Factors affecting Performance Measurement System in manufacturing Companies in developing countries – selected cases from Bangladesh

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Declaration

I can declare that the work submitted is my own work and the work submitted has not previously been submitted and/or examined for any other award.

Some of the analysis and arguments of the thesis have been presented in conference and can be found in the conference proceedings. The publication is :

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List of figures and tables

Glossary

Balanced Scorecard (BSC)	Performance management tool
Employee/Staff	Member of Organisations without managerial responsibilities
Key performance indicator (KPI)	A quantifiable measure used to evaluate the success of an organisation, employees etc. in meeting objectives for performance.
Managers/management/executives	Persons with line manager job responsibilities
Performance Management	The process of comparing actual performance with the planned performance and deciding future action
Performance management system (PMS)	A management framework that achieves an organisation's objective(s) through first measuring and reporting current actual performance and comparing it with the desired level of performance, and, second, delivering the appropriate behaviour and response to the measurement results
Performance measure (PM)	This is metric which quantifies the effectiveness and efficiency of action
Performance measurement	This is the process to quantify the effectiveness and efficiency of action.
Performance measurement system	This is a set of metrics those quantifies both effectiveness and efficiency of action
PMS lifecycle	Bourne et al. (2000) presented a three-stage model as the lifecycle of performance measurement systems. These three stages

	are- design, implementation and use and update.
Performance management system design	Design stage includes identifying the key objectives to be measured and designing the measures themselves (Bourne et al., 2000)
Performance management system implementation	In implementation phase, systems and procedures are put in place in order to gather and process the data that enable the measurements to be made regularly.
Performance management system use	Benefiting from the performance results and responding to the organisation's strategy

Abstract

The aim of this study is to investigate how performance measurement system (PMS) is implemented in practice and how internal contingency factors affect implementation and use of PMS. The internal contingency factors investigated are – management/leadership style, senior management commitment, reward system, employees' education level/knowledgeable workforce, training and IT. Case study research was adopted for data collection. Semi-structured interviews were conducted in six Bangladeshi companies. In addition to semi-structured Interviews, researcher also went through Personal observations and documentations review. A combination of Multinational and local companies was studied (2 Multinational and 4 local companies).

The results indicate that multinational companies are using systematic frameworks for PMS. They use an authoritative style when designing PMS, but they use a participative style in implementation and use phase. In these cases, senior management commitment, regular training, sophisticated IT infrastructure, reward linked with performance play an important role in successful PMS implementation and use. On the other hand, the local companies do not use PMS holistically or apply an integrated PMS framework. They include measures when they are required. They use an authoritative style in the whole process of PMS. In these cases, non- linkage of rewards with performance, lack of integrated IT support and lack of educated workforce are barriers to PMS success. However, as the senior management of all these companies are committed to making PMS successful, they are trying to overcome these deficiencies. They are moving towards the implementation of integrated PMS holistically throughout the company. They are also hiring educated staff, providing training to the existing workforce and implementing integrated IT support.

This research fills the gap of literature of management accounting in developing country, namely Bangladesh. This research contributes to the management accounting literature by identifying internal contingency factors that affect successful implementation and use of PMS in a developing country. These contingency factors are – management style/leadership style, senior management commitment, training, reward, integrated IT system, holistic PMS, non-resistance to change, educated employees and communication. At a general level, manufacturing companies in other developing countries can be benefitted from the findings of this research.

Also, the findings of this study provide considerable knowledge to managers regarding the way contingency factors influence PMS in manufacturing organisations in Bangladesh. This research provides guidance for business practitioners of Bangladesh on how contingency factors influence the implementation of PMS to enhance business performance. This will help them to effectively design, implement and use performance measures to achieve better performance.

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Chapter 1: Introduction

1.1 Research Background

A performance measurement system (PMS) is the process of information collection, analysis, and reporting on an organization or individual performance (Franco-Santos et al., 2012; Kaydos, 2020; Kasale et al., 2023; Spekle and Verbeeten, 2014). PMS is a management framework that achieves an organisation's objective(s) through first measuring and reporting current actual performance and comparing it with the desired level of performance, and, second, delivering the appropriate behaviour and response to the measurement results. Performance measurement (PM) is the process to quantify the effectiveness and efficiency of action (Neely et al., 1995). PM is considered as an essential component of modern management (Franco-Santos and Bourne, 2005). Both academics and practitioners has been giving focus on Performance measurement (PM) issue. There is a continuous interest in the areas of PMS design and use (Ferreira and Otley, 2009; Garengo et al., 2007). If companies want to achieve their goals and objectives, they should use Performance measures to control, assess and improve production processes (Agustina, 2021; Kaydos, 2020; Korhonen et al., 2023). Companies also need to compare the performance of different departments, plants, individuals, teams, employees and Organisations (Galeazzo et al., 2021; Kaydos, 2020; Vuong and Nguyen, 2022; Weiss and Hartle, 2023). According to Ghalayini and Noble (1996), research into PMS took place in two distinct stages. The first stage was between the 1880s and 1980s. In this stage, traditional financial measures such as return on investment, profit, productivity and investment were used. 'Budgeting' was the main Performance measurement system (PMS) during this stage and budgeting mainly focus on financial measures.

In mid-1980s the second stage of PMS literature began due to the changes in world markets. Traditional financial measures started facing criticism in this time. Companies started losing market share because overseas competitors offered better quality and varied products with lower costs. Other points of criticism of traditional financial measures were – emphasis on historical data, inability to forecast future performance, not encouraging managers to improve continually, absence of focus on strategy, unable to feed data in relation to flexibility, unable to feed data on customers' demand and competitors' performance, quality and responsiveness, discourage long-terminism (Neely, 1999; Trucco, 2015). Similarly, Neely (1999) recognised seven key reasons behind peoples' interest in performance measurement. The key reasons are - the power of information technology; specific improvement initiatives; national and international awards; increasing competition; the changing nature of work; changing organisational roles and changing external demands.

