

An exploration of performance measurement
systems in global organizations and SMEs:
from a contingency perspective

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An exploration of performance measurement systems in
global organizations and SMEs: from a contingency
perspective

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Abstract

This dissertation presents the results of two in-depth case studies in manufacturing companies, one is US-based global organization, and the other is China-based local firm. At a general level, the research investigates the interaction between organizational context and organizational actions; more specifically, the study investigates the differences of PMS adopted in GOs and SMEs. Contingency Theory as a framework has been used to support the explanation of the differences of PMS adopted in GOs and SMEs. The results of the study indicate that different organizations choose to adopt different PMSs due to their various in strategy, external environment, organizational structure as well as technologies of the organizations.

Declaration

No portion of the work referred to in this dissertation has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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List of Abbreviations

BSC – the balanced scorecard

CT – contingency theory

EVA –the economic value added

GOs – global organizations

JIT – just-in-time

MCSs – management control systems

PMS –performance measurement system

TQM – total quality management

SMEs –small to medium size companies

Chapter one – Introduction

This chapter sets out to introduce the nature and scope of the investigation developed in the subsequent chapters of the dissertation. First, there is a brief discussion of previous research to justify the relevance of this study. Second, the research objectives are discussed. A third section presents the research questions and research methods; the final section briefly describes how the dissertation is organized.

1.1 Background of the Study

Over the last three decades a number of innovative management accounting techniques Activity-based techniques, strategic management accounting, the balanced scorecard (BSC) and the economic value added (EVA), for example, have been developed across a range of industries. It has been argued that these innovative accounting techniques were designed to support modern technologies and new management processes such as total quality management (TQM) and just-in-time (JIT) production systems, and to aid the search for a competitive advantage to meet the challenge of global competition (Luther & Abdel-Kader, 2008). Firms needed management control systems (MCSs) for the new requirements of these technological and management developments (Gerdin, 2005). However, not all the firms adopted the advanced techniques. Tilleman (2005) explained that “the appropriateness of using sophisticated techniques may depend on the circumstances in which these techniques are being used [and this] ... gives rise to the need to adopt a contingency theory perspective” (p.102).

The contingency theory (CT) of management accounting suggests that there is no universally applicable control system, but that the choice of appropriate control techniques will depend upon the circumstances surrounding a specific organization (Otley, 1999). The literature shows that important contingencies affecting MCS design include external environment, corporate strategy, technology, and organizational structure (Chenhall, 2003).

New technology and environment also affect the design and functioning of organizations (Covaleski et al., 1996). A growing number of global organizations emerge through acquisitions and mergers to seek a competitive advantage through globalization. Recently, management accounting scholars have turned their attention to the study of MAS in the context of global organizations (GOs). As examples, Cruz et al. (2009) studied variation in the practice of management control in a global/local setting; Busco et al. (2008) examined the role played by performance measurement systems within processes of integration in GOs; Dossi & Patelli (2008) explored the use of performance measurement systems in managing relationships between headquarters and subsidiaries within GOs; Quattrone & Hopper (2005) analyzed the effects of management control systems in multinational organizations; and Chow et al. (1999) investigated the effects of national culture on the design of management controls for multinational operations.

However, there are few studies that explore the characteristics of performance measurement system (PMS) – an important element of MAS - in GOs and local

small to medium size companies (SMEs). Global organizations possess characteristics that may affect the design and implementation of their PMS. An exploration of these characteristics or differences of PMS between GOs and local companies may enrich our understanding of PMS. Moreover, from a practical perspective, such an exploration may provide some insights for local firms who wish to develop as a global firm.

1.2 Purpose of the study

This study aims to research further into PMSs using CT. The aim is to enhance comprehension of why organizations use particular kinds of PMS and how contingency factors affect the design and implementation of the PMS chosen.

The research is particularly directed towards comparing PMS in GOs and local SMEs, and using CT to analyze the key factors which influence the implementation of PMS in both GOs and local SMEs.

1.3 Research questions and research methods

The main research question for the present investigation is: “Why do organizations choose different forms of PMS” Four specific and practical research questions derived from the main research question form the basis of this investigation. They are:

1. What are the differences in design of PMS within GOs and local SMEs?
2. What are the differences in implementation of PMS within GOs and local SMEs?
3. What are the differences in usage of PMS within GOs and local SMEs?

4. How does CT explain the differences?

In order to answer these research questions, a qualitative research design was adopted. Qualitative research is appropriate when the aim of the investigation is to obtain a holistic, integrated understanding of social phenomena, on the basis of rich, contextual and detailed data (Burgess, 1984; Mason, 1996; Miles & Huberman, 1994). Given the nature of the research questions, in-depth intensive case studies were selected as the research method and applied to the cases of two companies. The adoption of case studies has been advocated for studying management accounting practices in complex settings (Eisenhardt, 1989; Johnson, 1992; Kaplan, 1986; Scapens, 1990; Yin, 1994). An interpretive theory – CT - was used as theoretical support for these investigations. The steps suggested for conducting case studies (Scapens, 1990; Ryan *et al.* 1992; Yin, 1994) were followed. Several managers, non-managers, accountants and non-accountants were interviewed, and additional data was gathered using documentary analysis.

1.4 Organization of the dissertation

The remainder of this dissertation is structured as follows: Chapter Two provides a literature review of the PMS and first discusses the relationship of PMS and MCS. It continues with the description of the features of GOs and local SMEs and their PMS. It reviews CT in the context of management accounting research. It then moves to a discussion of the main features of CT and discusses the choice of CT to inform this study.

Chapter three begins with a short description of the case study approach. It

then proceeds to provide details of the main research steps employed to support the present research. The methods employed in this investigation are then described.

Chapters four and five, respectively, describe the results of the empirical work for the two case studies (Alpha and Beta). In each chapter, there is some background to the organizations and a portrayal of the design, implementation and usage of their PMS.

Chapter six compares and contrasts the two case studies and concludes with the main differences in PMSs, and the relevant factors which influence the design of each PMS.

Chapter seven presents the conclusions and pulls together the results of the two case studies in a manner which aims to advance the theoretical and practical contributions of this research. The strengths and primary limitation of the research are then presented, and avenues for potential further research are suggested.

Chapter Two – Reviewing literature of Performance Measurement Systems within global organizations and local firms and developing a theoretical framework

2.1 Introduction

This chapter first discusses the relationship between Management control systems and Performance measurement systems, then reviews the literature of PMS within global organizations and local SMEs. After that, it presents contingency theory (CT) as the theoretical framework for this research project. Following a literature review on CT, the main contingency factors that may influence the PMS design, implementation and usage are identified.

2.2 Management control systems and Performance Measurement Systems

Management control systems (MCS) have been described by Langfield-Smith (1997) as the processes by which managers ensure that resources are obtained and used effectively and efficiently to accomplish the organizations objectives, actions, or activities. These processes are also taken to influence the probability that managers and employees will behave in ways that lead to the attainment of organizational objectives. In this respect managers use formal and informal information-based routines, and procedures designed to maintain or alter patterns of organizational activities (Langfield-Smith, 1997). To make it simple, MCS are a set of processes that provide information which is intended

to be useful to managers and employees in performing their jobs and in achieving the organization's objectives. The information is also useful to assist the organization in developing and maintaining patterns of business activities. Therefore, MCS is a broad term that encompasses management accounting systems and also includes other controls, such as personal or plan controls, thus providing a broad scope of information. MCSs focus not only on the provision of formal, financially quantifiable information, but also on external information related to markets, customers, competitors, non-financial information related to production processes, predicative information and a broad array of decision support mechanisms and informal personal and social controls (Chenhall, 2007).

Anthony (1965) similarly identified MCS as 'management planning and control systems', so that the above definition can be said to fit within the traditional framework of MCS. Otley (1999) pointed out that the traditional framework concentrates on the core area of 'management control' only, and neglects elements of strategy and operations. He proposed a more comprehensive concept – a performance management framework for analyzing MCS structured around five central issues. These issues are: (i) objectives, (ii) strategies and plans for their attainment, (iii) target-setting, (iv) incentive and reward structures, and (v) information feedback loops. First, the strategy and objectives that an organization decides upon are central issues. Any control system requires objectives and goals against which its performance can be assessed (Otley & Berry, 1980). Also of importance, is the connection the organization makes between its objectives and the means by which they might

be realized. Thirdly, the performance standards that should be expected must be considered. Target-setting and performance measurement play a pivotal role in business management. Popular management theory considers that 'what gets measured, gets done'. Fourthly, the motivation and incentives relevant to consequences that follow from achievement or failure to achieve the pre-set performance targets may be important. Fifth, corrective action to rectify a perceived problem and to further predict the need for corrective action must be considered. Otley's (1999) framework focused on using performance management and strategic implementation to analyze the practical working of MCSs.

Literature on Performance measurement systems (PMSs) define it as a control system comprising PMSs that represent sets of metrics, which can be financial or non-financial, internal or external, short- or long-term, as well as *ex post* or *ex ante*, that are used to quantify both the efficiency and effectiveness of actions (Henri, 2006a; Neely, 1999) and to give feedback to employees on the outcome of actions (Bititci et al.,1997). Those performance metrics should also challenge the content and validity of the strategy (Ittner et al.,2003) and to implement the strategy within the organization (Gates, 1999). The definition of PMS is consistent with the framework provided by Otley (1999) who considered PMS as an important component in understanding MCSs within organizations and even synonymous with MCSs. In this research project, the terms of MCS and PMS are interchangeable. Furthermore, a formal PMS is considered to be a major mechanism that can be used to make explicit the set of means-end relationships that the organization has developed to implement its strategic

intent (Otley,1999). PMSs have also long been recognized as playing an important role in the efficient and effective management of organizations (Rejc & Slapnicar, 2004). Therefore, this research project chooses PMSs as its research arena and further explores their features in the organizational context.

2.3 PMS in global organizations

2.3.1 Characters of Global organizations

Global organizations (GOs) are generally defined as groups of wholly or partially owned affiliates located in different countries (Busco et al, 2008). Because of their very nature – multiplicity of business environments, internal diversity of affiliates, and the different backgrounds of their employees, unique characteristics can be found in GOs such as substantial complexity and heterogeneity (Busco et al, 2008). Heterogeneity is classified as *contextual*, *intra-organisational* and *individual* (Roth & Kostova, 2003). Because GOs have their affiliates operating in different countries, they face a variety of political, economic, legal, social and cultural circumstances which contribute to *contextual* heterogeneity. Meanwhile, diversity of strategy goals and orientation, governance and control mechanisms, and management practices and processes in the various units within GOs, leads to *intra-organisational* heterogeneity. Finally employees in GOs usually have different backgrounds, with different attitudes, values and beliefs impacts on *individual* heterogeneity. As a consequence of their complex and heterogeneous nature, issues of co-ordination and integration have always been crucial in research on GOs (Busco et al, 2008)

Latest research highlights several tensions that characterize processes of co-ordination and integration of GOs, namely vertical vs. lateral relations, the convergence vs. differentiation of practices, and centralization vs. decentralization of decision making (Busco et al., 2008).

Vertical vs. Lateral relations

Vertical relations refer to the headquarters-subsidary relationship. Research on this topic has paid considerable attention to the extent of the control exercised by corporate headquarters over its subsidiaries, i.e. how the headquarters regulate transactions with and between subsidiaries and how they delegate authority to the subsidiaries. According to Kostova & Roth (2002), the relationship between headquarters and subsidiaries is very important, because it affects the perception and interpretation of pressures from headquarters within diverse local subsidiaries and, consequently, affects the adoption of the parent company's practices by each subsidiary. In addition, the vertical relation refers not only to the controlling nature but to flexibility in the new organizational forms, as the relationship between headquarters and subsidiaries is increasingly being combined with more direct relations among subsidiaries within the complex matrix or network structures. (Busco et al., 2008)

Lateral relations are defined as relationships between subsidiaries. Lateral relations can enhance the communication and interaction among the subsidiaries within GOs, thus can promote knowledge, resources and ideas

sharing. (Busco et al., 2008) Nevertheless, Tsai (2002) found control exercised by headquarters over its subunits had a negative effect on the willingness to share knowledge between subsidiaries. Organizations that have strong headquarters-subsidiaries relations demand that information flow vertically, and co-ordination is achieved through the mediation of the headquarters. Therefore, lateral exchange of information between subunits is not encouraged and a reduced willingness to share knowledge results.

