting value, or are they based on shareholder value in a way that works through business units and ultimately is connected to individual performance expectations?*

- **Malmi & Brown, 2008(Planning control)** – Malmi & Brown (2008) reinforce the importance of the alignment of goals. They state in their analysis that planning can enable the co-ordination through that same alignment of a set of goals across a functional areas of the organisation. Furthermore, business units are too found to be too specific and perhaps not relevant to every type of organisation. This question was altered with the purpose to identify goal alignment across the diverse areas of the organisation
- **Merchant and Van der Stede, 2012 (Results control)** – Merchant and Van der Stede (2012) explore results controls very deeply and do not include business units in their analysis. It is not relevant for a general MCS study and thus shouldn't be included in this question.
- **Ferreira & Otley, 2009** – Ferreira & Otley (2009) also take targets in large consideration when composing their framework. And just like Merchant

and Van der Stede (2012) do not mention business units in any of their questions as it is too specific to certain types of organisations. Thus we should exclude their mention from question 9 and create a new version to deeply comprehend goal alignment across any type of organisation.

10) *Target time horizon – Does top management focus mainly on the short term, or does it visualize short-term targets as a “staircase” toward the main focus on long-term goals?*

- **Malmi & Brown 2008 (Planning control)** – Short-term (action planning) and long-term planning are the two concepts that Malmi & Brown (2008) present within their framework. Action planning includes all the goals and actions for the immediate planning, usually on a 12-month period or less. On the other hand, long-range planning incorporates all the medium and long run goals and actions that are established. While this question makes does the distinction between short and long term planning, it was found to be too specific and perhaps focusing beyond its scope when mentioning the “staircase” between both. This urged a slight modification which is explained later in the chapter.
- **Merchant and Van der Stede. 2012 (Results control)** – This question will allow the interviewer to tell if goals are short term, which is what Merchant and Van der Stede (2012) suggest as a good method of improving results.
- **Ferreira & Otley, 2009** – While Ferreira and Otley’s (2009) framework does not enquire it directly, when applying it to an organization you will know the time horizon for the organizations goals. This question will allow for just that, and there is no need to specify further according to these authors.

11) *Target stretching – Are goals too easy to achieve, especially for some “sacred cow” areas of the firm, or are goals demanding but attainable for all parts of the firm?*

- **Malmi & Brown, 2008 (Planning control)** – Malmi and Brown (2008) only question about the standards and effort needed for the goals put in place by organizations. However the stating of “sacred cows” is found to be too specific and could be removed for the final version of the new survey.
- **Merchant and Van der Stede, 2012 (Results control)** – This question is relevant to understand if employees perceive their targets as realistic. Merchant and Van der Stede (2012) believe results controls, including targets, will allow for employees to have goals to strive for. This will allow for improvement in results, hence the importance of question 11 in understanding target stretching.
- **Ferreira & Otley, 2009** – Ferreira and Otley’s (2009) question 6 tries to understand how appropriate are the targets set by the organization, which is directly related to Bloom et. al.’s (2012) question about target stretching.

12) Performance clarity – Are performance measures ill defined, poorly understood, and private, or are they well defined, clearly communicated, and made public?

- **Malmi & Brown, 2008 (Cybernetic control)** – Clarity of information is acknowledged by Malmi & brown (2008) as being part of their feedback process, which they classify as one of their five characteristics of cybernetic controls. This question will inform the interviewer how clear standards of performance are to employees.
- **Merchant and Van der Stede, 2012 (Results control)**- “(...) organizations must know what results are desired in the areas they wish to control, and they must communicate those desires effectively to the employees working in those areas (Merchant and Van der Stede, 2012)”. This statement is directly answered by question 12, and once again suggests that performance clarity is a concern for most MCS authors.

- **Anthony, 1965 (Evaluating)** – Information is Anthony’s (1965) main concern and how information is evaluated is one of the questions in his work. Both performance clarity and dialogue (Bloom et al.’s (2007) question 6) are part of the information the author wanted to gather from his work, therefore this question is both relevant and necessary for the new survey.
- **Ferreira & Otley, 2009** – This question is present in Ferreira & Otley’s (2009) question 7, where they ask about processes followed by the organization to evaluating its employees’ performance. The scope of answers is very similar which proves that there is no need to add any element to this question.

13) Managing Human Capital – To what extent are people in the firm rewarded equally irrespective of performance level, or is performance clearly related to accountability and rewards?

- **Merchant and Van der Stede, 2012 (Personnel controls)**- These authors suggest that firms should make sure that jobs are allowed to have a high probability of success, as some organizations do not give employees a chance to succeed. This would indicate they agree that people in the firm are rewarded irrespective of performance level. Furthermore, as rewards and accountability and rewards are further explored in questions 15 and 16, there is no need to add to this question.

14) Rewarding High Performance – To what extent are people in the firm rewarded equally irrespective off performance level, or is performance clearly related to accountability and rewards?

- **Malmi & Brown, 2008 (Reward and Compensation)** – Malmi & Brown (2008) group all rewards and compensation given to employees in “reward and compensation” controls. This question allows for a wide

range of answers, which is enough according to these authors' frameworks.

- **Merchant and Van der Stede, 2012 (Results control)** – The provision of rewards to encourage behaviour for employees to strive for is the last of the four steps of results controls implementation (Merchant and Van der Stede, 2012). The authors identify various types of rewards, which is something that the survey should take in consideration, hence there will be a note added in the general framework for conducting the new survey.
- **Ferreira & Otley, 2009** – Ferreira & Otley's (2009) question 8 is addressing rewards and bonuses, and it distinguishes between financial and non-financial rewards, which are, again, an aspect to take in consideration when conducting the new survey.

15) Removing poor performers – Are poor performers rarely removed, or are they retained and/or moved into different roles or out of the company as soon as the weakness is identified?

- **Merchant and Van der Stede, 2012 (Action Control)** – The accountability of employees is included in Merchant and Van der Stede's (2012) group of Action controls. This question might suggest for very specific answers and not allow for interviewees to expand on the ways they make employees accountable for poor performance. There are more options to punish actions that deviate from the acceptable, and thus a new, even broader question will be suggested for removing poor performers. Although the guideline of the original survey (Appendix 1) would allow the interviewer to learn more about how the firm acts with under performs, the question still had a very narrow tone
- **Ferreira & Otley, 2009** – Ferreira & Otley's (2009) question 8 addresses the consequences for poor performers, and does not restrict the action to the removal of these under-achieving employees. The authors are also

looking for other types of actions, and thus a new question would be acceptable according to their perspective.

16) Promoting high performers – Are people promoted mainly on the basis of tenure, or does the firm actively identify, develop and promote its top performers?