These reasons forced Companies to develop and implement new PMSs in order to regain a competitive edge and become successful (Choong and Islam, 2020; Lewandowski and Cirella, 2023; Norhayati and Siti-Nabiha, 2009). Hence, companies started considering incorporating non- financial measures along with existing financial measures. This resulted invention of various integrated PMS tools. Examples of PMS tools are - Performance prism system (Neely et al., 2001), EFQM business excellence model (Westlund, 2001), Kanji business excellence measurement system (Kanji, 2002), Integrated dynamic performance measures system (Ghalayini et al., 1997) and Balanced scorecard (Kaplan & Norton,2005). These tools tried to grab attention of managers on the key success factors of the strategy as well as communicating these to the whole organisation.

Many studies took place in order to explore the concept and advantages of PMS. However, only few research has been done to provide facts on how PMS is implemented in practice. Most of the research were undertaken to identify the adoption rate of PMS in organisations instead of examining the way of implementation of the PMS in the organisation. These studies confirmed the use of PMS by two ways - one way is by gathering information from respondents and the other way is gathering information on the use of measures (both financial and non-financial) in those organisations (Gago-Rodríguez and Vikson, 2023; Hoque and James, 2000; Budimir et al., 2021; Ismail, 2007; Islam and Tadros, 2012; Gosselin, 2011; Hendricks et al., 2012). These studies did not offer enough facts on the way of implementation and development of the PMS and their components in practice.

Most of the research of performance measurement system is done in developed countries. Little research has been done in developing countries to explore the benefits of using PMS. There is a gap in PMS research for developing countries and the main reason for this research is to contribute towards this gap. Due to the globalisation and internationalisation, many multinational and foreign companies are locating in developing countries like Bangladesh. Hence, it is important to explore the application of PMS in developing economies. The main focus of this research is to explore the way PMS been implemented in Bangladesh and to identify the contingency factors affecting use of PMS in Bangladesh and thus contribute to the performance measurement systems literature and thus the management accounting literature in general.

1.2 Context of study - Bangladesh

Bangladesh is moving to a lower-middle-income economy from a low-income economy (Zafar, 2020). The traditional control systems are not effective in this changing circumstance. So, companies need to adapt PMS aligned with the changing economic condition which is the fundamental principle of contingency theory. It is necessary to understand how companies in Bangladesh adapt PMS in this dynamic situation.

Also, there are several distinctive social and cultural factors in Bangladesh which can significantly affect the implementation and use of PMS. It is important to understand how these social and cultural factors are affecting the implementation and use of PMS.

In most of the Bangladeshi companies, formal performance metrics are not given priority. Instead, informal control mechanism, as for example - loyalty, strong connections and reliable relationships are given priority. In addition, most of the companies adopt a hybrid control system which include mix of traditional control system and western formal control systems. This is a perfect context to continue contingency theory-based study.

Lack of research has been done in management accounting in developing countries, especially in Bangladesh. This research is filling the gap of management accounting literature of developing countries, especially Bangladesh.

1.2.1 Local and Multinational companies

It is important to understand the difference between local and multinational companies (MNCs) in order to contextualise the study of PMS in Bangladesh's manufacturing

sector. Local companies are normally rooted within the domestic institutional and cultural environment. They are frequently categorised by resource constraints, informal management practices, and restricted exposure to global performance standards. On the other hand, MNCs work across borders. They carry uniform PMS frameworks and advanced technologies with them. The implementation and use of PMS are affected by these differences of local and MNCs.

These differences are predominantly important in the context of Bangladesh. In Bangladesh, the manufacturing sector is speedily growing. Also, global trade and investment influence manufacturing sector in Bangladesh progressively. However, there is significant gaps in the literature regarding how internal contingency factors affect PMS differently in local versus multinational firms within this context. Theoretically, this gap emphasises the need to explore how contingency theory applies in developing countries with various kinds of organisations. Empirically, it highlights the necessity of understanding the ways firms in Bangladesh adapt their PMS to align with internal dynamics and external pressures.

This study contributes towards understanding of both PMS adaptability and effectiveness by addressing these gaps. This ultimately helps both practitioners and academics to gain insights of PMS in developing countries, especially in Bangladesh (which is the context of this study).

1.3 Contributions of this research

1. The review on PMS in this study contributes to empirical work of PMS by identifying research gap in this field. This provides future research directions to the researchers of this field.

2. This study contributes to the PMS literature by identifying internal contingency factors that affect successful implementation and use of PMS in a developing country; it adds value by researching a neglected area.
3. The findings of this study provide considerable knowledge to managers regarding the way contingency factors influence PMS in manufacturing organisations in developing countries.
4. This study helps manufacturing companies in Bangladesh by identifying internal contingency factors which they require to consider while adopting new management accounting practices.
5. This study deepens the understanding of current PMS application in Bangladeshi manufacturing companies which will be helpful for the current and potential investors who will plan to manage or start business in Bangladesh.
6. This study provides guidance for business practitioners on how internal contingency factors influence the implementation of PMS in order to enhance business performance. This will help them to effectively design, implement and use performance measures in order to achieve better performance. As a result, individuals will be able to take improved decisions to achieve their organisational goals.

1.4 Objectives and research questions of the Study

The aim of this study is to identify how the contingency factors affect PMS in developing countries.

The objective of this study is to answer the following two questions:

(1) How PMS implemented in practice in Bangladesh?