Convergence vs. Differentiation

Diverse individual and cultural backgrounds can be a major cause of conflicts within GOs. A common set of practices (i.e. convergence) can help to facilitate communication and knowledge transfer (Busco et al., 2008), and can thus mediate conflicts. Nevertheless, local practices related to local markets should be preserved so as to fit with the national business culture (Busco et al., 2006). Therefore, differentiation at local level is required. According to Vance (2006), convergence and divergence may work at different levels. For example, strategic decisions developed at headquarters may require global convergence, but the way to implement those strategies at the local level may require differentiation. To summarize, convergence and differentiation need to work together simultaneously in order to support global strategies and local business processes (Busco et al., 2008).

Centralization vs. decentralization

Centralization and decentralization reflect the extent to which decision-making authority is delegated by headquarters to subsidiaries. On the one hand, GOs want to enhance their competitive advantage across borders through centralization and co-ordination: on the other hand, there is a need for decentralization and local autonomy to adapt to local conditions. (Busco et al., 2008) Therefore, an appropriate balance between centralization and decentralization is necessary within GOs.

2.3.2 PMS in global organizations

Dossi & Patelli (2008) divided the evolution of PMS into GOs over three International Business eras, namely the *International* era, the *Global* era and the *Transnational* era. In the *International* era (in the 1970s), where organizational structure was the key mechanism used to control the multinational company, the relationship between headquarters and subsidiaries was characterized by a high level of centralization, and subsidiaries were mere implementers of the central strategy (Paterson & Brock, 2002). PMS were considered to be accounting-based mechanisms, whose use was mainly to measure and consolidate the financial results of decentralized units with low autonomy (Dossi & Patelli, 2008).

In the *Global* era, where the control of GOs shifted from selecting macro-organizational forms to designing management tools, PMSs were considered to be organizational mechanisms, whose use was not only to report and monitor financial results, but also to orient local behaviors through more pervasive performance measurements, coordinating delegated

decision-making (Dossi & Patelli, 2008).

In the present *Transnational* era, GOs are perceived as operating on a network basis, and have three main characteristics. First, they pursue an integrated worldwide strategy with geographically dispersed contributions. Second, they encompass distributed, specialized, and interdependent resources and capabilities. Third, they possess complex mechanisms of coordination and cooperation in an environment of shared decision-making (Malnight, 1996). PMS are shaped by the network of relationships in which each subsidiary is embedded (Andersson & Forsgren, 1996).

However, as Dossi & Patelli (2008) pointed out, prior studies of PMS in network-based GOs do not examine the use of PMS in managing these relationships specifically. Their research project focuses the role of PMS influencing the decision-making of subsidiaries. Their findings suggest that PMS have a greater influence on decisions in cases of higher subsidiary participation in PMS design, headquarters' cultural tolerance for uncertainty, subsidiary size, and global pressures; while measurement diversity and the linking of PMS to reward mechanisms have no significant impact on their decision-making. Moreover, their research reveals the existence of PMS decoupling – the independent development and use of local PMSs by subsidiaries in addition to the PMS implemented by headquarters. They argue that the combination of the PMS implemented by headquarters and the PMSs developed by subsidiaries can affect local economic performance.

On the other hand, Busco et al.'s (2008) research project also focused on the role played by PMSs in managing tensions in the relationships within GOs. They suggested that formal and informal mechanisms should combine to manage the tensions of integration, due to the conflict between cooperating and competing characteristics in the vertical and lateral relations in GOs. Formal PMSs can be used to collapse the distance between diverse entities, and create corporate direction within GOs, while informal interaction and knowledge sharing can produce a degree of trust which can both challenge and reinforce formal structures and systems.

In the same way, Cruz et al. (2009) described the combination of formal and informal mechanisms as loose coupling, such that the corporate headquarters of GOs have established standardized global management control systems (formal ones), and diffused them throughout the organization to ensure a convergence of global goals and practices. The managers of subsidiaries in the organization adapted the formal systems imposed by headquarters when integrating them into their internal day-to-day work processes and, thus, can both respond to global systems and meet local market conditions. However, their research indicated that local practice variations in management control systems are not necessarily due to tensions between institutional and technical requirements, as suggested by Busco et al. (2008). Local practice variation may be inevitable and necessary to implement global systems. Furthermore, they suggested that practice variation may contribute to the creation of global practices and thereby make globalization possible. That's because a particular product may have different meanings in different countries. Cruz et al. (2009)

referred to an good example provided by Beck (2000), which says “Mexican food is now a global product which is available in many countries. However, what Mexican food means in Mexico, may be quite different from what it means in the UK, Portugal, Australia, the USA, etc, due to culture differences, raw material differences, etc. We could say that Mexican food has only become a successful global product because of these practice variations” (p.114).

Turning to the issues of convergence vs. differentiation, Busco et al.'s (2006) study explored how a former state-owned Italian company, which was acquired by General Electric (GE), was integrated into the global GE organization through global PMS. The very characteristic of PMSs is a global language of measurement and accountability which helps to translate operational targets and achievements into financial terms. It implies that GOs favor the financial measure.

It is often to see GOs operate in many countries across the word, they treat the world as one single market composed of a few standardized, rather than many customized variables. There are two common kinds of strategies implemented in GOs: one a global strategy, the other a multinational strategy. In a global strategy, the development of common products designed for distribution throughout the world is the main object and, in this, similarities across various national markets are the main focus. By contrast, in a multinational strategy, the emphasis is on various needs from local markets in different countries, and on accommodating differences between national markets.

To summarize, a GO is a company that has subsidiaries and/or joint ventures spread across many countries, thereby competing on a worldwide basis with other firms in its industry (Cruz et al., 2009). Furthermore, GOs integrate geographically dispersed activities through co-ordination by corporate headquarters in order to achieve competitive efficiency on a global-scale (Cruz et al., 2009).

In response to the above description of characteristics and/or contingency factors in GOs, this literature review suggests that GOs often standardize accounting systems within their headquarters and subsidiaries across the world so as to achieve co-ordination in, for example, the implementation of global PMSs within the GOs; and focus on financial measures so as to establish a global language of measurement and accountability. However, it is also common to see a decoupling or a loose coupling of PMS within GOs. Decoupling of PMSs is the autonomous development and use of a local PMS by subsidiaries in addition to the PMS implemented by headquarters. Loose coupling of PMS means there is only one global PMS implemented in subsidiaries. However, managers in subsidiaries adapt some practices of global PMS in response to local market requirements. Some scholars have considered different practices of PMS in subsidiaries as being due to tensions between subsidiaries and headquarters, while others have suggested that varied practices in global/local settings may be inevitable, and necessary in order to implement global systems.

2.4 PMS in local SMEs

2.4.1 Characteristics of Local SMEs

There is no specific definition of a local firm in the literature. In order to draw a comparison of two extremely different kinds of companies, local firms are defined in this study as small to medium size companies (SMEs) that operate only in the domestic country. There are no other affiliates or subsidiaries operating in other countries. As compared with GOs, they possess little complexity and heterogeneity and focus more on the local market. Therefore, the local firm doesn't possess the unique characteristics which may exist only in GOs.

2.4.2 PMSs in SMEs

Very little empirical and theoretical research has been carried out on PMSs in SMEs. Therefore, it is not possible to draw an explicit literature review on this topic. Garengo et al. (2005) identified some difficulties to implement PMSs in SMEs. First, because of the time and human resources limitation, it is difficult to develop performance measurement projects in SMEs. Even some companies that do take part in these projects rarely continue on to the last phase. Second, SMEs either do not use a PMS or they implement only some parts of a general model. Even if general models were applied correctly, they wouldn't be suitable for SMEs, as small enterprises are different from big companies. Third, small companies focus on operational and financial performance and rarely measure innovation, human resources, work atmosphere, R & D, and training. Therefore, balanced models of PMS are seldom used. Fourth, the approach to PMS in

SMEs is informal. It is not planned and based on a predefined model. When specific problems emerge, a PMS will be introduced to solve them. Therefore, there is lack of linkage between the PMS and organizational strategic planning. Moreover, the aim of PMSs in SMEs is to gather information (which focuses on past activities) to support the control activities rather than the forecasting and planning processes. Fifth, because of the limited resources in SMEs, data is gathered and analyzed using an informal or imprecise approach which may result in ambiguity of the measurements and incorrect performance review. Consequently, the PMS might not be usable for achieving strategic objectives.

2.5 Theoretical framework

Traditional PMSs focus on financial results because of a legislation requirement. Scholars criticized traditional PMS as having limited flexibility, lacking strategic focus, and encouraging short-term achievement with local and fragmented optimization (Bourne et al, 2000; Lynch & Cross, 1995). Neely (1999) pointed out additional factors to which traditional PMSs cannot respond. These include the changing nature of work, increasing competition and specific improvement initiatives. Further features are national and international quality awards, changing organizational roles and changing external demands. The power of information technology in today's business environment requires better management accounting information to assist organizations to achieve success (Neely, 1999). Thus, contemporary performance measurement assigns equal importance to both the purposes and objectives of an organization, as well as to the processes and other drivers of success (Kaplan & Norton, 1996).

Measures must reflect the strategies and capabilities of the organizations and not just the financial results (Rejc & Slapnicar, 2004). PMS change along with the business environment of organizations: from focusing on financial results so as to respond the legislative requirement to combining both financial and non-financial measurements, in order to provide complete information in today's highly developed technological and increasingly competitive business environment. As discussed in the previous sections, PMSs may even vary between GOs and local SMEs.

The contingency approach to management accounting suggests that there is no universally appropriate accounting system that applies equally to all organizations in all circumstances (Otley, 1980). It is based on the view that the effectiveness and efficiency of organization results from fitting management practices, i.e. PMS, to the contingencies/contexts within which the organization operates (Chenhall, 2006). In other words, an organization will choose the particular features of an appropriate accounting system depending on the specific circumstances surrounding it. Consequently, PMSs must reflect the context to which they are applied. CT provides insights into how organizations adapt in response to the changing situations (Chenhall, 2006). Thus it appears that the design of an organization's PMS should change when the same conditions appear (Rejc & Slapnicar, 2004). Contingency theory (CT) provides an explanation of why MCS vary between firms operating in different setting (Fisher, 1995; D. Otley, 1980). Therefore, contingency theory has provided scholars with an important framework for studying organizations and the role of management accounting within the organizational context (Chenhall, 2003).

Emmanuel et al. (1995) identified three main classes of contingent factors that influence the design of an accounting system. First is the *environment*, which can be described as the degree of predictability, the degree of competition faced in the market place, the number of different product/markets encountered, and the degree of hostility exhibited. Next is *organizational structure*, which means the organizations size, interdependence, decentralization and resource availability. Finally there is *technology*, which refers to the nature of the production process or the degree to which it can be made routine. The three factors will be discussed in order as follows.

The environment factor possesses an inherent feature of uncertainty, which confronts the organization with difficulties in planning the future. Evaluating performance could become difficult as managers' performance may depend on unpredictable events over which they have little control (Chenhall, 2006). In addition to uncertainty, other factors such as market competition, product and customer diversity as well as hostility could present managers with threats and opportunities to develop strategies. Decisions about how to manage these factors may have an important impact on managers' performance (Chenhall, 2006).

Organizational structure on the other hand, is about how the organization develops a set of formal structural arrangements used to specify different roles or tasks for employees in order to ensure that the activities of the organization are carried out (Chenhall, 2006). In management accounting, organizational

structure is concerned with the extent of decentralization of authority and integration of sub-units' activities. Decentralization and integration are two competing concepts. To achieve decentralization, performance measures may need to be sensitive to the decision-making autonomy of divisional managers, while to achieve integration specific performance measures may be required (Chenhall, 2006). In this respect, the tensions in the vertical and lateral relations, and the centralization and decentralization which discussed in the previous section, contribute to the complexity settings of organizational structure in GOs.