- **Merchant and Van der Stede, 2012 (Results Control)** – Merchant and Van der Stede (2012) suggest that the employees' want from rewards are different, and in that perspective understanding how promotions work in the organization will be an benefit to the new version of the survey.
- **Ferreira & Otley, 2009** – This question is again included in Ferreira & Otley's (2009) question 8, as it can be considered as a type of reward. While it can be considered redundant to have question 16 (as promotions is not a specific type of control, but rather inserted into groups identified by authors) in order to allow for comparisons with organizations with Bloom et. al.'s (2012) survey this question will remain.

The analysis made to both Bloom et. al.'s (2007) survey and MCS literature allowed for a new concept of survey to be conceived. There was the need to remove 5 of the original 18 questions. Furthermore, 7 of the 13 remaining questions had some kind of adjustment.

Firstly, based on Malmi & Brown's (2008) framework question 7 was altered to become more focused on consequences for the misbehaviour of employees. It will also allow for the interviewer to analyse how the firm structures its administrative controls based on this framework.

Regarding question 8, the interviewer should be aware of the 4 characteristics that Merchant and Van der Stede (2012) present for their results measures: precise, objective, timeless and understandable when scoring the question. Furthermore, understanding if the company implements strategic and operational planning is also a goal for this new version of the question.

The target interconnection question (question 9) will see the mentioning of business units removed as it was found too specific for the purpose at hand. It will instead be focused on goal alignment across all functional areas of the organisation, which is considered important in Malmi & Brown's (2008) control systems as a package.

Target time horizon (question 10) was simplified to include only the distinction between short and long-term goals. These are known as action and long-range planning in Malmi & Brown's (2008) work.

Question 11 was rephrased to remove the expression of "sacred cows", but will remain with the purpose of understanding if there is any disparity between goal attainability across the different divisions of the organisation.

There will also a note added to the survey guideline on question 14, as it was found important to classify the types of rewards (promotions, bonuses, vacation, etc.) given by the organization as well as being able to clearly identified if they are mostly financial or non-financial.

Finally, question 15 was altered to fully understand the consequences for the firm's poor performers. It was found too specific and narrow for the matter, in comparison with MCS literature.

This chapter determines that the Bloom et. al.'s (2007) survey has a strong correlation with MCS's. Although most questions were easily identified in the various management control systems, a few were found too specific and were consequently altered to fully serve the purpose of the new survey tool. The new versions of the questions are exposed in the next chapter, in addition to the new final version of the survey.

Chapter 5

Management Control Systems survey

As previously mentioned, Bloom et. al.'s (2007) survey has a macroeconomic vision for management quality and firm performance. Furthermore, there are various limitations identified by the authors for their methodology. Firstly, it is extremely difficult to distinguish cause and effect from the results obtained. Is the firm performing well because of their "good" management practices or is the firm investing in management practices due to good performance? This is one of the reasons it is extremely hard to make strong statements about the relationship of managerial practices and performance (Bloom et. al., 2007).

Contingency theory will state that all management practices are contingent on business situations (Woodward, 1958 *apud* Bloom et. al., 2007). For this, Bloom et. al.(2007) identified contingency in three respects: different countries will specialize in different aspects of managerial practices; strategic decisions will be different according to specific circumstances the organization faces; and management practices accessed have not been equally beneficial throughout history.

The authors identify all these limitations, however for this work's purpose, further restrictions have to be taken in consideration. It is easily identifiable that not all types of management controls are addressed by the survey. Furthermore, the fact that questions created by Bloom et. al. (2007) are occasionally too specific for comparing MCS's. This resulted in creating a new version of the their survey. This was done in order to compare management control systems implementation between firms or simply analysing a unique case study.

Therefore, as seen in the previous chapter, 5 of the 18 questions cannot be related to MCS's and are therefore found irrelevant to compare these between organizations. Both human resources and manufacturing techniques are not fully significant to this research and consequently can be discarded for this purpose. Although some limitations can be identified to this approach, it will allow for a comparison of MCS's between a group firms in similar situations (in order to reduce the contingency limitation).

After the analysis made in the previous chapter, these are questions that will remain from the original survey. Six have remained in their original phrasing and seven have been altered in order to best serve this approach:

- 4) Performance tracking – Is tracking ad hoc and incomplete, or is performance continually tracked and communicated to all staff
- 5) Performance review – Is performance reviewed infrequently and only on a success/failure scale, or is performance reviewed continually with an expectation of continuous improvement?
- 6) Performance dialogue – In review/performance conversations, to what extent are the purpose, data, agenda, and follow-up steps (like coaching) clear to all parties?
- 7) Consequence management – Are employees made accountable for behaviour that is not in accordance to organisational policies? And how is behaviour monitored in the firm?
- 8) Target Balance – Are the goals exclusively financial or is there a balance of financial and non-financial targets? Is there a focus on strategic actions by the managers, or are employees provided with clear task lists to meet company targets?
- 9) Target interconnection – Are goals communicated across all functional areas of the organization, and if so are they aligned to meet the same objectives?

- 10) Target time horizon – Are the targets focused mainly on the short term, or is planning made with a greater focus on the long-term goals?
- 11) Target stretching – How achievable are the goals set by managers, are they easy to achieve or are they too ambitious? Are they easier to achieve to some branches of the organisation, or are they demanding but attainable to all areas of the company?
- 12) Performance clarity – Are performance measures ill defined, poorly understood, and private, or are they well defined, clearly communicated, and made public?
- 13) Managing Human Capital – To what extent are people in the firm rewarded equally irrespective of performance level, or is performance clearly related to accountability and rewards?
- 14) Rewarding High Performance – To what extent are people in the firm rewarded equally irrespective of performance level, or is performance clearly related to accountability and rewards?
- 15) Removing poor performers – How does the firm act on the presence of poor performers, are they immediately removed or are there different courses of action taken according to the gravity of the situation?
- 16) Promoting high performers – Are people promoted mainly on the basis of tenure, or does the firm actively identify, develop and promote its top performers?

Considering the removal of 5 of the original 18 questions, new dimensions were introduced due to their importance for MCS authors and their frameworks. One main type of control that is mentioned by various authors, but is not included in Bloom et. al.'s (2007) survey is cultural controls. According to Merchant and Van der Stede (2012), these are designed to encourage mutual monitoring to ensure the group norms and values. Malmi & Brown (2008) suggested that the five groups of controls in their MCS typology should be understood as a package. It is therefore important to understand if

they are all present in the organization being interviewed. We have identified questions that tackle cybernetic, reward and compensation and administrative controls. However for these authors, cultural controls are the group that provides the contextual frame for controls. To survey in their perspective, we should understand if a firm tries to impact its' employees behaviour through belief systems. It is also important to recognize the existence of organizational groups/division that can be used as controls.