(2) How do contingency factors affect the implementation and use of PMS in the manufacturing companies in Bangladesh?

In order to answer these questions, the researcher first investigated the PMS currently in use in the manufacturing Companies in Bangladesh. Researcher investigated to identify differences and similarities between companies regarding the process of implementation and use of PMS in these Companies. The use of PMS was compared between multinational and local companies.

Researcher then investigated some contingency factors which might affect the use of PMS. It is notable that firms' financial performance has not been considered in this study.

1.5 Method used in this research

In this research, a multiple case study approach was adopted. Researcher investigated six manufacturing companies (two multinational companies and four local companies). Researcher used different data collection tools and techniques including semi-structured interviews, personal observations, site visits and secondary sources such as company documents and websites.

1.6 Structure of the Thesis

This thesis is organised into seven chapters. First chapter is Introduction. Chapter two focuses on the contingency theory as this is selected as the theoretical framework for this research. The objective of this chapter is to discuss the importance of contingency factors in this study. The strengths and limitations of the contingency approach are

discussed here. Also, the contingency factors specific to this study are discussed in this chapter. In addition, researcher also discusses about significant contingency studies in this chapter.

Chapter three discusses about contemporary performance measurement systems. It discusses the importance of non-financial measures. In this chapter, researcher also discusses the literature relating to the factors that affect the application of performance measures.

Chapter four reviews the context of this research which is Bangladesh. This chapter explains the reasons for choosing Bangladesh as research context. A comprehensive review of accounting practices in Bangladesh is presented in this chapter. Prior research of Bangladesh on performance measures are also discussed here. Moreover, some contingency factors of this research are also discussed in the context of Bangladesh.

Chapter five focuses on management research methodology in general and the methods chosen for this research. This chapter also discusses the reasons for choosing specific methods for this research.

Chapter six discusses within case analysis. The researcher investigates six companies during the project. This part includes detailed case reports relating to each of the six companies. The aim of 'within case analysis' is for the researcher to become intimately familiar with the data collected.

Chapter seven attempts to answer two research questions. The research questions are - how PMS implemented in practice in Bangladesh and how do contingency factors

affect the implementation and use of PMS in the manufacturing companies in Bangladesh?

Chapter eight includes conclusion and contribution of this study. This chapter also discusses the limitations of this study and recommendations for future research.

1.7 Conclusion

The aim of this chapter was to provide an overview of this study. Researcher discussed about the significance, objectives and contributions of this study. Researcher also discussed about the structure of the thesis.

The next chapter (Chapter 2) provides justification for using contingency theory for this research and discusses the benefits and criticisms of contingency theory. The chapter ended with the review of pioneer studies of the contingency theory.

Chapter 2 Contingency Theory

2.1 Introduction

This Chapter focuses on the contingency theory as this was selected as the theoretical framework for this research. There are 5 sections in this chapter. Section 2.2 provides the justification to choose contingency theory for this research. Section 2.3 provides evolution of contingency theory. The strengths and limitations of the contingency approach are discussed in section 2.4 and 2.5 respectively. Section 2.6 focuses on contingency literature. Also, some significant contingency studies are discussed in this section.

2.2 Justification for Contingency theory

Contingency idea is viewed as a critical theoretical technique that gives a holistic view and useful insights into a company's practices (Donaldson, 2006; Daft, 2015; Daft and Armstrong, 2021; Otley, 2016; Drazin and Van de ven 1985; Linh, 2024; Zou, 2024). Covaleski et al., (1996, p.4) outline the contingency idea as "a theoretical perspective of organisational behaviour that emphasises how contingency factors affected the design and functioning of the organisations".

The study of Management Control has been an area of much interest to many researchers (Merchant and Van der Stede, 2007; Simons, 1994; Otley, 1999; Anthony et al., 2007; Chenhall, 2003). These researchers have endless efforts to investigate and come up with evidence regarding the best way in which management studies can be adequately studied. The question as to whether or not the Contingency theory is an appropriate approach in the study of Management Control is controversial (Otley, 1980; Chenhall, 2003; Fisher, 1998; Gerdin and Greve, 2004). Researchers such as

Fisher (1998) have made significant contributions to this field. According to Fisher (1998), the argument put forward by the Contingency theory is that setting up systems of control in an organization is contingency depending on the setting the organization in question has established. This means that an organization can only enjoy an increase in performance if it manages to set up a control system that matches the contingency (Alsharari et al., 2023; Chatterjee et al., 2024; Chenhall, 2003; Donaldson, 2006; Fisher, 1998; Gerdin and Greve, 2004; Otley, 1980).

According to contingency theories, Organisation can achieve higher performance if there exists a higher level of fit between organisation's PMS and its operating environment (Chenhall, 2003; Handoyo et al., 2023; Nguyen et al., 2023). It can be harmful for an organisation if there is absence of fit between its sources of competitive advantage and PMS (Ittner, 2008; Melnyk et al.,2014; Simons, 2019). Hence, it is important that the study of impact on PMS shows the system users how the combination of PMS and the context can enhance organisational performance by aiding to take high quality decisions (Al-Surmi et al., 2022; Burney and Widener, 2007; Chenhall, 2003; Chenhall, 2005; Gomes and Mendes, 2023;Henri, 2006; Kaplan and Norton, 1996; Malina and Selto, 2001). In addition, it is also important to show which operational context will influence PMS (Bourne et al., 2005). Franco-Santos and Bourne (2005) highlighted contextual factors those stress the setting of the PMS in which it operates. They also splitted the contextual factors in two groups – internal factors and external factors (Anis and Shauki,2023; Broccardo et al., 2023; Daft, 2015; Donaldson, 2006; Franco-Santos and Bourne, 2005; Mintzberg, 1979; Otley, 1980). Internal factors refer to the factors related to organisational context and external factors refer to the factors related to environment and industry features (Daft, 2015;