Furthermore, organization size is an important variable affecting both structure and other control arrangements (Emmanuel et al., 1995). Exposure to more diverse product-market environments and pressure from more stakeholder groups, requires comprehensive performance measurement systems to cope with the increasing levels of complexity and diversity if growth is to be increased (Rejc & Slapnicar, 2004).

Finally, technology refers to how the organization's work processes operate, i.e. how to allocate resources including machines, tools, materials, people, software and knowledge into the business operation (Chenhall, 2006). Technologies present important contingencies for the organizations due to production complexity, task uncertainty in high variability and output measurement, as well as process interdependencies. These contingencies present challenges for the design of PMSs (Chenhall, 2006). In GOs, its internal process highly interdependencies due to the requirement for convergence in

global level as well as production complexity due to the maintenance for differentiation in local level, indicate that the technology is complex. While, in SMEs, because it lack of resources in machines, tools, materials, people, software and knowledge into the business operation, it is unnecessary and/or reasonable to establish complex operation process. Therefore, it could be said that it is less complexity of technology in SMEs.

Moreover, Dent (1990) put forward some arguments that differences in corporate strategies should logically lead to differences in the design of control systems. An organization strategy refers to how to select its markets, products and technologies. Therefore, the adaptation or alteration of strategy might initiate a change of PMS. Strategy is somewhat different from other contingency variables. The choice of strategy is flexible in the hand of the managers in the organizations. Therefore, it could be the means whereby managers can influence the nature of the external environment, the technologies of the organization, the structural arrangements, and the control culture and the MCS (Chenhall, 2007).

Furthermore, Henri (2006b) argues that the use of a PMS could be another contingency factor that influences its design. His findings indicated that top managers reflecting a flexible type of management culture tended to use comprehensive performance measures, and to use PMSs to focus organizational attention to a greater extent on supports for strategic decision-making and legitimate actions. In this respect, it is the control culture/the management style which influences the use of PMS. In this

research project, it presents that the management style is another contingent factor that influences the use of PMS and further influences the design and implementation of PMS.

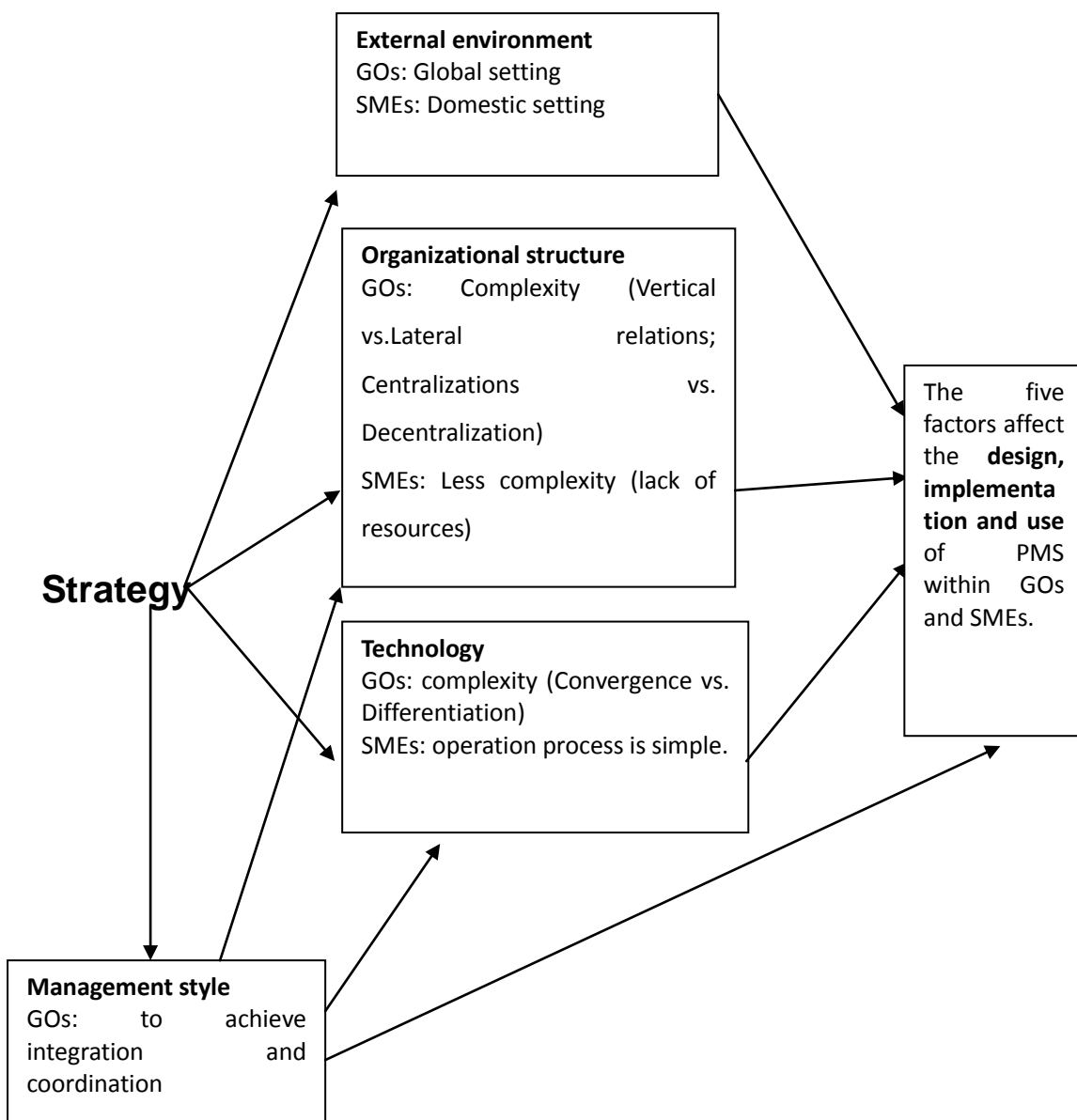
The above contingency factors including environment, organizational structure, technology, corporate strategy and the use of PMSs are expected to impact on the adoption of particular PMSs in the case study organizations. GOs and local firms confront different environments because they have different organizational structures, and possess different technology and, thus, may need to develop different strategies. Consequently some differences in their PMS should be expected. Besides, Chenhall (2003) concludes his extensive review on empirical contingency-based research developed since 1980s, that “to maintain the relevance of MCS contingency-based research, scholars will need to focus their attention on contemporary dimensions of MCS, context and organizational and social outcomes” (p.161). In this study, the researcher looks at contemporary dimensions of management accounting practices and the context within which they operate. Two different kinds of organizational (GOs and SMEs) characteristics are examined as contextual contingency factors that could affect the design, implementation and usage of their PMSs. Figure 2.1 depicts these contingency factors and their potential relationships with PMS.

2.6 Conclusion

This chapter reviews PMS from a contingency point of view and analyzes different contingency factors which have important implications in the design, implementation and use of PMS. It discusses respectively, the characteristics of

GOs and local firms, and how PMS are implemented within GOs and local firms. Literature has underlined certain differences between GOs and local firms. However, there is lack of research exploring how these differences influence PMS. There is the need for systematic comparison of PMS within GOs and local firms and for an exploration of the main contingency factors which influence PMS.

Figure 2.1 contingency factors and their relationship with PMS



Chapter Three – Research Methodology

3.1 Introduction

This chapter presents the methodological issues related to the investigation carried out in this dissertation. The aim is to specify the adopted research design, and to explain how the two case studies were conducted, and the evidence gathered and analyzed. This Chapter is structured as follows: first it discusses why qualitative research methods and the case study approach were adopted in the context of this investigation. It follows by specifying the case study design and its execution, and describes the methodology used to gather and analyze the empirical data. Finally, a conclusion is drawn.

3.2 Qualitative research methods and the case study approach

This study follows a qualitative research method to obtain a holistic, systematic and integrated understanding of the differences of PMS within GOs and local firms, based on rich, contextual and detailed data (Burgess, 1984; Mason, 1996; Miles & Huberman, 1994). More explicitly, this study focuses on Why do organizations choose different forms of PMS , what are the design, operation and usage differences of PMS within a GO and a local firm, and how does CT explain those differences? Such questions are typical of qualitative research (Patton, 1987).

Qualitative research methods have been recommended by numerous scholars in the management accounting discipline. They have suggested that such methods provide a rich description of social world which helps understand how

accounting meanings are socially generated and sustained (Hopper & Powell, 1985; Hopwood, 1983; Humphrey & Scapens, 1996; Kaplan, 1983; Scapens, 1990).

Qualitative research methods include case studies, field surveys and participant observation. And qualitative data “consists of detailed descriptions of situations, events, people, interactions, and observed behaviors, direct quotations from people about their experiences, attitudes, beliefs and thoughts” (Patton, 1987, p. 22). Qualitative research methods and qualitative data play a very important role in exploring inside the ‘black box’ of an organization. Many writers suggest that researchers need to continually define and redefine an organization’s characteristic through the processes of socialization (Miles, 1979; Patton, 1987; Yin, 1994). Case studies can help to meet such objectives (Silverman, 1994), allow the researcher to become closely familiar with the context of the research (Campbell, 1975), and help describe and explain the processes of an organization’s behavior (Scapens, 1990). Yin defines a case study as:

An empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident, and in which multiple sources of evidence are used (1994, p.13).

Case studies have been advocated in management accounting research in complex organizational settings by many scholars (Burns & Kaplan, 1987; Eisenhardt, 1989; Kaplan, 1983; Scapens, 1990). Furthermore, the recent

interest in case studies is the result of the perceived gap between textbooks, which have mainly adopted a normative emphasis (i.e. 'what ought to happen'), and organizational practice (i.e. 'what actually happens') (Scapens, 1990).

Case studies are an appropriate research strategy to adopt when the research questions are "how" and "why"; when control over behavioral events is not required; when the research is focused on contemporary events; and when the researcher wishes to understand an organizational phenomenon in its real-life context (Yin, 1994). The investigation conducted in this dissertation research falls into these categories.

Since the primary aim of this study is to gain an understanding of PMS within GOs and local firms, company case studies will be adopted for this study. Furthermore, it is held that case studies provide a suitable means by which to explore the contingent factors which influence PMS in design, implementation/operation and usage in both GOs and local firms.

3.3 Methods employed for the two case studies in the dissertation

The empirical work carried out for the two case studies in this study tried to follow the six steps described. Furthermore, it was decided to facilitate access to the companies by sending them a letter of introduction describing the main aims of the investigation, the research methods to be adopted and, also, to guarantee confidentiality.

This study utilized multiple sources of evidence during the data collection phase. In the two company cases (Alpha and Beta), evidence was gained mostly through:

- a) Interviewing people at different organizational levels including accountants and non-accountants; and,
- b) Company documentation including internal used reports both financial and non-financial; and the company website.

The two case studies which support this dissertation were conducted were a China base local firm (“Alpha”) – a middle size manufacturing company producing stainless products with about 500 employees; and a subsidiary company (“Beta”) situated in China owned by a US based global organization – a leading elevator manufacturing company with about 1000 employees. These two organizations were in the same industry – manufacturing organizations and implemented different kinds of PMS. The researcher considered the exploring of PMS in the two organizations could answer the research question

To fulfill the purposes of this study, two forms of triangulation were applied, namely, ‘data triangulation’: the use of a variety of data sources in a study, and ‘methodological triangulation’: the use of multiple methods to study a single problem or program (Patton, 2002, p.247). Patton (2002) states that triangulation strengthens a study by combining methods, such as using quantitative and qualitative approaches, and intermixing interviewing, observation and documentary analysis. In this investigation, two comparative case studies, and mixed methods, i.e. interview, document and record analysis

were conducted for 'methodological triangulation'. Secondly, various sources of data within each data collection method were applied for 'data triangulation'. The processes and techniques of collecting, recording and analyzing the empirical data by the researcher in the study are discussed next.

3.3.1 Interview Techniques

Interviews are one of the most frequently used methods adopted when developing qualitative research (Mason, 1996; Miller & Glassner, 1997). In-depth interviewing gives the interviewer a detailed, rich and holistic understanding of people's experiences, opinions, feelings and attitudes (Mason, 1996; May, 1997; Patton, 1987). May (1997, p.129) has claimed: "interviews are used as a source for understanding how individuals make sense of their social world and act within it". Moreover, interviews are very demanding and require "skill, sensitivity, concentration, interpersonal understanding, insight, mental acuity, and discipline" from researchers (Patton, 1987, p.108). To conduct the whole interviewing process successfully, researchers need a good knowledge of interviewing techniques so as to formulate the right questions in the right way, listen carefully, take notes, and follow up with additional questions (Yin, 1994; Patton, 1987).