Organizations have attempted to create and shape organizational culture in various ways. In Ferreira & Otley's (2009) framework, the first question is actually directly related to organizational culture:

- What is the vision and mission of the organization and how is this brought to the attention of managers and employees? What mechanisms, processes, and networks are used to convey the organization's overarching purposes and objectives to its members?

This question will be divided into two parts and used in the new survey tool. In order to obtain a score (from 1 to 5) when conducting the survey this question will be adapted and stated as follows:

- Organizational purpose – Are the firms vision and mission clearly established, and they are clearly communicated to managers and employees?
- Organizational objectives – Are there mechanisms, process or networks used to convey the firms norms and values? If so, are they overall accepted and followed?

While the second question might look to be redundant, it looks upon institutional objectives rather than performance or targets. It aims to obtain information on the firm's group values and/or cultural norms, and to know if any codes of conduct; codes of ethics; organizational credos; intra-organizational transfers; employee rotation; Physical arrangements or even management philosophy are used by the administration. It is crucial to

establish if an organization aims to obtain an own culture, as organizational cultures remain relatively fixed over time, even while objectives and strategies are necessarily adapted to changing business conditions (Merchant & Van der Stede, 2007). Similar to Ferreira & Otley's (2009) questionnaire, these questions will be introduced in the beginning of the new survey.

The authors analyse the impact on behaviour, through the institutionalized belief systems, on three different levels (Malmi & Brown, 2008). The first level includes organizations that deliberately recruit individuals that have a particular set of values with match those of the organization. The second incorporates when individuals are socialized and have their values changed to fit the organisational values. The third and last level is when values are explained and employees must behave in accord with them, even if they do not relate to them individually. In accordance to this, question 3 was conceptualized and included:

- Organizational values - Are matching organizational values a requirement when recruiting new employees? If not, does the firm try to alter them by socialization or are they simply explained to individuals?

This question has a direct approach to Malmi & Brown's (2008) three levels of impact on values. It will allow for a clear classification of organizations on this perspective and will inform the interviewer of how the firm's values are passed on to its employees.

Table 2 includes the final version of the new management control systems survey. It includes 16 questions that are all fitting to understand a type of management control of the organization being studied.

The application of the new survey must be done in accordance to the World Management Survey's outline, and it will aim to compare the interviewed company's management quality in a management control perspective. As done

for the WMS databases, the interviews will be conducted in a double-blind approach. The interviewer will not be aware of the performance of the firm nor the interviewee will know he is being scored. The score will continue to be ranged from 1 to 5 and will take in consideration Appendix 1 that includes the full guideline for Bloom et. al. (2007) original survey. For the questions that were added or altered, table 3 should be considered. Both these guidelines contain various questions that can be asked by the interviewer, and the answers will allow for the scoring to be done in a more impartial and just manner. They are also divided into the 4 sectors of activity that Bloom et. al. (2007) have studied in their on-going research, in order to adapt the survey to their characteristics of the organisation.

Table 2
The new management control systems survey

Categories	Score from 1 to 5 based on:
(1) Organizational purpose	Are the firms vision and mission clearly established, and they are clearly communicated to managers and employees?
(2) Organizational objectives	Are there mechanisms, process or networks used to convey the firms' norms and values? If so, are they overall accepted and followed?
(3) Organizational values	Are matching organizational values a requirement when recruiting new employees? If not, does the firm try to alter them by socialization or are they simply explained to individuals?
(4) Performance tracking	Is tracking ad hoc and incomplete, or is performance continually tracked and communicated to all staff?
(5) Performance review	Is performance reviewed infrequently and only on a success/failure scale, or is performance reviewed continually with an expectation of continuous improvement?
(6) Performance dialogue	In review/performance conversations, to what extent are the purpose, data, agenda, and follow-up steps (like coaching) clear to all parties?
(7) Consequence management	Are employees made accountable for behaviour that is not in accordance to organisational policies? If so, how is behaviour monitored in the firm?
(8) Target balance	Are the goals exclusively financial, or is there a balance of financial and nonfinancial targets? Is there a focus on strategic actions by the managers, or are employees provided with clear task lists to meet company targets?
(9) Target interconnection	Are goals based on accounting value or are they based on shareholder value, and is there any connection to individual performance expectations?
(10) Target time horizon	Are the targets focused mainly on the short term, or is planning made with a greater focus on the long-term goals?
(11) Target stretching	How achievable are the goals set by managers, are they easy to achieve or are they too ambitious? Are they easier to achieve to some branches of the organisation, or are they demanding but attainable to all areas of the company?
12) Performance clarity	Are performance measures ill-defined, poorly understood, and private, or are they well-defined, clearly communicated, and made public?
(13) Managing human capital	To what extent are senior managers evaluated and held accountable for attracting, retaining, and developing talent throughout the organization?
(14) Rewarding high performance	To what extent are people in the firm rewarded equally irrespective of performance level, or is performance clearly related to accountability and rewards?
(15) Removing poor performers	How does the firm act on the presence of poor performers, are they immediately removed or are there different courses of action taken according to the gravity of the situation?
(16) Promoting high performers	Are people promoted mainly on the basis of tenure, or does the firm actively identify, develop, and promote its top performers?