Franco-Santos and Bourne, 2005; Grant, 2021; Handoyo et al., 2023; Johnson et al., 2017; Nguyen et al., 2023; Shahadat et al.,2023). Because of the time and resource constraints, this research focused solely on internal factors. Internal factors selected for this study are – management/leadership style, top management commitments, Reward system, training, resistance to change, technology/IT and knowledgeable workforce. The reasons why the above-mentioned internal contingency variables were chosen for this study are the importance of these variables in wide range of contingency theory and management accounting literature and the suitability of these variables in context to the research in this study (Abdelwahed and Doghan, 2023; Alkandi et al., 2023; Ali and Anwar, 2021; Blanchard and Thacker, 2023; Chaurey et al., 2023; Weiss and Hartle, 2023; Nudurupati et al., 2010).

2.3 Evolution of the Contingency Theory

The early 19th century saw a proliferation of organizational theories as researchers sought to determine the best way in which companies could be organized. Some of the theories that emerged during this period were the Scientific Theory of Management by Fredrick Taylor, Max Webber's bureaucratic theory and Henry Fayol's Theory of Management (Fayol, 1949; Taylor, 1919). These theories were common in terms of seeking a scientific approach to organizational management. This could be explained by the fact that this was a period of industrial revolution and therefore the main concern was how to enhance productivity and efficiency in organizations. However, in the years 1930s to 1950s, there emerged interests in terms of ensuring that organizations adopt a human relations approach and thereby the development of theories emphasizing on employee social wellbeing such as the Theory Y that stressed the need for companies to be humanistic and democratic. Beginning the year 1960, there was an emergence of innovation with a shift from production to information revolution. The main area of

focus was enhancing group work and teamwork (Burns and Stalker, 1961; Etzioni, 1961; Joynt, 1977; Kast and Rosenzweig, 1970; Lawrence and Lorsch, 1967; McGregor, 1960; Taylor, 1911; Taylor 1947; Woodward, 1965).

Fredrick Taylor according to Miller and O'Leary (1989) is considered as one of the earliest organizational theorists and his early works brought out scientific management. He outlined for monitoring of individual performance as well as work units. However, the research undertaken by Melton Mayo in 1933 and Barnard in 1938 changed this viewpoint. Similarly, Miller and O'Leary (1989) supported the new perspective of considering that human beings could not be controlled like machines as had been proposed by the Scientific Theory of Management. These researchers noted that social and psychological factors ought to be considered in the design of organizational processes (Barnard, 1938; Mayo, 1933; Miller and O'Leary, 1989). The focus should therefore not only be in terms of improving efficiency, productivity and profitability. There is need to ensure that a company also take great interest in improving the welfare of its people (Barnard, 1938; Mayo, 1933; Miller and O'Leary, 1989).

According to Otley (1980, p.416), Contingency theory stemmed from the works of Burns and Stalker (1961) which was thereafter reinforced by Woodward (1965). Another contributor to this theory was Chandler (1962) who emphasized the relationship between corporate strategy and goals achievement as well as organizational structure. Otley (1980) noted that contingency theory developed in the early 1960 as theorists focused on organizations' structures that could help improve organizational performance. Covaleski and Dirsmith (1996) observed that these studies reached a conclusion that contextual factors influenced organizational

structures. Some of the contextual factors that were identified include technology (Woodward, 1965), organizational size (Blau, 1970) and task environment (Burns and Stalker, 1961).

Fiedler (1964) introduced his contingency theory of leadership which challenged the idea of universal leadership style. He argued that effective leadership depends on the contexts. He outlined three principal situational elements those influence how favourable a specific context is for a leader. These elements are – the degree to which tasks are clearly defined and structured, the quality of the relationship between the leader and team members and the extent of the leader's formal authority to administer rewards or enforce discipline (Fiedler, 1964).

However, Fiedler's contingency theory focused more on the behaviours and traits of individual leaders (Fiedler, 1964). On the contrary, Fisher (1998) introduced a new perspective that shifted the idea of individual leadership to collective or group leadership. The focus on traditional contingency theory were on the traits and styles of individual leaders. However, the focus of Fisher's contingency theory was on group-level or collective processes and communications. Fisher's theory recommended that groups collectively adapt to the environments instead of adjusting a leader to situations (Fisher, 1998).

According to Barnard, (1938) as stated by Miller and O'Leary (1988), human relations perspective was a key pillar of the contingency theory. The theory was cognizant of the fact that corporations are influenced by social, physical and biological factors (Barnard, 1938). Self-interest and contractual principles were noted to be key drivers of organizations which caused management of businesses to be very fragile (Miller and O'Leary, 1988). Whereas the human relations perspective assumed that an

organization's existence can be justified by its ability to benefit individuals, the contractual perspective noted the need for a business to justify its legitimacy by generating sufficient returns to investors. Decision making therefore requires a careful balancing act to ensure that even as managers pursue their self-interests, the contractual principles are not overruled. Pursuit of contractual principles alone was noted as insufficient in driving cooperation and integrative group unity. Contingency theory therefore provided a blend that offered insights on human behaviour and individual decision making in an organization considering structural factors such as size, technology and environment. Moreover, it helped to explain important issues of managerial accounting research such as coordination and organizational control (Barnard, 1938; Schreyögg, 1980).