In this investigation, a semi-structured interview format was adopted. This typically utilizes techniques from focused and structured methods and is normally supported by an interview guide to help the researcher make sure that all important topics and issues are covered (May, 1997). Interview guides were prepared for supporting the interviews and these helped the researcher to

conduct the interviews in a flexible, but systematic and comprehensive way.

Telephone interviewing was used in this study. The language used during the interview was Chinese and each interview was about 20 to 30 minutes. The primary choice of case study companies are those situated in New Zealand, because the researcher is resident in New Zealand. Due to the failure to get access in global organizations in New Zealand, the researcher turned to the alternative companies which were the two organizations in China, Alpha and Beta. Where there is a distance issue between the interviewees and interviewer, telephone interviewing is a possible alternative to be taken by the researchers (Gillham, 2000). The telephone interview works best in small-scale research, and it is perfectly feasible to record telephone interviews, which enables the researchers to focus on responding to the interviewees (Gillham, 2000). Each telephone interview in this study was arranged at a time that suited the interviewee. Similar techniques to those used in face-to-face interview were applied to the telephone interview.

Interviewees were encouraged to speak freely about what they felt was most affecting them and their job. To facilitate free communication and interaction between the researcher and interviewees, the purpose and methods of the research were presented and confidentiality was stressed before the beginning of each interview. Furthermore, when the interviewees emphasized a particular aspect or issue not initially planned for discussion, the researcher encouraged them to further express their points of view. This helped to show to the interviewees that the researcher valued their participation and opinions. It also

contributed to the development of confidence and trust between the interviewer and interviewee.

The evidence from the interviews was further reinforced by documentary evidence and follow-up questions were used to further clarify their response to some of the initial questions.

3.3.2 The population

In-depth semi-structured interviews were conducted over a period of fifteen days in Alpha with 5 interviewees and over another ten days with 3 interviewees in Beta. There were 15 interviews taken in total. The interviewees were selected from different levels of the organizations.

In these two case studies, sampling of respondents took place with different people in different contexts. Both accountants and non-accountants were interviewed in order to determine which management accounting information was used in the management process by the various managers and decision makers.

Regarding Alpha, two groups were interviewed. First, people working in the Alpha head office, including the Managing Director, Financial Controller and Personnel Director. Second, people in the factory were interviewed, including the Factory General Manager, and shop floor people. In Beta, the people interviewed were also categorized into two groups: first, people at management level, including the Managing Director and Personnel Director; and second,

people at non-management level i.e. shop floor people.

3.3.3 Recording the data

In this research, interviews were recorded by using: note-taking during interview and telephone recording. These two methods were adopted to help the researcher better understand the perspectives and experiences of people being interviewed (Patton, 1987). All the interviews taken in this study were recorded and later transcribed. The transcription of interview has been sent back to interviewees for the purposes of validation. Finally, three kinds of data: the completed transcriptions, notes, and other supplementary documents provided by the interviewees formed the database.

3.3.4 Analysis of the data and developing explanations

For the two case studies undertaken in this study, the researcher adopted Patton's (1987, p.144) processes during the data analyzing procedure, which are: 'category construction' and 'sense making'. The first is to bring order to evidence by organizing it into patterns and categories. The second is to attach meaning and significance to the analysis, and to build linkages and relationships among dimensions in order to get explanations and to describe patterns. The qualitative data analyzing methods suggested by Miles and Huberman (1994) were also adopted in this study. They are data reduction, data display and conclusion verification.

During the data reduction process, in order to identify the specific issues from the each interview, the researcher read the transcripts of the recorded

interviews several times with special attention given to the expressions. Later on, the research summarized those issues in separate sheets for each interview. When common sequences and patterns were spotted from those sheets, data reduction was made and similar themes were clustered and categorized. Meanwhile, the research closely detected dissimilarities of perception among interviews and evidenced the disconfirmed patterns. These procedures were operated to assure the validity of the analysis.

The data display then followed, “to understand what is happening” and was considered as a “major avenue to valid qualitative analysis” (Miles and Huberman, 1994, p.11). In this study, ‘conceptually ordered displays’ as suggested by Miles and Huberman (1994) were used, since the researcher wanted to better understand the relations between the issues and themes analyzed previously. The display provided an overall view of the subjects of this investigation.

At the stage of drawing and verifying a conclusion, rival explanations for the patterns, categories and interrelations amongst all constructs were formulated, thoroughly compared and analyzed (Yin, 1994). In order to check for alternative explanations, inductive and logical reasoning as suggested by Patton (1987) were conducted. First, the researcher looked at other ways of organizing evidence that could have lead to different conclusions, and second, tried to think about other possible explanations and then check whether these explanations could be supported by evidence (Patton, 1987). During this process, the researcher collected additional data from the key informants in the organizations, getting

feedback from interviewees and, finally, concluded that the explanations developed were meeting the criteria of plausibility, sturdiness and conformability (Miles and Huberman, 1994).

3.4 Conclusion

This chapter described how the research study was conducted and how field research provided direct observation of the PMS and its features in the two case study companies.

Chapter Four – Case study one: Alpha—local company

This chapter discusses the findings of the first case study aimed at exploring the design, implementation and usage of PMS in a local company. Chapter Four is structured as follows. Section 4.1 presents the background of Alpha. Section 4.2 discusses the design of PMS in Alpha. Section 4.3 discusses the implementation of PMS in Alpha. Section 4.4 concludes with some remarks.

4.1 The background of Alpha

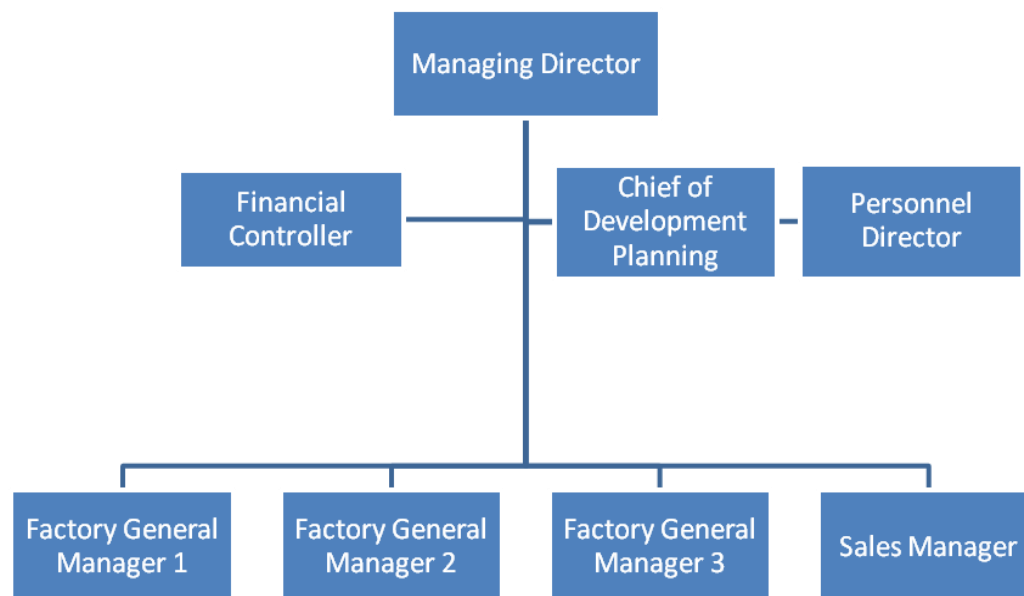
Alpha is a middle size China-based dishware manufacturer, which was established in 1996 and has been in business for almost thirteen years. The company manufactures a wide range of dishware for the international allied industries.

Manufacturing started at a small site in 1996 and the company grew steadily through the expansion of other two sites and a sales office (see Figure 4.1 Organizational chart). Alpha began as a private-owned family company which had 20 employees and developed to a group company which had over 500 employees in 2004. Such growth was mainly attributable to the successful export of customers' own designed products and the reform and opening policy executed in China. From 1996 to 2004, around 90% of the earnings derived from contracts for pre-designed products with individual customers (as opposed to 10% for domestic sales of self-designed products), and the binding contract with a single customer normally extended over 2 years. After 8 years of business, Alpha had maintained a group of loyal customers and developed

good market credit and reputation.

However, in 2004, the Managing Director realised that the costs within the Group were very high. It was not worthwhile for the Group to further expand its business. Moreover, competition in the market had increased. The Managing Director decided to change the strategy from focusing on market share only to cost reduction and new production line development.

Figure 4.1 Alpha's Organizational Chart



4.2 The old PMS in Alpha

Because Alpha was established as a private family company, PMS established initially had been informal, or on paper only, and not actually employed in day-to-day business. Most of the initial employees were family members. They had a strong blood bond to the company. Therefore, they trusted each other, and were fully dedicated to the company. A formal system was not necessary at

that time.

However, PMS didn't develop with the expansion of the company. Alpha still used the same PMS by 2004 but not in an effective way. The established measures were not reasonable, achievable or objective. The senior managers seldom used them to evaluate the employees' performance and never used them as the criteria for promotion. They just believed in their own judgment. Because the established measures were not practical, the senior managers considered the annual evaluation procedure waste of time. They didn't bother to participate in the evaluation or to carefully provide the required information. At the level of front-line employee, the non-practical measures couldn't direct their actions. They felt that subjective judgment by the managers played an important role in assessing their performance. Because of the subjective judgment ruling the assessment of employees' performance, one of the interviewees from front-line level mentioned that he had no inspiration to dedicate himself in his job. He even considered that the managers pushed the subordinates hard in the workplace to fulfill their own personal interests. This resulted in an unfriendly working environment due to lack of trust and equity between employees. Consequently, people in the head office felt helpless to motivate the employees toward the objectives of the company.

Based on the above information, there are four issues which need to be addressed with the PMS. First, the PMS was unable to motivate the employees. Second, the PMS couldn't direct the employees' work performance. Third, it lacked a connection between the company's development and individual

development. Fourth, no useful feedback information could be gathered from the PMS. Therefore, the Managing director considered that a brand new PMS was needed to assist Alpha's continuous expansion or even to survive in the highly competitive business environment.

4.3 New PMS design

Here, I will use one department, the Group Development Planning Department (GDPD) in Alpha, as an example of the way in which Alpha developed a brand new PMS. There were seven steps taken to establish performance measures to evaluate the chief of GDPD.

The first step was to develop Alpha's strategy and annual objectives. Alpha had been focusing on increasing market shares and output in last 8 years. Until 2004, the Managing Director realized that the group increased output only by increasing the number of employees and amount of equipment rather than by increasing production capability. Therefore, the increased sales revenue resulted in no net profit increase. And there was a lot of pressure put onto the Managing Director to explain the huge fixed cost from employees and equipment every year. In order to maintain market share and enhance competitive ability in the business environment, Alpha needed to increase production capability and product quality, reduce production cost and develop high production techniques.

In accordance with the above long term strategy, annual objectives were set up using the balanced scorecard approach. (See Figure 4.2.)