Table 3
The changes to the survey guideline – Part 1

Question	Topic	Manufacturing	Healthcare	Education	Retail
1	Organisational Purpose (Tests how aware employees are of the firms vision and mission)	a)What is your firm's vision? b)What is your firm's mission? c)Can you identify any of your tasks or responsibilities that you believe contribute to the firm's vision and mission? d)Do you recall reading the firms mission and vision anywhere? e)How often are mission and vision brought up in strategic meetings? a)Can you identify values that your firm tries to pass on to its employees? b)What kind of social/cultural norms are present on the day-to-day running of the firm? c) Is there any kind of firm/employee network that communicates the firms values/norms?	a)Can you identify values that your organisation tries to pass on to its employees? b)How often are you reminded of the organisational ethical norms and values? c)How do you feel are your organisation's norms overall accepted by its members?	a)Can you identify values that your organisation tries to promote? b)Is there any specific value that is often promoted by the school? c) Is recruitment made according to candidate values? d) Does the school try to socialize its employees in order to promote shared values? e) Is there any action taken by the school to try to explain its values to employees?	a)What is your firm's vision? b)What is your firm's mission? c)Can you identify any of your tasks or responsibilities that you believe contribute to the firm's vision and mission? d)Is there any firm information merchandise available in the store? e)Does this merchandise include the firm's mission and vision? a)Can you identify values that your firm tries to pass on to its employees? b)What kind of social/cultural norms are present on the day-to-day running of the store? c) Are rules and values generally accepted and followed by employees?
2	Organisational Objectives (What processes, networks or mechanisms are used to enforce norms and values?)	a)Can you easily identify values that your firm tries to promote? b)Is there any specific value that is often promoted by the firm? c) Is recruitment made according to candidate values? d) Does the firm try to socialize its employees in order to promote shared values? e) Is there any action taken by the firm to explain its values to employees?			
3	Organisational values (What values are passed on by the firm, and how does the organisation attempt to do so)	a) Can you easily identify values that your firm tries to promote? b)Is there any specific value that is often promoted by the firm? c) Is recruitment made according to candidate values? d) Does the firm try to socialize its employees in order to promote shared values? e) Is there any action taken by the firm to explain its values to employees?			
7	Consequence Management (Questions if employees are accountable for their behaviour)	a) Is behaviour controlled in your organisation? b)If an employer misbehaves in your organisation is his behaviour made accountable to his superior? c)Is your company structured in order to control employee behaviour? d) Are there formal lines of authority or accountability? e) Does misbehaviour near dangerous industrial equipment carry stronger consequences? a) Are the goals established by the company strictly financial? b)Are non-financial goals clearly communicated to employees? c) How often does the firm carry out what you consider to be strategic initiatives? d) Are employees given checklists to guide them on what to do to achieve the firm's goals? e)For example, are there any goals regarding the breakdown of industrial equipment?	a) Is behaviour controlled in your organisation? b)If an employer misbehaves in your organisation is his behaviour made accountable to his superior? c)Is your company structured in order to control employee behaviour? d) Are there formal lines of authority or accountability? e) Does misbehaviour regarding patients carry stronger consequences by the hospital (not the law)? a) Are the goals established by the company strictly financial? b)Are non-financial goals clearly communicated to employees? c) How often does the firm carry out what you consider to be strategic initiatives? d) Are employees given checklists to guide them on what to do to achieve the firm's goals? e) Are there non-financial targets regarding patient satisfaction?	a) Is behaviour controlled in your organisation? b)If an employer misbehaves in your organisation is his behaviour made accountable to his superior? c)Is your company structured in order to control employee behaviour? d) Are there formal lines of authority or accountability? e) Does misbehaviour near students carry stronger consequences? a) Are the goals established by the company strictly financial? b)Are non-financial goals clearly communicated to employees? c) How often does the firm carry out what you consider to be strategic initiatives? d) Are employees given checklists to guide them on what to do to achieve the firm's goals? e) Is there any type of goal established for customer satisfaction?	a) Is behaviour controlled in your organisation? b)If an employer misbehaves in your organisation is his behaviour made accountable to his superior? c)Is your company structured in order to control employee behaviour? d) Are there formal lines of authority or accountability? e) Does misbehaviour near clients carry stronger consequences? a) Are the goals established by the company strictly financial? b)Are non-financial goals clearly communicated to employees? c) How often does the firm carry out what you consider to be strategic initiatives? d) Are employees given checklists to guide them on what to do to achieve the firm's goals? e) Is there any type of goal established for customer satisfaction?
8	Target Balance (Are goals financial or non-financial? Is there strategic or operational planning?)	a) Are the goals established by the company strictly financial? b)Are non-financial goals clearly communicated to employees? c) How often does the firm carry out what you consider to be strategic initiatives? d) Are employees given checklists to guide them on what to do to achieve the firm's goals?			

Table 4
The changes to the survey guideline – Part 2

<p>9</p>	<p>Target interconnection (Are goals interconnected across all functional areas of the organisation?)</p>	<p>a) Are the goals established by the company similar across all of the organisation? b) Are goals based on accounting value or shareholder value? c) Are goals aligned across all divisions of the firm and are they correlated to individual performance expectations? d) Would you say that the goals established for the manufacturing workers are connected to those of the HR department?</p>	<p>a) Are the goals established by the company similar across all of the organisation? b) Are goals based on accounting value or shareholder value? c) Are goals aligned across all divisions of the firm and are they correlated to individual performance expectations?</p>	<p>a) Are the goals established by the company similar across all of the organisation? b) Are goals based on accounting value or shareholder value? c) Are goals aligned across all divisions of the firm and are they correlated to individual performance expectations?</p>	<p>a) Are the goals established by the company similar across all of the organisation? b) Are goals based on accounting value or shareholder value? c) Are goals aligned across all divisions of the firm and are they correlated to individual performance expectations? d) Would you say that the goals established for the sales clerk are aligned to those of the area manager?</p>
<p>10</p>	<p>Target time horizon (Are goals and objective short or long-term planned?)</p>	<p>a) Are the targets set by the company long term? b) Are the goals set by the company to be accomplished in a 12 month period or less? c) Are goals altered during the year in accordance to performance?</p>	<p>a) Are the targets set by the school long term? b) Are the goals set by the school to be accomplished in a 12 month period or less? c) Are goals altered during the school year?</p>	<p>a) Are the targets set by the company long term? b) Are the goals set by the company to be accomplished in a 12 month period or less? c) Are goals altered during the year in accordance to performance?</p>	<p>a) Are the targets set by the company long term? b) Are the goals set by the company to be accomplished in a 12 month period or less? c) Are goals altered during the year in accordance to performance?</p>
<p>11</p>	<p>Target stretching (How attainable are goals and how demanding are they to the different divisions of the organisation)</p>	<p>a) Would you say that the goals set by the company are attainable? b) Are they attainable for all functional areas of the firm? c) Would you say that the goals established for the manufacturing workers are as attainable as the ones of the HR department?</p>	<p>a) Would you say that the goals set by the company are attainable? b) Are they attainable for all divisions of the hospital? c) Would you say that the goals established for the cardio unit (for example) are as attainable as the ones of the maternity?</p>	<p>a) Would you say that the goals set by the company are attainable? b) Are they attainable for all divisions of the company? c) Would you say that the goals established for the sales clerk are as attainable as the ones of the area manager?</p>	<p>a) Would you say that the goals set by the company are attainable? b) Are they attainable for all divisions of the company? c) Would you say that the goals established for the sales clerk are as attainable as the ones of the area manager?</p>
<p>14</p>	<p>Developing talent and promoting high performers (Tests whether promotion is performance based and whether talent is developed within the organisation)</p>	<p>a) Tell me about your promotion system. b) What about poor performers? What happens with them? Are there any examples you can think of? c) How would you identify and develop your star performers? d) If two people both joined the company 5 years ago and one was much better than the other what job opportunities would he/she have in the company? e) What types of bonuses are given to employees? Are there any non-financial benefits?</p>	<p>a) Can you tell me about your career progression/promotion system? b) How do you identify and develop your star performers? c) What types of professional development opportunities are provided? d) Are better performers likely to be promoted faster or are promotions given on the basis of tenure/seniority? e) What types of bonuses are given to employees? Are there any non-financial benefits?</p>	<p>a) Can you tell me about your career progression/promotion system? b) How do you identify and develop your star performers? c) What types of professional development opportunities are provided? How are these opportunities personalized to meet individual teacher needs? d) How do you make decisions about promotion and additional opportunities within the school, such as performance, tenure, other? Are better performers likely to be promoted faster or are promotions given on the basis of tenure/seniority? e) What types of bonuses are given to employees? Are there any non-financial benefits?</p>	<p>a) Tell me about your promotion system. b) What about poor performers? What happens with them? Are there any examples you can think of? c) How would you identify and develop your star performers? d) If two people both joined the company 5 years ago and one was much better than the other what job opportunities would he/she have in the company?</p>
<p>15</p>	<p>Removing Poor Performers/ Making Room for Talent (Tests how well the organisation is able to deal with underperformers)</p>	<p>a) If you had a worker who could not do his job what would you do? Could you give me a recent example? b) How long would underperformance be tolerated? c) Do you find any workers who lead a sort of charmed life? Do some individuals always just manage to avoid being fixed/fired?</p>	<p>a) If you had a clinician or a nurse who could not do his job, what would you do? Could you give me a recent example? b) How long is under-performance tolerated? How difficult is it to terminate a nurse/ clinician? c) Do you find staff members who lead a sort of charmed life? Do some individuals always just manage to avoid being fixed/fired?</p>	<p>a) If you had a teacher who could not do his job what would you do? Could you give me a recent example? b) How long would under-performance be tolerated? How difficult is it to terminate a teacher? c) Do you find staff members/ teachers who lead a soft or charmed life? Do some individuals always just manage to avoid being/fired?</p>	<p>a) If you had a worker who could not do his job what would you do? Could you give me a recent example? b) How long would underperformance be tolerated? c) Do you find any workers who lead a sort of charmed life? Do some individuals always just manage to avoid being fixed/fired?</p>