Contingency theory gained a lot of popularity by the early 1970s; it became one of the dominant approaches to organizational theory (Child, 1977). However, in the late 1970s, the theory started to elicit criticisms (discussed in section 2.5) such as by Wood (1979) and Otley (1980). Otley (1980) argued that behavioural theory focused on accounting information on individuals rather than considering an organization holistically. On the other hand, Miller (1981) and Clegg and Hardy (1999) argued that Contingency theory merely provided a synthesis between the universalist whereas opposing ideas of classic and human relations theories. Contingency theory was therefore noted to push for an open system approach whose success unfortunately relies on environmental factors (Otley et al., 1995).

Contingency theory, according to Dent (2001), is based on the idea that organization has unique strengths and weaknesses and depending on operating contexts (contingency factors), these could either be managed or not. According to Donaldson

(1996) and Alam (1997), the success of an organization is solely dependent on the correctness of fit between its context and the management style adopted. Even though Contingency theory offers specific advice regarding the various forms of management styles that ought to be taken with a range of contextual variables, it absolves management the responsibility of driving success in a business.

2.4 Benefits of the Contingency Theory

Contingency theory has an intuitive appeal by providing the basis for understanding broad issues that affect management controls (Selto et al.,1995). The theory is considered suitable in designing performance measurement tools by taking into account the fact that there is no one best way of management since it depends on the situation (Alsharari et al., 2023; Chatterjee et al., 2024; Drazin and Van de Ven, 1985; Selto et al., 1995; Merchant and Van der Stede, 2007). Consequently, the theory encourages leaders to use their intuition in exercising decisions while taking into account the existing conditions. The theory therefore resolves some of the ambiguities and contradictory findings that had resulted from the universalistic approaches. Moreover, the theory offered considerable inspiration to researchers by prescribing tight control systems that are appropriate to companies in stable environments where simple technology is applied and centralized organizational designs are put in place. Conversely, for complex, decentralized and dynamic organizations, loose control systems are most appropriate (Daft, 2015; Marchese et al., 2023; Merchant and Van der Stede, 2007; Simons, 2008). Therefore, according to Rayburn and Rayburn (1991), contingency theory offers guidance regarding the optimal forms of control to be deployed based on different operating environment. A holistic approach to the

design of control and management accounting systems is therefore offered by their theory.

The other strength of this theory is the fact that it takes account of the fact that organizations are open systems with direct interactions with the environment (Burke and Morley, 2023; Mahmud et al., 2021). Environmental uncertainties are therefore likely to have an impact on the business. Contingency theory is also appealing for being practical and therefore offering reasonable explanations for the variables that concern management in designing control systems in practice. This has caused the theory to gain wide acceptance in informing the practice. Its acceptance of the fact that contingencies need to fit in a specific manner for an organization to operate optimally provides the justification for business reorganization to adjust to new contingencies. Hence, contingency theory has the capability for continuous change management in a business to align operations to emerging trends (Ahmed et al., 2020; Chatterjee et al., 2024; Child,1975; Victer, 2020)

2.5 Criticisms to contingency theory

Longenecker and Pringle (1978) is one of the critics who argued that contingency theory simply made a listing and crude classification of variables without offering any plausible explanations regarding the relationship among these variables. Similarly, Otley (1980) took issues with the theory arguing that the contingency variables that were used were ill-defined and measured and at the same time could not be comparable across earlier accounting studies and therefore conflicting results were yielded. On the other hand, Drazin and Van de Ven (1985) and Selto et al. (1995) were concerned that due to the extensive interactions of the various variables as well as organizational dynamism, it is hard to apply the theory in practice.

Child (1996) (in Donaldson, 1996) held the view that contingency theory assembles by finding strong statistical links between variables such as variables relating to organizational contexts and forms of management that existed in such organizations. Statistical correlations, however, do not in themselves lead to a theory since according to the researcher, a theory need to be satisfactory based on the overall understanding of the processes. Donaldson (1996) supports this view arguing that organizations operate in different industries and therefore, their correlations differ depending on industry niche. Generalisations postulated by contingency theory can therefore only be applied within a niche and not across industry niches (Donaldson, 2006; Hanson et al., 2016; Merchant and Van der Stede, 2017; Tolbert and Hall, 2015; van Mossel et al., 2018).

Donaldson (1996) observes that the development of ne-contingency theory provided a more dynamic and realistic approach than the traditional contingency theory. The challenge of the theory according to Donaldson (1996), is the fact that it relies on the idea of 'fit' which is quite ambiguous since managers are unlikely to know the organization fit that they should be in or the structures that are required to achieve such a fit. The theory assumes that managers implicitly know which direction fit lay and how to get there which is quite unrealistic (Csaszar and Ostler, 2020; Donaldson, 2001; Gagai, 2022; Hatch and Cunliffe, 2013; Jones, 2013; Tompkins, 2023). Whereas managers try to achieve full-fit, they always end up moving into quasi-fit and therefore, organizations adjust their structures to narrow the gap between its contingencies and actual level though the gap is really never closed.

2.6 Review of literature on the Contingency theory

Contingency approach lies in between the situation-specific and the Universal approach (Child, 1974; Grüner, 2024; Levstek et al., 2022; Luthans, 1973; Miller, 1981; Nugraha and Soewarno, 2024; Rose et al., 2023). According to contingency theory, different control systems are appropriate for different Organisations (Child, 1974; Miller, 1981; Luthans and Stewart, 1977). They argued that it was hard to advent an approach that avoids adverse aspects of each traditional approach. Luthans and Stewart (1977) proposed that the best control idea or technique relies upon on the instances at a specific period. They argued that contingency approach can be the best option to achieve this goal. The contingency technique is situation oriented but greater rigorous than conventional strategies. Hence, Ittner and Larcker (2001) stated that no specific system of management accounting and control can be applicable universally. The Organisation requires to adopt appropriate accounting and control techniques which can handle the situations surrounding the organisation.