Figure 4.2. The Balanced scorecard approach

<p>Financial term:</p> <ul style="list-style-type: none">-Sales revenue: 40 million;-Net profit: 1.3 million; <p>Customer term:</p> <ul style="list-style-type: none">-Complain ratio reduced by 20%; <p>Internal process term:</p> <ul style="list-style-type: none">-Completed the research and develop of Model CA498 Painting;-Completed the design of Model AC507;-Product quality standard reaches the requirements of ISO/TS15982 and QS9000;-Defect rate reduces by 20%-Research and develop cost is 1 million. <p>Learning and develop term</p> <ul style="list-style-type: none">-Average training days per person per year is 15;-Increase the management level and maintain the innovation achievement;

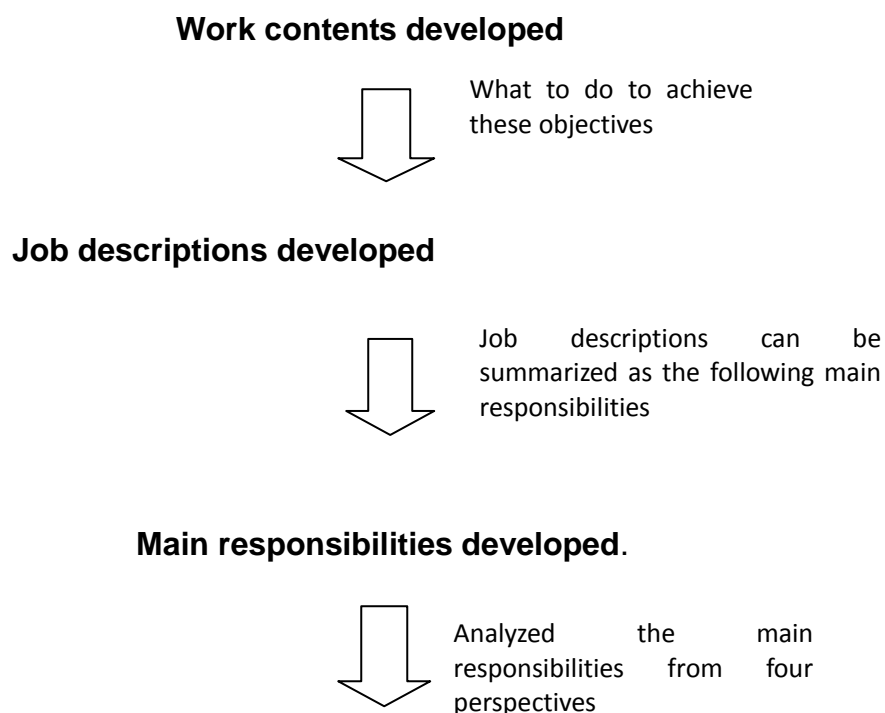
(Source: documents obtained from GDPD)

And then the seven- steps procedure to develop the performance measures is summarized as follows. (See Figure4.3)

The first step is to develop the main work contents, which include an annual investment plan, a customer services plan and a product design plan. An outline of job descriptions that identify what is needed to achieve the established plans follows. The job descriptions contain two parts. The first part focuses on organizing and planning for production, factory management, logistics, energy usage, technique development, new product design and new

equipment investment. The second step emphasizes the reports to be written up, including production and development reports provided to the CEO: the development implementation plan, project schedules and investment budget.. The third step is to summarize the main responsibilities in accordance with the job description. For example: to execute ongoing development and investment plans in line with Alpha's annual objectives and investment budget; to execute and control the approved development plans; to execute the proposal plans for product design and control the quality in production procedures; to execute the plans for repairmen and maintenance of factories, business buildings and other equipment. The fourth step is to analyze the main responsibilities from four perspectives, and follows the identification of the key performance indicators to fulfill the four perspectives. The sixth step is to specify the performance measures required to evaluate the defined key performances (See Figure 4.4). And finally, the last step is to check for consistency with the annual objectives.

Figure 4.3. The six steps process

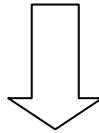


Financial perspectives: project costs and administration costs should be controlled within the accepted limit.

Customer perspectives: high satisfaction levels from external and internal customers should be maintained.

Learning and development: effective feedback information collection procedures and effective plans for employees' training and development should be available.

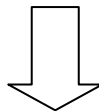
Internal procedures: Pre-established standards designed to accomplish the projects should be followed.



How to fulfill the four perspectives

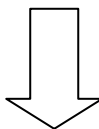
Key performance indicators

1. Control the project cost and administration within the excepted limit
2. The satisfaction level of the projects
3. Information collection and management
4. The ability to establish development projects
5. The completion rates of the projects



How to evaluate performances?

Specify performance measures



Check for the consistency with the annual objectives

Figure 4.4 Performance measurement form of the chief of GDGP

performance measures (m)	Evaluation formulas or principles	Proportion	Score (r x m)
Project cost control	The deviation between the final cost and the planned budget should be smaller than $\pm X\%$	0.1	
The ability to develop the projects and control the implementation of the projects	Evaluated by internal customers (other departments which associate with the projects). Total scores should not be lower than X.	0.3	
Projects completion rates	Actual projects completion rate should not be lower than 95%.	0.3	
The ability to control the implementation of the long term projects	The actual completion time should not be over 5% of the total plan completion time	0.1	
Satisfaction level	Evaluated by satisfaction level from	0.1	

of the projects	the external and internal customers. Total scores should not be lower than X.		
Information collection and management	Evaluated by the comprehensiveness of collected information, on time and easy to read reports. There are evaluated by satisfaction level from internal customers. Total scores should not be lower than X.	0.1	
Total		score	
☐			

Therefore, the design of PMS is closely linked with the new strategy and assists its implementation.

Individual development plan (IDP) developed

The individual development plan is a systematic plan for improving personal ability so as to achieve individual objectives within a particular period.

First, it is necessary to specify the personal abilities that need to improve.

These abilities should be identified in accordance with individual performance measures, and take into account the individual job responsibilities and required skills. After full discussion with the individuals and their supervisors, the

particular abilities are specified and action plans are developed. The action plan should specify which methods should be used to improve the personal abilities that were identified: for example, training, rotation, or participation in related projects. It should also specify the time period during which the action plan and evaluation methods should be executed. The results of the action plan may be an eligible certificate, professional certificate, or performance evaluation results from participation in the projects or rotations. The final step is to follow up the individual development plan after implementation. (See Figure 4.5 as an example of the IDP for the chief of GDGP)

The purpose of establishing an IDP is to improve an employee's personal ability to finish his/her job objectives. If the IDP were not implemented, or the employee felt no support from the company, performance evaluation, and consequently the achievement of the company's objectives might be influenced.

Figure 4.5 The IDP for the chief of GDGP

Particular abilities	Action plans	results
Office software operation ability	Participate in office software training classes, and get the first level computer qualification	Basically utilize office software to assist the paper work. Next step is to get the second level computer qualification
General accounting	After self-studying or	read the financial report

knowledge	taught by colleagues from accounting department, he can read the financial report or internal accounting report by himself	or internal accounting report by himself
Project management ability	Participate in project management training classes, or participate in a particular project team as an assistant, and then after learning from this experience, he can handle the next project individually.	After learning from the training classes and xxx project experience, he can handle the next project individually.
High level of English	Participate in Alpha English training classes	Communicate with foreign technicians

4.4 Implementation of PMS

The new PMS is adopted throughout all the departments and subsidiaries in Alpha. During the implementation procedure, continuous communication and information feedback are two important aspects.

4.4.1 Continuous communication

A main tool to help implement PMS is continuous communication throughout the company, from front-line employees to Managing Director and to each department manager, and, especially from subordinates to their supervisors.

Continuous communication is useful in three respects. Firstly, communication between subordinates and supervisors, can enable supervisors to predict future events and develop plans to deal with them without serious damage occurring. Secondly, through communications, supervisors can assess all kinds of information which can help to improve management efficiency. For example: by understanding the situations and thoughts of subordinates, supervisors can develop an appropriate work plan; by understanding the progress of subordinates work, supervisors can make adaptations and coordinations in time when deviations arise; by understanding when the subordinate encounters obstacles, supervisors can help them to overcome difficulties and consequently fulfill the performance measurement objectives; through communication, they may avoid some unexpected event happening in the annual performance evaluation; by cooperating with the subordinates as they carry out their job, the supervisor can increase subordinates' confidence. Thirdly, communication can provide the necessary information to employees. Because of the in-time information, subordinates and supervisors can coordinate efforts, and consequently achieve the planned objectives more effectively.

There are several matters which should be communicated. For example, what's the progress of the planned job objectives; are the subordinates and teams in

the right track; how to take actions to alter the deviations? Which parts of the job are going well; which parts encounter difficulties or obstacles; is it necessary to adjust employees' performance target; what kinds of actions should supervisors take to support the subordinates; do supervisors and subordinates coordinate with each other; which parts of the job need further discussion.

There are several ways to communicate: orally or in writing; meetings or chatting. The internet is also an important communication tool. All the communication methods can be classified as formal or informal. Written reports, and meetings are formal methods. Informal methods include movement management, which means supervisors can go to the work place of subordinates from time to time to communicate with them and deal with issues that arise; or open-door policy, which means the managers' office doors are open anytime as a signal to employees that they can go to the managers' office anytime they want to discuss issues.

4.3.2 Information feedback process

The information feedback process means that the final result will be sent back to evaluatees after the completion of the evaluation. The purpose of this is to inform the evaluatees about the detail of his/her results. If he/she has a different opinion of the result, they can file an appeal form to re-evaluate the points of disagreement, thus encouraging managers to pay attention to the opinions of subordinates and enhancing the transparency and justice of the PMS.

4.4 Conclusion

In the operation of the old PMS, Alpha had been facing several pressures that profoundly affected the company's performance. The old PMS was replaced for several reasons. First, it was unable to motivate the employees. Second, the PMS couldn't direct the employees' work performance. Third, it lacked connections between company development and individual development. Fourth, no useful feedback information could be gathered from the PMS. Therefore, a brand new PMS was developed to ensure survival and assist Alpha's continuous expansion or in the highly competitive business environment.

The new PMS was designed using the balanced scorecard approach and in conjunction with an individual development plan. During the implementation of the new PMS, communication throughout the organization was enhanced.

Chapter Five – Case study two: Beta—global company

5.1 Introduction

This chapter discusses the findings of the second case study aimed at exploring the design, implementation and usage of PMS in one of the subsidiaries of a global organization. Chapter Five is structured as follows. Section 5.2 presents the background of Group and Beta. Section 5.3 discusses the design, implementation and usage of PMS in Beta. Section 5.4 discusses the implementation of a new PMS in the Group.

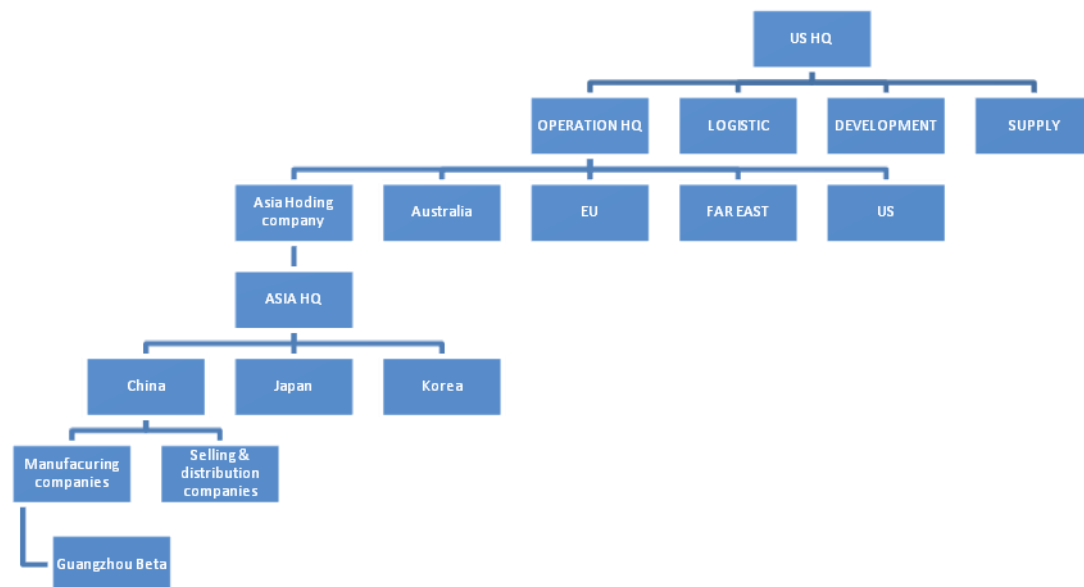
5.2 The background of Group and Beta

The origins of Group (a US-based elevator manufacturing company), which owns over fifty subsidiaries, date back to the 19th century. From 1954 to 1998, Group underwent a period of consolidation, including significant acquisitions, spread across five continents. The path of expansion took Group from being a private to a public company, then to becoming a global organization. During this development, the characteristics of Group's management style (predominantly decentralized, with a small head office, and tight financial controls) remained intact. Vertical integration also remained a principal organizational goal.