Conclusion

This thesis aimed to create a new double-blind survey tool to further enhance management control systems research. The literature reviewed in this work is mainly from three different research trends. Firstly, the management practices comparison across firms and industries is what the new methodology was based upon. It was mostly focused on Bloom et. al. (2007) various papers and articles, and the diverse research that was created consequently.

Understandably, the next chapter was entirely focused on Management control systems literature. The main authors and their framework for MCS's were identified and explained. Anthony's (1965) evaluating framework, Simon's (2000) Levers of control, Malmi & Brown (2008) control systems as a package, Ferreira and Otley's (2009) interview framework and Merchant and Van der Stede (2012) work were all analysed and used for the analysis done to Bloom's et. al. (2007) work.

Furthermore, in order to understand the importance of MCS's to the modern firm, Franco-Santos' (2012) paper was reviewed. Contemporary performance measurements are a critical component of almost all management control systems. These tools were proven to have an impact on people's behaviour, organizational capability and performance.

The work presented in this thesis aims to provide a tool for both researchers and organizations. The new adapted Bloom et. al. (2007) survey will allow for further research on Management control systems and their impact on organizational performance. Similar to the case for management practices, comparisons will be made possible across firms, industries or even countries. It is also an appropriate tool for organizations to perform an intra-analysis to their management control policies, and consequently compare and benchmark them to success case studies. All these applications of the survey could be done in the four different areas of activity: healthcare; education; retail and manufacturing.

From the original survey, five questions were removed and three new ones were introduced. On the remaining thirteen, seven questions were altered or had a note for reinterpretation. This new tool has sixteen questions, and has a scoring component similar to the management practices survey.

There are various limitations that can be identified to this tool, where some are very similar to the original Bloom et. al. (2007) survey. Contingency was a main issue brought up for the original survey, because it aimed to relate performance to managerial practices. In this case, however, it is not a main limitation as performance is not what we aim to compare. One limitation that could identify is the scoring for the new survey not being entirely linear. An example for this is when companies are asked about their operational and strategic planning, which are both forms of control but there is no preferred option for an organisation.

Applying the survey created in this work will allow for further research on this topic. Management control systems have been gaining importance in the modern firm, and this thesis is a solid contribution to the current research trend on this topic.

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Appendix

Topic	Manufacturing	Healthcare	Education	Retail
Operations Management				
<p>Introducing Modern Techniques</p> <p><i>Tests how well modern management techniques have been introduced</i></p>	<p>a) Can you describe the production process for me?</p> <p>b) What kinds of lean (modern) manufacturing processes have you introduced? How long has this practice been in place? Can you give me specific examples?</p> <p>c) How do you manage inventory levels? What is done to balance the line? What is the takt time of your manufacturing processes?</p>	<p>a) Can you briefly describe the patient journey or flow for a typical episode?</p> <p>b) How closely located are wards, theatres, diagnostics centres and consumables?</p> <p>c) How often do you run into problems with the current layout and pathway management?</p>		<p><i>Part I:</i></p> <p>a) Can you briefly describe your day-to-day store operations process?</p> <p>b) Do you have a to-do list? Do your employees?</p> <p>c) How do you manage your inventory? What system do you use for ordering products? How is your backroom organized?</p> <p>d) If I were an employee and a customer asked me for an item from the backroom, how long would it take to retrieve it?</p> <p><i>Part II:</i></p> <p>a) Can you briefly describe your day-to-day scheduling process?</p> <p>b) How do you choose how many people will be scheduled for each hour the store is open? How do you define roles within the staff?</p> <p>c) If I were assigned to merchandising (stocking) that day, would I perhaps have to run to cash if the store got busier?</p> <p>a) Can you take me through the rationale to introduce these changes?</p>
<p>Rationale for Introducing Modern Techniques</p> <p><i>Tests the motivation and impetus behind changes to operations and what change story was communicated</i></p>	<p>a) Can you take me through the rationale to introduce these processes?</p> <p>b) What factors led to the adoption of these lean (modern) management practices?</p>	<p>a) Can you take me through the rationale for making operational improvements to the management of patient pathway? Can you describe a recent example?</p> <p>b) How often do you challenge/streamline the patient pathway?</p> <p>c) What factors led to the adoption of these practices?</p> <p>d) Who typically drives these changes?</p>		
<p>Standardization</p> <p><i>Tests how well procedures are standardised, aligned, applied and monitored systematically</i></p>		<p>a) How standardised are the main clinical processes?</p> <p>b) How clear are clinical staff members about how the treatment of specific procedures should be carried out?</p> <p>c) What tools and resources does the clinical staff employ (e.g. checklists or patient bar-coding) to ensure that they have the correct patient and/or conduct the appropriate procedure?</p> <p>d) How are managers able to monitor whether clinical staff are following established protocols?</p>	<p>a) How structured or standardized are the instructional planning processes across the school?</p> <p>b) What tools and resources are provided to teachers (e.g. standards-based lesson plans and textbooks) to ensure consistent level of quality in delivery across classrooms?</p> <p>c) What are the expectations for the use of these resources and techniques?</p> <p>d) How does the school leader monitor and ensure consistency in quality across classrooms?</p>	
<p>Good Use of Human Resources</p> <p><i>Tests whether staff are deployed to do what they are best qualified for, but</i></p>		<p>a) With respect to your staff, what happens when different hospital areas become busier than others?</p> <p>b) How do you know which tasks are best suited to different staff?</p> <p>c) What kind of procedures do you</p>		