According to the contingency principle, the maximum green organizational structure depends on several contingency factors and useful relationships, in preference to a deterministic commonplace sense. Contingency theorists argue that there can be a centre floor between extremes these two, wherein it is viable to investigate adjustments in organizational structures in a systematic way. “The key contingency variables are environmental complexity” (Lawrence and Lorsch, 1967), “organisational technique” (Chandler, 1966; Child, 1972), “generation” (Woodward, 1965), and the” size of the corporation” (Hickson et al., 1969). Jaffee (2001) explains that depending on aid undermines the extent to which the environment determines the contingency

idea and emphasizes initiative techniques that can be undertaken by managers to deal with the problems they are facing.

Gresov (1989), Fisher and Fisher (1998) have explained that a business organization would possibly layout a managed device to be nicely matched with a (dominant) contingency thing and overlook others. Besides, they stated that when numerous contingency factors are entered concurrently in the evaluation, programs to the management system can also conflict. The layout of numerous contingency manipulate structures involves compromises that save you an "adjustment" for all situations (Reilly, 1998). If all contingency factors have required the same form of manage for optimality, then the manage device layout might be easy. Contradictory contingencies motive wishes that are not well matched. The conflicting contingencies consist of designing a management system that deviates requests for at the least one occasion, making optimum control difficult (Usach, 2019). The war in the emergency framework acknowledges that some misfit, significant or format can stand up as a useful reaction to numerous contingencies. The method to this warfare is not clean. Many researchers have used contingency theories to their control research.

Many authors have counselled executives in research that captures many crucial links in control and manipulate capabilities and theories that could decorate an understanding of contingencies and the relationship a number of the feasible variables and the control manipulate the device (Chenhall, 2006; Donaldson, 2006; Dropulic, 2015; Mustapha,2019; Sirmon and Hitt, 2009). Despite the fact that the unique terms and site of variables range, everybody shows that control, control and accounting should be regarded as a complete organizational manipulate business enterprise comprising accounting statistics systems, performance measurement, reward structures, and organizational design.

The framework as explained by Otley (1980) illustrates how the impact of contingency variables depends on the control method or with the aid of those who are associated with organizational objectives, or those past the company's manage. Brickley et al. (1995) suggests that organizational structure framework of a commercial company, consisting of the allocation of rights to make decisions to employees, is directly encouraged by way of the industrial organization' monetary and non-financial desires that are suffering from contingency variables inside the environment of the economic corporation.

Contingency theory according to Covaleski and Dirsmith (1996) offers a rich blend between sociological perspective and organizational theories. Some of the studies that are considered to have pioneered the contingency theory include Burns and Stalker (1961), Lawrence and Lorsch (1967) and Woodword (1965). The following is a brief overview of each of these theories and their contributions to the Contingency Theory.

2.6.1 Burns and Stalker (1961)

These two researchers undertook a study on organizational structures and systems with a review of their relationships with environmental factors. They sought to assess the impact of the environment on organizational systems. The researchers noted that having mechanistic or organic management structures was largely related to the environmental change. Environmental change according to them referred to the pace of technological innovation, type of production technique and competitiveness in the market. They argued that whereas there was no single set of principles to guide organizational structure, organizations need to come up with ideal structures that fit the situations to serve as a model that should be followed by administrative practice. Management tasks according to the researchers should therefore be to correctly

interpret the market and technological situation and design the appropriate systems as well as implement and oversee operationalization of such systems.

The researchers held the view that organizations are simply a set of systems that are assembled out of usable attributes of people and thus the need to ensure that they are congruent. Competition and rivalry among systems in an organization should therefore be discouraged. Hierarchical order in organizations is supposed to ensure that such harmful competition does not take root as rights and responsibilities are clearly defined. The researchers proposed two distinct management structures namely; mechanistic and organic. Mechanistic style was proposed for organizations operating in stable conditions whereas organic structures are meant for businesses those faced continuous change. They noted that in mechanistic structures, it is important to break down individual tasks with subordinates being accountable to their supervisors. In such structures, roles and responsibilities for each person are clearly spelt out whereas operations and working behaviours are governed by instructions and decisions that are made by superiors. This structure requires that hierarchical structure be maintained with the head of the businesses retaining overall responsibility of the business. Information therefore flows from top to bottom with managers filtering and amplifying some of this information as might be necessary.

Conversely, for organic structures, the business is designed in complete opposite of mechanistic structures. This is useful in businesses that face unstable conditions and therefore tasks cannot be broken down and distributed among individual tasks that can be clearly defined hierarchically. In such structures, individuals need to use their knowledge of the tasks and the organization. Jobs are not formally defined and there are so much horizontal and vertical interactions. In such structures, communication is required continuously amongst people of different ranks with the main agenda being

consultation rather than command. The leaders can therefore not be assumed to have all the information regarding the business since a lot of delegation occurs at the lower levels.

The researchers observed that dysfunctional structures make both the individuals and organizations less fit to survive in a certain environment. They therefore contended that the choice of an organizational structure is contingency upon the environmental factors faced by a business. Since environmental factors also keep changing, it is also important for organizations to ensure that their structures are not static. The risk is to keep the same structure amidst changing environmental factors which could cause such a structure to be unfit. Managers should therefore undertake regular environmental scanning to ensure that they have chosen the most appropriate organizational structure. The level of adoption of continuous change that is proposed by the contingency theory is therefore supported by the two researchers. This is based on the appreciation of the fact that organizations go through phases of changes and thus they need to keep reviewing their structures from time to time (Samuel and Sibindi, 2019).