Group had been run as a “production-driven” company – there was a general belief that it could sell whatever it produced to its major customers. However, Group had “lost its way” in the early - 1990s, because of excessive labor cost and cheaper foreign competition. Group reviewed its strategy, and introduced “cost-reduction” and “efficiency-improvement” measures throughout the

business, as well as expanding its offshore manufacturing capabilities in lower-cost locations, particularly Asia and Eastern Europe. Then, in 1997, Group separated its business into four independent sub-groups (an internal demerger into operation, logistic, development and supply subsidiaries). (see Figure 5.1 the organizational chart)

Figure 5.1. The Organizational Chart of the Group



Beta is a manufacturing China-based subsidiary under the operation sub-group, established in 1998. At that time, Group implemented a global PMS in all the subsidiaries including Beta. The main features of the PMS were to separate employees into two categories: management level and non-management level. Two different kinds of evaluation models for the two categories were developed.

The PMS was associated with a reward system. The employees at management level were evaluated using financial objectives and project completion rates. The employees at non-management level were evaluated using comparison factors which focused on past work performance and attitude. The final results were ranked as five levels. (See Figure 5.2)

Figure.5.2 Five levels of rankings

Outstanding: the employee has finished excellently all the tasks undertaken.

Exceeds expectations: for most of the tasks undertaken, the employee has exceeded expectations.

Expected performance: the employee has finished all the tasks undertaken with competence.

Improvement needed: the employee has finished all the tasks undertaken, but lacks innovation.

Unsatisfactory: the employee was not able to achieve the established objectives and most of the tasks undertaken did not reach a satisfactory level.

(source: appraisal documents obtained from Beta)

Technically speaking, the PMS at that time was not a system. It was only a performance evaluation process, because it lacked specific performance measures and feedback processes. However, in 2002, a lot of issues appeared. First, it was wrong to simply evaluate the performance of an employee at the year's end. That's not the actual meaning of a PMS. PMSs should be continuous, and systematic. Performance evaluation is only one component of the PMS, not the whole picture. The PMS in Beta, or the global PMS, focused on past events only and ignored future development in general. The PMS was

unable to assist people at management level effectively or to analyze the causes of poor performance and improve the processes of business operation towards achieving better performance. Moreover, people had no specific direction for achieving their own objectives.

Second, the staff at management level had no consistent understanding of PMS. Each manager had his/her own interpretation of PMS. There was also a lack of communication when implemented, so that deviation existed in prioritizing tasks. Conflicts might appear between managers in different departments and even among the staff in the same department, precluding the establishment of a friendly work environment. Moreover, it was hard to build trust between employees, and between employees and the company. Fairness and justice were also an issue.

Third, there was no comprehensive evaluation system for employees at management level. Objectives achievement measures and projects completion measures were clearly specified. However, that might have seduced managers away from process, and towards excessive emphasis on results. Therefore, some potentially competent managers might have missed out on appropriate training.

Fourth, there was inherent imbalance and subjectivity at the level of association between departments' objectives and company objectives. To some extent, different departments would be expected to have different levels of contribution to the final company objectives. However, this differentiation was not reflected

in the PMS.

5.3 A brand new competence-based PMS established in Beta

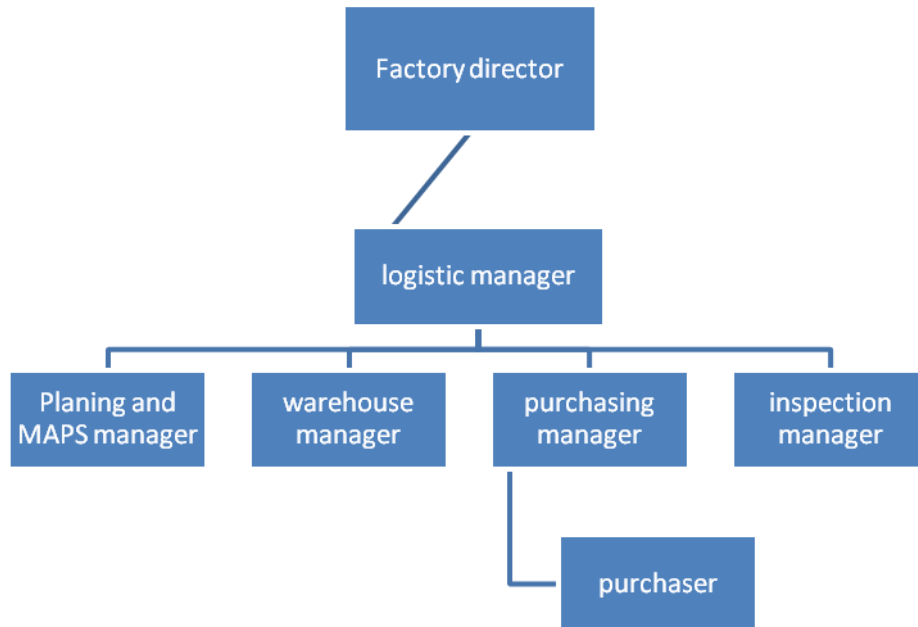
5.3.1 The design of PMS

In 2002, Beta set up a project team to handle the design of a PMS. Team members included senior managers and people from the HR department. The project team needed to draw up the project schedule, and update head office on its progress.

There are two main components in a competence-based PMS. They are 1) a full description of the main responsibilities of each position, 2) a specification of the core competences required to carry out those responsibilities effectively. As an illustration, the development process used by the purchasing group in Beta is given here .

There are two positions in purchasing group: the purchasing manager and the purchaser. The main responsibilities of the purchasing manager are the organization and execution of all the purchasing activities. These include appropriately assigning the purchase tasks to different purchasers; supervising and inspecting the purchaser to see whether they have followed the purchasing principles and ethical standards; maintaining good relationships with the suppliers and knowing well the market price of the products. The main responsibilities of the purchasers are the following: providing correct raw materials, production equipment and office furniture on time to the applicant; handling issues from substandard products and insurance claims.

Figure 5.3 Purchase department organization chart



After analyzing the main responsibilities in the two positions, the members in the project team specified the core competencies or skills that are required in the position. For the purchaser position, good communication skills are the core competency. Because they need to negotiate with suppliers, handle the insurance claims, and record the correct required products from other departments, they all need good communication skills. As to the purchase manager, in addition to communication skills, excellent leadership is another core competency. Following the same process, other core competencies can be developed to measure the employees' performances in other positions.

5.3.2 The implementation of PMS in Beta

Comprehensive understanding of the new PMS by employees at management level in Beta, and provision of training classes in the new PMS for employees at non-management level are two crucial procedures for implementing the PMS in Beta.

The success of the new PMS, is closely related to the management level employees in Beta, because they are its executors. In order to let the management level employees access all the new information, the project team provided a comprehensive report on the new PMS from the set up process, to the methods and final results. In addition, the project team assigned one team member to each department to do a face to face interview so as to help the management level employees get the whole picture of the new PMS.

Non-management level employees attended training classes provided by the project team so as to understand the new PMS. They had to know that the purpose behind performance management and evaluation was to let the employee develop alongside the company.

5.4 a global competency-based PMS implemented throughout the Group

The CEO in Beta then wrote a report on the new PMS to the headquarters in the Group. The content included the design, the implementation and the results. After implementing the new PMS, the employees in Beta were inspired. They could feel the direction which they should work toward. The PMS also

enhanced fairness, justice, and trust within the company. The employees dedicated themselves completely to the company as they knew they would develop alongside it.

After hearing the success Beta had achieved, the Group decided to design and implement a global competency-based PMS throughout their headquarters and all the their subsidiaries in 2003. The main purpose was to enhance the coordination of the whole Group and, at the same time, keep flexibility for the subsidiaries located in different countries. The global competency-based PMS was designed by a professional project team. They are specialists at designing appropriate PMS for organizations.

First, the competency of the employees is a global standard measure. It is separated into two categories, namely management level employees and non-management level employees. There are 12 applications of the competency measures for non-management level employees, including work quality, productivity, safety, work attitude, go-aheadism and so on. There are different applications of competency measures for management level employees, for example, adaptability, analytical thinking, business innovation, business judgment and so on. Each application has a detailed description of the behavioral indicator and a rating in 3 scales. One application of competency is business innovation. The behavioral indicator is ability to drive change and to use new or unique solutions in business situations. Rating 1 is 'exceeded expectations and expertly applied', which means the employee

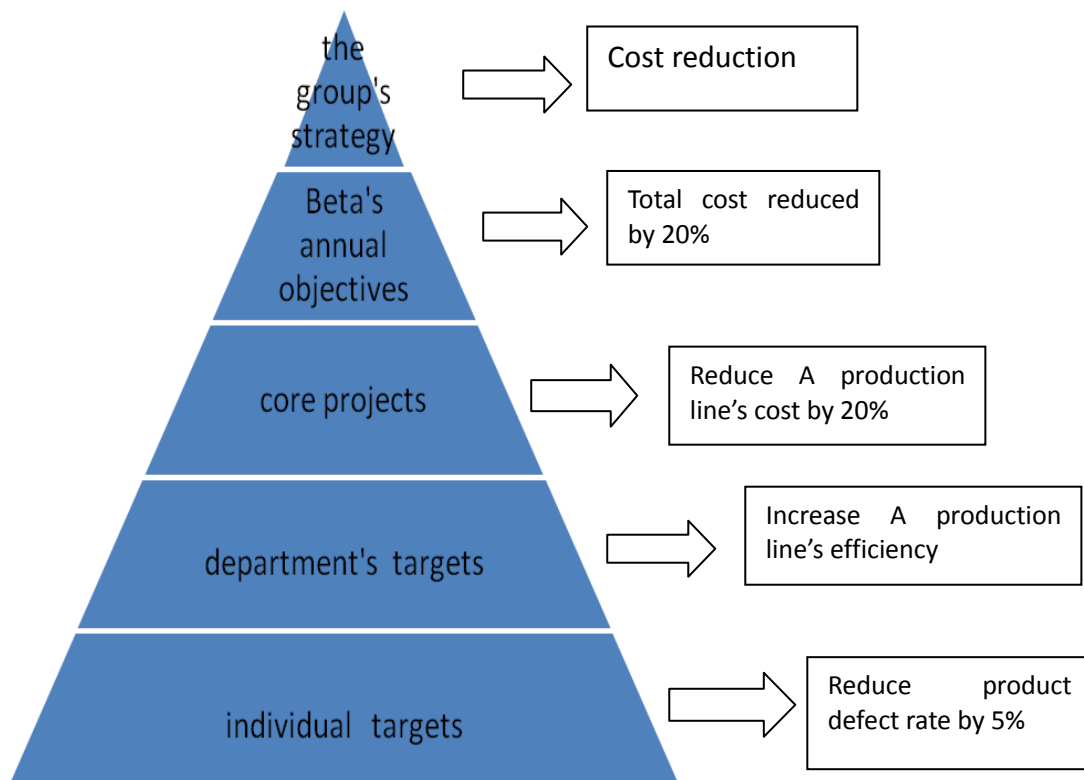
✧ Champions change and continuous improvement as business

opportunities;

- ✧ Looks for breakthrough business ideas and practices within and beyond the company, and encourages others to do likewise;
- ✧ Uses unconventional approaches to solve customer and other business problems where standard approaches don't work;
- ✧ Assumes new and difficult challenges and manages them as opportunities;
- ✧ Finds creative ways to get things done with limited resources and pressing constraints.

Second, is to translate the Group strategy and the subsidiaries' annual objectives into individual operational terms or individual objectives. This process moves from top to bottom. First the Group will establish its strategy and then translate it into annual objectives for the subsidiary, and then the subsidiary will establish core projects in accordance with the annual objectives. As well as the core projects, each department has its own targets which are used to evaluate the performance of the department manager. Next, the manager will discuss the department's targets and his own targets with his subordinates and set up evaluation targets and performance measures for his subordinates. These performance measures for subordinates should be agreed by both parties. The manager needs to revisit the targets with the subordinates after a fixed period. This is the time for the manager and the subordinate to review the pre-set targets, to see how well they are being met and to make some adjustments if necessary. The following pyramid shows how to translate the strategy and the annual objectives into individual objectives.