Topic	Manufacturing	Healthcare	Education	Retail
<i>nevertheless help out elsewhere when needed</i>		have in place to assist staff flow between areas; for example, is there one central person or centre which coordinates this process?		
Data Driven Planning and Student Transition <i>School specific: Tests if schools use assessment to verify learning outcomes at critical stages, make data easily available and adapt student strategies accordingly</i>			a) Is data used to inform planning and strategies? If so how is it used – especially in regards to student transitions through grades/ levels? b) What drove the move towards more data-driven planning/ tracking?	
Personalization of Instruction and Learning <i>School specific: Tests for flexibility in teaching methods and student involvement ensuring all individuals can master the learning objectives</i>			a) How much does the school attempt to identify individual student needs? How are these needs accommodated for within in the classroom? b) How do you as a school leader ensure that teachers are effective in personalizing instruction in each classroom across the school? c) What about students, how does the school ensure they are engaged in their own learning? How are parents incorporated in this process?	
Adopting Best Practices <i>Tests how well the organization incorporates best practices and the sharing of these resources across the organization</i>			a) How does the school encourage incorporating new teaching practices into classroom? b) How are these learning or new teaching practices shared across teachers? What about across grades or subject? How does sharing happen across schools (community, state-wide etc), if at all? c) How does the school ensure that teachers are utilizing these new practices in the classroom? How often does this happen?	
Performance Monitoring				
Process Documentation and Continuous Improvement <i>Tests processes for and attitudes to continuous improvement and whether learnings are captured/ documented</i>	a) How do problems typically get exposed and fixed? b) Talk me through the process for a recent problem. c) How can the staff suggest process improvements?	a) How do problems typically get exposed and fixed? b) Can you talk me through the process for a recent problem that you faced? c) When processes do change, what is the main driver of change? d) Who within the hospital typically gets involved in changing or improving? How do/ can different staff groups get involved in this process? Can you think of any examples?	a) When problems (e.g. within school/ teaching tactics/ etc.) do occur, how do they typically get exposed and fixed? b) Can you talk me through the process for a recent problem that you faced? c) Who within the school gets involved in changing or improving process? How do the different staff groups get involved in this? d) Do the staffs ever suggest process improvements?	a) How do problems typically get exposed? b) Talk me through the process for a recent problem. c) How can the staff suggest process improvements?

Topic	Manufacturing	Healthcare	Education	Retail
<p>Performance Tracking</p> <p><i>Tests whether performance is tracked using meaningful metrics and with appropriate regularity</i></p>	<p>a) What kind of KPIs would you use for performance tracking?</p> <p>b) How frequently are these measured? Who gets to see this KPI data?</p> <p>c) If I were to walk through your factory could I tell how you were doing against your KPIs?</p>	<p>a) What kind of performance or quality indicators would you use for performance tracking?</p> <p>b) How frequently are these measured? Who gets to see these data?</p> <p>c) If I were to walk through your hospital wards and surgical rooms, could I tell how you were doing against your performance goals?</p>	<p>a) What kind of main indicators do you use to track school performance? What sources of information are used to inform this tracking?</p> <p>b) How frequently are these measured? Who gets to see this performance data?</p> <p>c) If I were to walk through your school, how could I tell how it was doing against these main indicators?</p>	<p>a) What kind of KPI's would you use for performance tracking?</p> <p>b) How frequently are these measured? Who gets to see this KPI data?</p> <p>c) If I were to walk around your store backroom and offices could I tell how you were doing against your KPI's?</p>
<p>Performance Review</p> <p><i>Tests whether performance is reviewed with appropriate frequency and communicated to staff</i></p>	<p>a) How do you review your KPIs?</p> <p>b) Tell me about a recent meeting.</p> <p>c) Who is involved in these meetings?</p> <p>d) Who gets to see the results of this review?</p> <p>e) What is the follow up plan?</p>	<p>a) How do you review your main performance indicators?</p> <p>b) Can you tell me about a recent review meeting?</p> <p>c) Who is involved in these meetings? Who gets to see the results of this review?</p> <p>d) What is a typical follow-up plan that results from these meetings?</p>	<p>a) How often do you review (School) performance --formally or informally-- with teachers and staff?</p> <p>b) Could you walk me through the steps you go through in a process review?</p> <p>c) Who is involved in these meetings? Who gets to see the results of this review?</p> <p>d) What sort of follow up plan would you leave these meetings with?</p>	<p>a) How do you review your KPI's?</p> <p>b) Tell me about a recent meeting.</p> <p>c) Who is involved in these meetings? Who gets to see the results of this review?</p> <p>d) What is the follow up plan</p>
<p>Performance Dialogue</p> <p><i>Tests the quality of review conversations</i></p>	<p>a) How are these meetings structured? Tell me about your most recent meeting.</p> <p>b) How would the agenda for the meeting be determined?</p> <p>c) What type of feedback occurs in these meetings?</p> <p>d) For a given problem, how would you identify the root cause?</p>	<p>a) How are these meetings structured? How is the agenda determined?</p> <p>b) During these meetings do you find that you generally have enough information for review?</p> <p>c) How useful do you find these meetings? What type of feedback occurs in these meetings?</p> <p>d) For a given problem, how do you generally identify the root cause?</p>	<p>a) How are these reviewing meetings structured?</p> <p>b) Do you generally feel that you do have enough data for a fact-based review?</p> <p>c) What type of feedback occurs during these meetings?</p>	<p>a) How are these meetings structured? Tell me about your most recent meeting.</p> <p>b) How would the agenda for the meeting be determined?</p> <p>c) What type of feedback occurs in these meetings?</p> <p>d) For a given problem, how would you identify the root cause?</p>
<p>Consequence Management</p> <p><i>Tests whether differing levels of performance (not personal but plan/process based) lead to different consequences</i></p>	<p>a) Let's say you've agreed to a follow up plan at one of your meetings, what would happen if the plan weren't enacted?</p> <p>b) How long is it between when a problem is identified to when it is solved? Can you give me a recent example?</p> <p>c) How do you deal with repeated failures in a specific business segment?</p>	<p>a) Let's say you've agreed to a follow up plan at one of your meetings, what would happen if the plan weren't enacted?</p> <p>b) How long does it typically go between when a problem is identified to when it is solved? Can you give me a recent example?</p> <p>c) How do you deal with repeated failures in a specific sub-specialty or cost area?</p>	<p>a) Let's say you've agreed to a follow up plan at one of your meetings, what would happen if the plan wasn't enacted?</p> <p>b) How long does it typically go between when a problem is identified to when it is solved? Can you give me a recent example?</p> <p>c) How do you deal with repeated failures in a specific department or area of process?</p>	<p>a) Let's say you've agreed to a follow up plan at one of your meetings, what would happen if the plan weren't enacted?</p> <p>b) How long is it between when a problem is identified to when it is solved? Can you give me a recent example?</p> <p>c) How do you deal with repeated failures in a specific business segment?</p>
Target Setting				
<p>Types and Balance of Targets</p> <p><i>Tests whether targets cover a sufficiently broad set of metrics and whether financial and non-financial targets are balanced</i></p>	<p>a) What types of targets are set for the company? What are the goals for your plant?</p> <p>b) Tell me about the non-financial goals?</p>	<p>a) What types of targets are set for the hospital? What are the goals for your specialty?</p> <p>b) Tell me about goals that are not set externally (e.g. by the government, regulators)?</p>	<p>a) What types of targets are set for the school to improve student outcomes? Which staff levels are held accountable to achieving these stated goals?</p> <p>b) How much are these targets determined by external factors? Can you tell me about goals that are not externally set for the school (e.g. by the government or regulators)?</p>	<p>a) What types of targets are set for the company? What are the goals for your store/region?</p> <p>b) Tell me about the non-financial goals?</p>