2.6.2 Woodward (1965)

The researcher undertook a comparative study to determine where there is a link between technical complexity and strategies that an organization applies. The study found out that organizational performance is strong where there is a technological fit than where the level of technology applied has a mismatch with management organization. She argued that since all organizations were facing technological change, organic structures are likely to be forced upon organizations in the future. Woodword therefore assumed that technology is the only driver of change.

Woodward's study had significant weaknesses by assuming that the overall structure of an organization is solely influenced by technology. A number of researchers have criticized Woodword due to this assumption such as Donaldson (1995). Donaldson argued that technology actually influences an organization at the level of individual job and not at the overall organizational structure. Several researchers supported Donaldson's this argument (Sibassaha et al., 2025). Nevertheless, Woodword offered an important bridge to the contingency theory by identifying technology as an important variable. This has been confirmed by other researchers such as Ritzer (1998) who contend with the fact that technology is an important component in management models. Currently, technology is the main driver of businesses. As corporations become complex, establish operations across the globe and hinge their competitiveness of ecommerce, technological innovation is the mainstay of business strategy. Organizations are forced to adopt complex and new forms of business structures such as cellular, matrix and network structures which according to Miles et al., (1997) is meant to generate economic value.

2.6.3 Lawrence and Lorsch (1967)

These two researchers conducted a comparative study targeting companies serving in the plastic industry. Based on their study, they found out the critical success factors included differentiation and integration. They clearly determined that organizations that were successful had adapted their management styles to fit their environmental factors. They noted that the level of uncertainty and change in an environment informs development of internal features of a company. They reached conclusions that people have goals and purposes and at the same time, it is people who coordinate different activities thereby creating an organization. Furthermore, the effectiveness of an

organization was noted to be dependent on how satisfied its people were. The researchers observed that as organizations grow, they tend to develop specialized units to take care of segments of their external environment thereby resulting to differentiation of functions. The differentiated tasks are however related to each other and thus the need for integration. The organizations that they studied had differentiated their subunits some dealing with the market environment (sales), techno-economics (manufacturing) and scientific environment research and development. The level of uncertainty within each sub-environment and their diversity created the need for creation of the sub-units with objective of increasing effectiveness in dealing with each sub-environment.

The researchers however noted that increased differentiation increased interdepartmental conflicts since each specialist group tended to develop its own means of coping with their particular uncertainties. The researchers noted that this was generally useful since having different perspectives enables an organization effectively cope with the environment. However, integration of the different perspectives was also important to ensure that the common organizational objective is realized.

The contributions by Lawrence and Lorsch towards contingency theory are quite immense. They brought about the concept of an open environment that is central to the theory. The theory calls for organizations to appreciate the fact that they interact with the external environment and thereby the need to come up with effective strategies to ensure that a proper fit is maintained with environmental factors (Nassou and Bennani, 2024; Volberda et al., 2011).

2.6.4 Child (1975)

The researcher argued that contingency theory is a means to superior performance since it helps to identify the variables that enable a business to cope well with operating realities. These factors are expected to keep changing from one organization to another especially with differences in terms of the environment of operation, technology, and organization size. The researcher noted that high levels of bureaucracy are appropriate for large corporations but not for small companies. However, the researcher did not identify any strong relationships between organizational variables, management and performance. This could be due to the measurement perspectives used or the variables that were investigated. On the other hand, Boswell (1973) argued that a variety of variables influence performance and therefore there might be no single factor that is significant. The other reason could be due to the fact that managers are usually quick to come up with strategies to resolve constraints that arise occasionally. Child also noted that managers play an active role in organizations instead of a reactive one (Dionne et al., 2025). Therefore, unlike the view that was taken by the contingency theory that managers are reactive, Child argued that they play a proactive role and manipulate contextual factors to the advantage of the business. Child therefore offered some ground for the Contingency theory by introducing the concept of strategic choice. This helped to improve the theory as it involves an appreciation of the fact that managers exercise some freedom in making decisions that influence a business characteristic. On the contrary, recent research suggests that the role of managers has shifted in recent decades to collaborative facilitators from being active decision makers (Zhang, 2023). According to him, managers are supporting in respond to the necessities of team instead of directing or driving the changes themselves (Zhang, 2023).

Table 2.1 Comparisons of contingency theories

Aspect	Burns & Stalker (1961)	Woodward (1965)	Lawrence & Lorsch (1967)	Child (1975)
Focus	Structure and environmental stability	Technology and structure	Subsystems and environmental uncertainty	Strategic choice and managerial agency
Key concept	Mechanistic vs. Organic structures	Technology types (unit, mass, process)	Differentiation and Integration	Managers actively shape structure and strategy
Level of Analysis	Whole organization	Whole organization	Subsystems within the organization	Organizational and managerial level
Contribution	Introduced adaptive structures	Linked technology to structure empirically	Emphasized internal fit and coordination	Introduced the concept of strategic choice
Empirical Basis	Case studies in UK electronics firms	Survey of UK manufacturing firms	Study of firms in plastics, food, and containers	Theoretical and empirical studies on managerial roles

Because of the time and resource constraints, this research focused solely on internal contingency factors. Internal contingency factors selected for this study are – Management/leadership style, Top management commitments, Reward system, training, technology/IT and knowledgeable workforce. The reasons why the above-mentioned internal contingency variables were chosen for this study are the importance of these variables in wide range of contingency theory and management accounting literature and the suitability of these variables in context to the research in this study.

2.7 Conclusion

The aim of this chapter is to discuss contingency theory. Researcher justifies the reasons for using contingency factors for this research and discusses the benefits and criticisms of contingency theory. The chapter ends with the review of pioneer studies of the contingency theory.