Figure 5.4 Strategy translation pyramid



Third, is to set up the individual training and developing plan. The plan should specify what kinds of competencies or skills should be improved so as to assist individuals to achieve their targets: what kinds of actions need to be taken, or which classes should be attended. Moreover, it should specify the duration within which the individual plan should be completed. Finally, the PMS should also link to the reward system.

5.5 Conclusion

This chapter provided a description of how the PMS changed in Beta and the Group. It identified the main problems encountered by Beta with its old global PMS. And then it presented how a new global competence-based PMS was implemented in Beta, the Group and all the other subsidiaries. The main

features of the new PMS are its focus on individual competence and financial measures at global level. Each subsidiary can develop its own local PMS to assist the implementation of the global PMS.

Chapter Six – Comparing and contrasting the two case studies and concluding remarks

Chapters Four and Five discussed the two case studies independently in order to relate them to the research questions posed in Chapter One, namely: (1) ‘what are the differences in design of PMSs between GOs and local SMEs?’; (2) ‘what are the differences in implementation of PMSs between GOs and local SMEs?’; (3) ‘what are the differences in usage of PMSs between GOs and local SMEs?’; (4) ‘why the organizations choose to use such kinds of PMS?’; (5) ‘how does CT explain the differences in PMSs between GOs and local SMEs?’. The aim of this chapter is to continue the theoretical discussion by comparing and contrasting the two case studies, and to relate them back to the research questions and the ideas contained in the theoretical framework set out in Chapter Two.

Chapter Six is organized as follows: the section below pulls together the findings of the two case studies in a comparative table. There follows a theoretical discussion of the main issues in two sections. These two sections: 6.2 and 6.3, discuss how the contingency factors influence the adoption of the particular PMSs within Alpha and Beta in relation to the fourth and fifth questions and how the new PMSs work in the case study organizations. The chapter terminates with a conclusion drawn from the above discussion.

6.1 The cases of Alpha and Beta: a comparison

This section pulls together the findings of the two case studies in Chapters Four and Five in a comparative table. This forms a review of the main issues in the two companies for the theoretical analyses that follow in Sections 6.2 and 6.3. The diagram summarizes the design, implementation and usage of PMSs adopted in the two companies.

Table 6.1 the PMS adopted within Alpha and Beta

The adopted PMS	Alpha	Beta
Design	Balance scorecard approach Develop comprehensive performance measures to mirror the business model	Focuses on financial measures and individual competency measures
Implementation	It is adopted throughout the company.	The global PMS is adopted throughout the headquarters and all the subsidiaries, and in the meantime, each subsidiary develops its own local PMS to assist the implementation and practice of the global PMS

Usage	To monitor and direct the employees' actions; assist the implementation of the organizational strategy	To assist the implementation of the corporate strategy; achieve coordination and integration
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6.2 Discussion of the PMS within the two cases

6.2.1 Contingency effects on PMS

In Chapter two, several contingency factors are identified that might influence the design, implementation and usage of PMS in different organizations. They are external environment, technology, organizational structure, the use of PMS, and strategy. The following will discuss each contingency factor respectively, and apply it to the analysis of the two cases so as to answer the research questions of 'why the organizations choose to use such kinds of PMS?' and 'how does CT explain the differences in PMS between GOs and local SMEs?'.

External environment

The external environment in which Alpha is operating is less uncertain. Alpha has a lot of loyal clients and has established good relationships with the suppliers. The main concerns in Alpha are how to reduce production costs and increase the product quality. Therefore, a comprehensive PMS which can assist the company in achieving its cost-based strategy seems to fit this setting (Chenhall, 2005). Comprehensive performance measure frameworks, i.e.

BSCs, are intended to be used as tools to assist in strategic management. They attempt to show cause-effect relationships between strategy and the operations required to achieve those strategies. Such highly structured approaches to planning and control are unlikely to be effective in highly uncertainty situations. That is, if the company operates in uncertain and diverse environments, a highly detailed and comprehensive business model and the associated performance measures will be ineffective in responding to rapidly changing conditions (Chenhall, 2006).

A GO is company that has subsidiaries and/or joint ventures spread across many countries, thereby competing on a worldwide basis with other firms in its industry. The worldwide competition increases the uncertainty and diversity of the external environment of the GOs. Therefore, a comprehensive PMS might not be effective in GOs. Ezzamel (1990) reported that high environmental uncertainty was associated with an emphasis on financial targets for evaluating performance and required not only explanation of variances but also high participation and interpersonal interactions between superiors and subordinates. Thus, PMS that have an emphasis on financial measures with high interpersonal interaction seem to be a fit in GOs operating in a high environmental uncertainty context.

The global PMS implemented in the Group and Beta is a combination of financial/economic value measures and non-financial measures. The non-financial measures focus only on the individual competency of the employees. Therefore, it could not be classified as a comprehensive PMS

which intends to mirror the business model. These two kinds of measures apply to different targets. The non-financial measures apply to each employee in the Group. The financial measures apply to the Managing Directors in each subsidiary. Managing directors in the subsidiaries will plan how operations should interrelate to achieve the target and decide on the performance measures for the lower level managers. The Managing Directors have the responsibility of ensuring that the causal links between operations and their economic value are managed effectively and that they are responsible for the decisions affecting economic value. Therefore, it could be concluded that the main focus of the global PMS is the financial measures.

The managing director in Beta commented on the present PMS:

“The PMS is very flexible. The major focus is the individual competency. It separates the competency applications into two categories, managers and normal employees. The managerial ability of the managers is very important in this system, because the managers are responsible to establish the performance measures for their subordinates and lead them to complete their tasks.”

He further pointed out the communicate role played by the PMS:

“The PMS also acts as an effective communication channel to communicate the Group and Beta’s strategies throughout the structure of the company. The managers and their subordinates are encouraged to review and discuss the pre-set performance measures regularly (recommend period is every 3 months). In so doing, the managers can get the update information about the operations from their subordinates so as to plan the future actions or alter the inappropriate pre-set performance measures. The flexible PMS can assist us to effectively respond to the

emergent situations.”

The Managing Director in Beta indicated that there isn't a formal local PMS in Beta. But the top management team will hold meetings to discuss the causal links between operations and the Group and Beta's strategies, before identifying the key drivers of the strategy. After that, the top management team will have meetings with the lower level managers and establish the performance measures with them based on the key drivers that were identified. The top management team will discuss the causal links between operations and the strategy with the lower level managers, and enhance their understanding of the strategy and the whole business model in Beta. In this way, the lower level managers will establish more effective performance measures for their subordinates. The communication role of the PMS enhances interpersonal interaction between superiors and subordinates. These findings in the case of Beta are consistent with reports from Ezzamel (1990).

Technology & Organizational Structure

The comprehensive performance measures are unlikely to be effective in the context of complex and uncertain technologies. Such technologies involve few routine tasks that are well understood, and could possibly have high levels of interdependencies across the value chain. Therefore, the unambiguous, balanced approach is unlikely to be achieved in complex settings. It is difficult to identify cause-effect relationships where such a high interdependency exists in divisions with few routine tasks and highly complex organizational structures.

The organizational structure is another contingency factor determining the design of a PMS and the extent of performance measurement use. A wide diversity of measures reflects interactive control in the organizations (Henri, 2006a; Simons, 2000). The interactive use of comprehensive performance measures refers to the generation of comprehensive information within the organizations in order to stimulate the development of new ideas. It also initiates and guides the emerging ideas and identifies critical events in uncertain environments to achieve strategy. To be effective in this role, the organization requires structures that are sufficiently open and flexible to ensure employees are empowered to respond to strategic uncertainties (Henri, 2006a; Simons, 2000). That top managers reflecting a flexible management type tend to use more performance measures, is consistent with the results from Henri's (2006b) empirical research. Chenhall (2005) further pointed out that the comprehensive performance measures are costly to design and implement. Therefore, we might expect to see more effective comprehensive performance measures in large organizations.

Alpha is a middle sized manufacturing company. The operation processes are routine and the employees undertake well-understood tasks. It could be easier for Alpha to establish causal connections between strategy and operations and to build in performance measures to mirror the business model. Relatively speaking, as compared with the GOs, Alpha is not a large organization. However, the formal comprehensive measurement system was implemented effectively in Alpha.

When asking the CEO “is there any difficulty encountered when you designed and implemented the new PMS in the first place?”

He said:

“The process of designing the PMS was not very difficult. Most of the project team members including me have been working in the company since it established in the first place. We saw how it expanded and grew from a small company into today’s group company with about 800 employees. We are all familiar with the company’s operations. Therefore, it was not very hard for us to build the cause-effect business model and establish the associated performance measure system to mirror the model. However, it did take almost a year to completely implement the new PMS throughout the company. We needed to introduce it to the middle level managers and then to launch some training classes to introduce it to the front line employees...Even though it is costly to design and implement the new PMS, the benefit we obtained is over the cost. After we implemented the new PMS in one year, our production cost was reduced by 30%. The employees’ motivation was inspired. Moreover, the employees are willing to continue working in the company as they feel the company provides them a place to develop their career. ”

However, the measurement and definition of size is ambiguous. There are several ways of estimating size including profits, sales volume, assets, share valuation and number of employees (Chenhall, 2007). Therefore, it is meaningless to compare the sizes of organizations under different measurement conventions. In the case of Alpha, the number of employees has increased as compared with the number of employees when Alpha was set up in the first place. The increasing number of employees is associated with

coordination and control issues (Chenhall, 2007). Therefore, a formal PMS is presumable to establish in order to achieve greater level of coordination and control on the large number of employees.

Speaking of the technology and organizational structure of GOs, Dossi & Patelli (2008) pointed out that GOs are now perceived to be operating as a network based in the transnational era. They pursue an integrated worldwide strategy with differentiated contributions and geographically dispersed operations, encompass distributed, specialized, and interdependent resources and capabilities, and further possess complex mechanisms of coordination and cooperation. All these characteristics increase the complexity of the organization's operation processes and hierarchical structures. Therefore, a wide diversity of performance measures might not be effective in GOs. It is likely that the incremental value of the information will decrease with additional measures (Chenhall, 2006).

In Beta's case, the Group owns over fifty subsidiaries spread across five continents. The Group separated its business into four independent sub-groups (an internal de-merger into operation, logistic, development and supply subsidiaries). Beta is situated within the manufacturing function of the Asian HQ (Fig.5.1 represents the corporate structure). The complexity of the hierarchical structure and high levels of interdependency across the value chain make it difficult to establish a clear cause-effect business model from the Group perspective. Therefore, a comprehensive PMS might not be effective in the Group.

Management style and the use of PMS

Henri (2006b) posited the nature of PMS usage as another contingency factor influencing the design of performance measures. His findings indicated that top managers reflecting a flexible type of management culture tend to use comprehensive performance measures and to use PMS to focus organizational attention on supports for strategic decision-making and on legitimizing actions to a greater extent. Legitimation refers to the justification and validation of current and future actions as well as the assertion of self-interest and the exercise of power (Ansari & Euske, 1987).

The CEO in Alpha attempted to establish a flexible type of organizational culture and to use the PMS to tie the organization together, enable discussion in meetings with superiors, subordinates and peers, and to support strategic decision-making. Therefore, the comprehensive performance measures design was associated with PMS usage.

Recent empirical researches suggest that headquarters in GOs implementing the PMS in subsidiaries, aim to influence decision-making in subsidiaries (Dossi & Patelli, 2008) and to manage tensions between headquarters and subsidiaries (Busco et al, 2008) by collapsing the distance between diverse entities and creating corporate direction in GOs as well by as legitimizing activities in the subsidiaries so as to reinforce the global structures and systems. Thus, headquarters in GOs would appear to use PMS to focus corporate attention, support strategic decision-making and legitimate actions. A

comprehensive PMS might fit in that context.

However, the literature on PMS in GOs indicates otherwise. It suggests that GOs implement a global PMS which focuses on translating operational targets and achievements into financial terms so as to establish a global language of measurement and accountability, and achieve coordination and integration (Busco et al, 2008).