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<p>Interconnection of Targets</p> <p><i>Tests whether targets are tied to the organization's objectives and how well they cascade down the organisation</i></p>	<p>a) What is the motivation behind your goals? b) How are these goals cascaded down to the individual workers? c) How are your targets linked to company performance and their goals?</p>	<p>a) What is the motivation behind these goals? b) How are these goals cascaded down to the different staff groups or to individual staff members? c) How are your unit targets linked to overall hospital performance and its goals?</p>	<p>a) How are these goals cascaded down to different staff groups or to individual staff members? b) How are your targets linked to system/ corporation performance and its goals?</p>	<p>a) What is the motivation behind your goals? b) How are these goals cascaded down to the individual workers? c) How are your targets linked to company performance and their goals?</p>
<p>Time Horizon of Targets</p> <p><i>Tests whether organization has a '3 horizons' approach to planning and targets</i></p>	<p>a) What kind of time scale are you looking at with your targets? b) Which goals receive the most emphasis? c) Are long term and short term goals set independently? d) Could you meet all your short-run goals but miss your long-run goals?</p>	<p>a) What kind of time scale are you looking at with your targets? b) Which goals receive the most emphasis? c) Are the long term and short term goals set independently? d) Could you meet all your short-run goals but miss your long-run goals?</p>	<p>a) What kind of time scale are you looking at with your targets? b) Which goals receive the most emphasis? c) Are long term and short term goals set independently? d) Could you meet all your short-run goals but miss your long-run goals?</p>	<p>a) What kind of time scale are you looking at with your targets? b) Which goals receive the most emphasis? c) Are long term and short term goals set independently? d) Could you meet all your short-run goals but miss your long-run goals?</p>
<p>Target Stretch</p> <p><i>Tests whether targets are based on a solid rationale and are appropriately difficult to achieve</i></p>	<p>a) How tough are your targets? Do you feel pushed by them? b) On average, how often would you say that you meet your targets? c) Do you feel that all groups receive the same degree of difficulty, in terms of targets? Do some groups get easy targets? d) What is the rationale behind the targets?</p>	<p>a) How tough are your targets? Do you feel pushed by them? b) On average, how often would you say that you meet your targets? How are your targets benchmarked? c) Do you feel all specialities, departments or staff groups receive the same degree of difficulty in terms on targets? Do some groups perhaps have easier targets?</p>	<p>a) How tough are your targets? Do you feel pushed by them? b) On average, how often would you say that you and your school meet its targets? How are your targets benchmarked? c) Do you feel that on targets all departments/ areas receive the same degree of difficulty? Do some departments/ areas get easier targets?</p>	<p>a) How tough are your targets? Do you feel pushed by them? b) On average, how often would you say that you meet your targets? c) Do you feel that all groups receive the same degree of difficulty, in terms of targets? Do some groups get easy targets? d) What is the rationale behind the targets?</p>
<p>Clarity and Comparability of Goals</p> <p><i>Tests how easily understandable performance measures are and whether performance is openly communicated to staff</i></p>	<p>a) If I asked your staff directly about individual targets what would they tell me? b) Does anyone complain that the targets are too complex? c) How do people know about their own performance compared to other people's performance?</p>	<p>a) If I asked someone on your staff directly about individual targets, what would he or she tell me? b) Does anyone complain that the targets are too complex? c) How do people know how their own performance compares to other people's performance? Is this published or posted in any way?</p>	<p>a) If I asked one of your staff members directly about individual targets, what would they tell me? b) Does anyone complain that the targets are too complex? Could every person in this school tell me what they are responsible for and how that will be assessed? c) How do people know about their own performance compared to other people's performance?</p>	<p>a) If I asked your staff directly about individual targets, what would they tell me? b) Does anyone complain that the targets are too complex? c) How do people know about their own performance compared to other people's performance?</p>
<p>Leadership Vision</p> <p><i>Tests whether leaders have an understanding of the broader set of challenges that their organization, system and key actors face and the right mindset to address them</i></p>	Leadership			
			<p>a) What is the school's vision for the next five years? Do teachers/ staff know and understand the vision? b) Who does your school consider to be your key stakeholders? How is this vision communicated to the overall school community? c) Who is involved in setting this vision/ strategies? When there is disagreement, how does the school leader build alignment?</p>	

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<p>Clearly Defined Accountability for Leadership</p> <p><i>Tests whether there is formal accountability among leaders for delivery of the organization targets and objectives</i></p>		<p>a) Can you tell me about the role that clinicians have in improving performance and achieving targets?</p> <p>b) How are individual clinicians responsible for delivery of targets? Does this apply to cost targets as well as quality targets?</p> <p>c) How do clinicians take on roles to deliver cost improvements? Are they selected for this role or do they volunteer? Can you think of examples?</p>	<p>a) Who is accountable for delivering on school targets?</p> <p>b) How are individual school leaders held responsible for delivery of targets? Does this apply to equity and cost targets as well as quality targets?</p> <p>c) What authority do you have to impact factors that would allow them to meet those targets (e.g. budgetary authority, hiring & firing)? Is this sufficient?</p>	
<p>Clearly Defined Leadership and Staff Roles</p> <p><i>Tests how clearly the roles, responsibilities and required attributes of staff are defined with the organization</i></p>			<p>a) How are the roles and responsibilities of the school leader defined? How are they linked to student outcomes/ performance?</p> <p>b) How are leadership responsibilities distributed across individuals and teams within the school?</p> <p>c) How are the roles and responsibilities of the teachers defined? How clearly are required teaching competences defined and communicated?</p> <p>d) How are these linked to student outcomes/ performance?</p>	
Talent Management				
<p>Instilling a talent mindset/ Managing Talent</p> <p><i>Tests what emphasis is out on overall talent management within the organization</i></p>	<p>a) How do senior managers show that attracting and developing talent is a top priority?</p> <p>b) Do senior managers get any rewards for bringing in and keeping talented people in the company?</p>	<p>a) How do you ensure you have enough staff/ nurses of the right type in the hospital?</p> <p>b) How do senior managers show that attracting talented individuals and developing their skills is a top priority?</p> <p>c) Do senior staff members get any rewards for bringing in and keeping talented people in the hospital?</p>	<p>a) How do school leaders show that attracting talented individuals and developing their skills is a top priority?</p> <p>b) How do you ensure you have enough teachers of the right type in the school?</p> <p>c) Where do you seek out and source teachers?</p> <p>d) What hiring criteria do you use?</p>	<p>a) How do senior managers show that attracting and developing talent is a top priority?</p> <p>b) Do senior managers get any rewards for bringing in and keeping talented people in the company?</p>
<p>Building a High-Performance Culture through Incentives and Appraisals</p> <p><i>Tests whether there is a systematic approach to identifying good and bad performers and rewarding them proportionately</i></p>	<p>a) How does your appraisal system work? Tell me about the most recent round?</p> <p>b) How does the bonus system work? Are there any non-financial rewards for top performers?</p> <p>d) How does your reward system compare to your competitors?</p>	<p>a) How does your appraisal/ review system work? Can you tell me about your most recent round?</p> <p>b) How does your staff's pay relate to the results of this review? How does the bonus system work?</p> <p>c) Are there non-financial rewards for the best performers across all staff groups?</p> <p>d) How does your reward system compare to that at other comparable hospitals?</p>	<p>a) How does your evaluation system work? What proportion of your employees' pay is related to the results of this review?</p> <p>b) Are there any non-financial or financial bonuses/ rewards for the best performers across all staff groups? How does the bonus system work (for staff and teachers)?</p> <p>c) How does your reward system compare to that of other schools?</p>	<p>a) How does your appraisal system work? Tell me about the most recent round?</p> <p>b) How does the bonus system work? Are there any non-financial rewards for top performers?</p> <p>d) How does your reward system compare to your competitors?</p>

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<p>Removing Poor Performers/Making Room for Talent</p> <p><i>Tests how well the organization is able to deal with underperformers</i></p>	<p>a) If you had a worker who could not do his job what would you do? Could you give me a recent example? b) How long would under-performance be tolerated? c) Do you find any workers who lead a sort of charmed life? Do some individuals always just manage to avoid being fixed/fired?</p>	<p>a) If you had a clinician or a nurse who could not do his job, what would you do? Could you give me a recent example? b) How long is under-performance tolerated? How difficult is it to terminate a nurse/clinician? c) Do you find staff members who lead a sort of charmed life? Do some individuals always just manage to avoid being fixed/ fired?</p>	<p>a) If you had a teacher who was struggling or who could not do his/ her job, what would you do? Can you give me a recent example? b) How long is under-performance tolerated? How difficult is it to terminate a teacher? c) Do you find staff members/ teachers who lead a soft or charmed life? Do some individuals always just manage to avoid being/ fired?</p>	<p>a) If you had a worker who could not do his job what would you do? Could you give me a recent example? b) How long would under-performance be tolerated? c) Do you find any workers who lead a sort of charmed life? Do some individuals always just manage to avoid being fixed/fired?</p>
<p>Developing Talent and Promoting High-Performers</p> <p><i>Tests whether promotion is performance based and whether talent is developed within the organization</i></p>	<p>a) Tell me about your promotion system. b) What about poor performers? What happens with them? Are there any examples you can think of? c) How would you identify and develop your star performers? d) If two people both joined the company 5 years ago and one was much better than the other what job opportunities would he/she have in the company?</p>	<p>a) Can you tell me about your career progression/ promotion system? b) How do you identify and develop your star performers? c) What types of professional development opportunities are provided? d) How do you make decisions about promotion/ progression and additional opportunities within the school, such as performance, tenure, other? Are better performers likely to be promoted faster or on the basis of tenure/ seniority?</p>	<p>a) Can you tell me about your career progression/ promotion system? b) How do you identify and develop your star performers? c) What types of professional development opportunities are provided? d) How do you make decisions about promotion/ progression and additional opportunities within the school, such as performance, tenure, other? Are better performers likely to be promoted faster or on the basis of tenure/ seniority?</p>	<p>a) Tell me about your promotion system. b) What about poor performers? What happens with them? Are there any examples you can think of? c) How would you identify and develop your star performers? d) If two people both joined the company 5 years ago and one was much better than the other what job opportunities would he/she have in the company?</p>
<p>Distinctive Employee Value Proposition</p> <p><i>Tests the strength of the employee value proposition</i></p>	<p>a) What makes it distinctive to work at your company as opposed to your competitors? b) If you were trying to sell your firm to me how would you do this (get them to try to do this)? c) What don't people like about working in your firm?</p>	<p>a) What makes it distinctive to work at your hospital, as opposed to other similar hospitals? b) If I were a top nurse or clinician and you wanted to persuade me to work at your hospital, how would you do this? c) What do you think people may not like about working at your hospital?</p>	<p>a) What makes it distinctive to teach at your school, as opposed to your other similar schools? If you were to ask the last three candidates would they agree? Why? b) How do you monitor how effectively you communicate your value proposition and the following recruitment process</p>	<p>a) What makes it distinctive to work at your company as opposed to your competitors? b) If you were trying to sell your firm to me how would you do this (get them to try to do this)? c) What don't people like about working in your firm?</p>
<p>Retaining Talent</p> <p><i>Tests whether the organization will go out of its way to keep its top talent</i></p>	<p>a) If you had a star performer who wanted to leave what would the company do? b) Could you give me an example of a star performer being persuaded to stay after wanting to leave? c) Could you give me an example of a star performer who left the company without anyone trying to keep them?</p>	<p>a) If you had a top performing manager, nurse or clinician that wanted to leave, what would the hospital do? b) Could you give me an example of a star performer being persuaded to stay after wanting to leave? c) Could you give me an example of a star performer who left the hospital without anyone trying to keep them?</p>	<p>a) If you had a top performing teacher who wanted to leave, what would the school do? b) Could you give me an example of a star performer being persuaded to stay after wanting to leave? c) Could you give me an example of a star performer who left the school without anyone trying to keep him?</p>	<p>a) If you had a star performer who wanted to leave what would the company do? b) Could you give me an example of a star performer being persuaded to stay after wanting to leave? c) Could you give me an example of a star performer who left the company without anyone trying to keep them?</p>