Turning to Beta's case, the main strategy of the Group is to emphasize the various needs of local markets in different countries and to accommodate differences between national markets. Further, the strategy is aimed at reducing costs and achieving competitive efficiency on a global-scale by integrating geographically dispersed activities through co-ordination. Therefore, the PMS needs to reflect the features of both coordination and localization to be implemented in both the Group and its subsidiaries.

This new global PMS does reflect both coordination and differentiation. First, the headquarters will translate the corporation strategies into different financial measures for the Managing Directors in the subsidiaries and focus corporate attention. Second, the headquarters also keep an eye on the individual competency of each employee in the Group. Each subsidiary and each employee will use these measures to direct their actions. Third, the headquarters will not plan operations on how to achieve the target. The Managing Directors in the subsidiaries have authority to direct their people toward to the target in accordance with the pre-established financial measures.

The global PMS is then used to support strategic decisions. Managing directors can establish their own PMS suited to their own business model. The local PMS also plays the role of assisting managing directors to achieve their local operation strategies.

The Group also tends to use the PMS to focus corporate attention, support strategic decision-making and legitimise actions, while the global PMS adopted by both the Group and Beta focuses the financial measures. Therefore, in the context of GOs, the use of PMS does not appear to have much effect on the design.

Strategy

The adaptation or alteration of a strategy might initiate a change of PMS. Strategies are somewhat different from other contingency variables. The choice of strategy is flexible in the hands of the managers of organizations, and could be the means whereby managers can influence the nature of the external environment, the technologies of the organization, the structural arrangements and the control culture or MCS (Chenhall, 2007). Section 6.3 will further discuss this issue.

6.3 The change of PMS

6.3.1 Replacing the existing PMS in Alpha

In 2004, the CEO in Alpha decided to design a formal PMS, because he found that the existing PMS was unable to enhance either the employees' or the

organization's performance. Moreover, the ambiguous and uncertain performance measures limited the motivation and innovation of the employees.

Alpha was a private family company with only 20 employees in 1996. Most of the employees were family members. Because of the limited human resources and time, there was no formal PMS established at that time.

When asked how the company evaluated the performance of the employees at that time, the CEO said:

"At the beginning, we all focused on how to improve the techniques in producing the products, how to occupy the market share. The performances of the employees in the marketing department were the priority issue. We only developed financial measures to evaluate the performance of the employee in the marketing department. Most of the employees in the production department were family members. We didn't develop formal measures to evaluate their performances. We trusted them. We believed that they would do their best to contribute to the company. In other word, in a family, the parents don't establish formal measures to evaluate their children's performance. They only instruct them as what we did in the first place."

It could see the strategy in Alpha in the beginning was to occupying the market shares as many as it could. That's why the PMS only focused on the employees in marketing department.

However, by 2004, the private family company had developed as a small group company with three factories and one trading company and had over 500 employees. The existing PMS didn't fit a group company. Alpha's strategy has

changed to focus on cost reduction and further expansion. All other contingency factors have changed, i.e. the internal operation process/technology, the increasing number of employees and new established factories which may lead to re-arrange of organizational structure.

What contingency theory suggests is that the PMS should develop alongside the development of the company. An appropriate PMS in organizations is likely to be used and provide satisfaction to individuals, who then presumably can approach their tasks with enhanced information. As a consequence, these individuals take improved decisions and better achieve organizational goals and improve organizational performance (Chenhall, 2003). Vice versa, an inappropriate PMS in the organizations is likely to decrease the satisfaction to individuals, who then presumably do not complete their tasks satisfactorily. As a consequence, these individuals may take bad decisions and fail to achieve organizational goals. Furthermore, the organizational performance may be influenced by poorly performing individuals. Therefore, an appropriate PMS is necessary for the survival and development of a company.

Obviously, the previous PMS didn't fit in the present situation of Alpha. The employees were dissatisfied with the previous PMS. They felt it was unfair and unjust. The performance measures were ambiguous and uncertain. They didn't feel there were opportunities for promotion, unlike employees in the marketing department who had clear targets to achieve for rewards, and family member employees who didn't need to strive to get positions at management level.

Therefore, in 2004, the CEO in Alpha decided to design a new formal PMS aiming to motivate the employees' performance, enhance the organizational performance and further expand the group. The new PMS has been successfully running for four years in Alpha. The front line employees, senior managers as well as the managers in the head-office are all satisfied with it.

When asked how they felt about the new PMS, the front-line employees said:

“Now I am very clear about my job objectives. And I do know if I work well and exceed my pre-set target, I will get rewarded. More important is that, I do know I have an equal opportunity to pursue a higher level position. I see the fairness and justice of management control in the company.”

The senior managers said:

“After implementing the new PMS, I have a better understanding of my own role within the company. Moreover, the new PMS captures different dimensions of performance, which can help me to see the “big picture” of the company's operations and understand the drivers of performance and the effect of my actions on parts of the operation value chain. It also enhances the communication and clarification of the company's strategy.”

The CEO said:

“After implementing the new PMS, I can see a higher level of coordination and integration of different departments in business operations. I think it is because the new PMS integrates measures across the value chain, which can help individuals to understand cross-functional relationships. Thus, it increases the effectiveness and efficiency of the business operations which enhances the organizational

performance.”

An empirical research by Hall (2008) indicated that a comprehensive (formal) PMS influences managers' role in two aspects, goal clarity and process clarity. Goal clarity implies that the goals and objectives of the job are clearly stated and well defined. Process clarity implies that the individual is certain about how to perform his or her job (Sawyer, 1992). Comprehensive PMS may increase the managers' goal clarity by providing comprehensive information about the organization's strategies and operations, which helps them to better understand their own role within the organization. Furthermore, comprehensive PMS may increase process clarity by educating managers about the economics of the business and the drivers of costs, revenues and performance. Thus, the managers are more effective in performing their task when they understand what needs to be done and how managerial functions are to be performed (Hall, 2008).

6.3.2 Replacing the existing PMS in Beta

Beta experienced similar situations to those experienced by Alpha. They found that ambiguous and uncertain performance measures decreased the degree of job satisfaction of their employees. As a consequence, the performance of the employees could be influenced, and poor organizational performance might result.

The previous global PMS did work when Beta was set up in the first place. First, the Group's strategy is to achieve coordination, and the management style was

predominantly centralized with tight financial controls which reflected a control dominant type of organizational culture. Top managers reflecting a control dominant type of organizational culture tend to use fewer performance measures compared with those reflecting a flexibility dominant type (Henri, 2006b). A global standard PMS seemed to be effective in achieving coordination and integration and in providing a common language to communicate throughout the Group. More importantly, it satisfied the requirements for the centralization of Group control.

However, the previous global standard PMS didn't fit with the business model of Beta. The high level management team in Beta found that they couldn't keep those valuable employees in the company. And the PMS couldn't assist them to achieve the company's objectives. Therefore, Beta developed its own competency-based PMS. After successfully implementing the new PMS in Beta, the Group decided to implement a new global competency-based PMS in their headquarters and in all their subsidiaries to maintain coordination and flexibility. At that time, the strategy of the Group has changed to achieve cost reduction of operation efficiency. The organizational structure also changed. Therefore, a new PMS should be developed to reflect the new features in the Group.

The new global PMS is combined with financial and non-financial measures. The non-financial measures focus on individual competency, and separate all the employees in the Group into two levels: management level and non-management level. Based on these two levels, the PMS establishes two different sets of applications to evaluate individual competency. The financial

measures are used in the highest level of the management team in each subsidiary. Following the subsidiary's hierarchical structures, the financial measures will be translated into different kinds of measures by the supervisors for use by their subordinates.

6.4 Conclusion

This chapter analyzes the PMS in Alpha and Beta using the theory framework developed in Chapter two. The analysis process supports the theory framework that contingency factors such as external environment, technology, organizational structure and strategy have greater influences in the design of the PMS in Alpha and Beta. Furthermore, the adaptation or alteration of strategy could influence the change of external environment, technologies in the organization and the re-arrangement of organizational structure. It may be that changes in external environment or technology bring a change or alteration process in the PMS of both companies.

Chenhall (2006) suggested that the organization size could be another contingency factor which influences the design of the PMS, because large organizations might have resources to experiment with the systems and to learn how to implement and adapt them to their needs. However, the case of Alpha suggests otherwise. A comprehensive PMS was effectively implemented in Alpha – a middle sized company. The company's strategy, external environment, technology, and organizational structure play an important role in the design and implementation of PMS. Even though SMEs have limited resources, they were able to develop their own PMS which suited the context of

its strategy, external environment, technology and organizational structure. A formal PMS might enhance the role clarity of employees and further improve organizational performance (Hall, 2008).

However, the analysis didn't support the management style as another contingency factor in the theoretical model. Alpha's case shows that top managers reflecting flexibility dominant types of organizational culture tend to use a comprehensive PMS and use it to focus organizational attention, support strategic decision making and legitimize actions. However, this idea doesn't apply to the GOs. In Beta's case, the Group intends to implement their corporate strategy through the PMS and achieve coordination throughout the corporate structure. Because of the inherent complexity in the external environment, technology and organizational structure, it is difficult to establish a comprehensive PMS in the Group. Like other GOs, the Group implements a global competency-based PMS in all its subsidiaries, which focuses on financial measures. Meanwhile, the subsidiaries establish their own informal PMS to support the implementation of the global PMS.

Chapter 7 – Conclusion

This chapter presents the main conclusions and implications of this investigation, as well as its limitations, and some recommendations for further research. It begins with an explanation of the main practical contributions of this study. This is followed by a presentation of the limitations of the research. The chapter ends with suggested issues for further investigation.

7.1 Practical contributions

Chapter One discussed concerns over the lack of empirical studies of the differences between PMS practices within GOs and local SMEs; Chapter Two concluded that PMS practices vary in the different settings of organizations. Hence, the characteristics of GOs and local SMEs needed to be teased out. CT was then justified as the theoretical framework to support the investigation; Chapter Three discussed the use of an interpretive case study for the study of the PMS practices in organizations. The two case studies were presented in Chapters Four and Five, and their comparison and theoretical analysis in Chapter Six. It is hoped that the project will contribute to the further understanding of the dynamics of PMS practice in different organizations. The main practical contributions of this study can be summarized as follows.

After observing the two case studies, the characteristics of their PMSs and the features of the context in which they operate are drawn out. The major characteristic of GOs is the maintenance of both coordination and

differentiation. Therefore, its PMS should reflect these two attributes. The Group in Beta's case implemented a global PMS which focuses on financial targets, while authorizing the means of achieving financial targets in the hands of the Managing Directors in the subsidiaries. The different level of implementation of PMS is a new feature in the management accounting practices in GOs.

The PMSs implemented in Alpha and Beta each include measures of individual development that are aimed at improving the performance of the employees so that they feel they are developing along with the company. The PMSs could also improve employee performance by developing their personal skills so as to enhance the achievement of their personal objectives. This investigation confirms Hall's (2008) findings that a comprehensive (formal) PMS influences managers' role clarity and thus enhances performance at the managerial level.

Third, the role of communication during the implementation of a new system is extremely important, as observed in the two case studies. It is necessary that the implications and execution of the new system should be accepted by the employees, particular those at management level, because they are the main executors. If the managers don't understand the system or resist it, the implementation will not be successful.

7.2 Limitations of the research

This research is based on qualitative case studies of two companies, one local SME, and one subsidiary of a GO in the same industry – manufacture. One

limitation of this investigation concerns the lack of accessibility of the directors in Beta's parent company, who apparently had an important role in imposing the global PMS on the whole group. Furthermore, the researcher did not interview the design team of the new PMS in Beta.

Another limitation is that this investigation analyzed only the contingency factors of external environment, organizational structure, technology, use of PMS and strategy. There are other factors that might influence the adoption of PMS in different organizations. Chenhall (2007) posited that the culture factor also influences the design of a PMS.

The main limitation of the investigation concerns the lack of completely holistic and intensive data on the two companies. Because of the time limitation, the researcher collected only the preliminary data necessary to write up the dissertation.

7.3 Suggestions for further research

From the limitations mentioned above, a possible avenue for further research concerns the undertaking of a more holistic and intensive case study of companies in the same industry.

Another area for future research would be the inclusion of more contextual factors which might contribute to the differences in PMSs adopted across different organizations.

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