Several researchers suggested that contingency theory is considered suitable in designing performance measurement tools by taking into account the fact that there is no one best way of management since it depends on the situation (Alsharari et al., 2023; Chatterjee et al., 2024; Merchant and Van der Stede, 2007). Contingency theory enables leaders to use their intuition in exercising decisions while taking into account the existing conditions. Hence, the theory resolves some of the ambiguities and contradictory findings that had resulted from the universalistic approaches.

Rayburn and Rayburn (1991) argued that contingency theory offers guidance regarding the optimal forms of control to be deployed based on different operating environment. Therefore, contingency theory offers a holistic approach to the design of control and management accounting systems.

The next chapter (Chapter 3) provides review of performance measurement system. At the end of the chapter, researcher added a conceptual framework which was developed based on the review of performance measurement system.

Chapter 3 Performance Measurement System

3.1 Introduction

This chapter highlights the rise of measurement systems, the need for new measurement approaches, and some of the factors that affect the contemporary measures of performance. There are 5 sections in this chapter. Section 3.2 explains the necessity of new performance measurement system. Section 3.3 reviews contemporary performance measurement system. The criticisms of non-financial performance measures are discussed in section 3.4 followed by discussion of previous studies on factors affecting use of performance measurement system.

3.2 The Need for New Performance Measurement Systems

Eccles and Pyburn (1992) express an identical view that historical focus is the nature of financial accounting, thus rendering performance information to be received late, diminishing its predictive ability (Trucco, 2015). Given this historical approach, the authors indicate that financial measures cannot answer questions relating to value creation and cannot serve stakeholders with varied interests. Hence, they cannot point out success factors within a company. Conventional performance measurement usually focuses on the financial measures of sales, profit, debt, and ROI (Horvathova and Mokrisova, 2023; Riofrio et al., 2023; Rahiminezhad Galankashi and Mokhatab, 2022; Lee, 2023; Munthal and Logasakthi, 2024). Over-dependence on such measures is not only incomplete but dangerous, too. Much criticism has been made that financial measures are backwards-looking, and by their nature, they convey no predictive value. Furthermore, traditional performance measures often focus on the individual or specific functions rather than on the processes that are key to managing

the business and for which more transversal metrics are required than conventional systems typically provide.

While budgetary control might be successful in stable environments in which clarity of the budgets is guaranteed, it has significant challenges with increasing complexity (Atukunda et al., 2024; Alsharari, 2020; Chenhall and Morris, 1986; Hopwood, 2013; Johansson-Berg and Wennblom, 2023; NGUYEN, 2024; Otley, 1978; Simons, 2019). Otley (2001) referred to the budgets as highly simplistic characterisations of what represents a more complex reality, which may pose a problem. As a result, companies should shift from using financial numbers as the foundation of performance measures to making them part of a broader set of measures. This view is consistent with many experts who believe that a more comprehensive performance measurement system is required (Ittner et al., 2003; Kellen and Wolf, 2003; Meyer, 2003; Neely, 1999; Neri et al., 2021).

Some critics questioned whether budgeting is relevant to management control in the modern organisation (Hope and Fraser, 2003; Mitter et al., 2024; Neely et al., 2001; Trevisan and Mouritsen, 2023). This is because most organisations face an ever-increasing rate of change nowadays, and traditional budgeting practices often need to be more flexible to sustain that dynamic and fast-paced business environment. In aggregate, these changes are referred to as a performance measurement revolution by Neely in 1999. It addresses weaknesses within traditional performance measures when assessing advanced manufacturing techniques.

The revolution calls for a need for performance metrics that compare more with contemporary business practices and have the ability to provide better information in terms of relevance and time appropriateness on which to base strategic decisions (Eccles, 1991; Srivastava and Bag, 2023; Sartal et al., 2020)

In recent years, management practice has been impacted by various changes, such as - increased product proliferation, extensive adoption of automation and digital technologies in manufacturing, and the expansion of global markets due to the reduction of trade barriers (Barney and Hesterly, 2019; Errida and Lotfi, 2021; Grant, 2008; McAfee and Brynjolfsson, 2008; Ng and Stanton, 2023; Porter, 2008; Teece, 2010). All these require management practices to change continually to help managers make strategic decisions. As a result, management accounting has become essential as it acts as a critical element in organisational success by offering tools and frameworks for moving through this complex landscape (Bhimani, 2020; Chang et al., 2023; Grossi et al., 2020; Hadid and Al-Sayed, 2021; Ittner and Larcker, 1998; Kaplan and Atkinson,1998; Nixon and Burns, 2012; Trevisan and Mouritsen, 2023)

Contemporary elements of environmental change impact the business enterprise as follows: there is increased environmental uncertainty; organisations have grown in size, become concentrated, and have formed alliances; and lastly, there has been a decline in manufacturing (Alsharari, 2024; Azadegan et al., 2013; Nudurupati et al., 2021; Otley, 1994; Porter and Strategy, 1980; Sarkis, 2001; St-Pierre et al., 2023; Struckell et al, 2022; Zhang et al., 2023) . According to Otley (1994), environmental uncertainty ‘arises from shifting conditions in the external environment which make the future unstable; hence, the standard budgeting approaches will be less accurate’. Otley (1994) concluded that the increasing unpredictability of the world complicates organisational control. According to Otley, advances in Technology cut down employees and, hence, reduce the size of business units. Besides that, he added that the "emergence of the concentrations and alliances and the fall in traditional manufacturing signal presumption of a new era in business’’. Firms are rapidly

abandoning past production techniques and embracing the latest methods to establish and enjoy sustainable, capable advantages (Bag et al., 2021; Best, 2001; Goldman and Nagel, 1993; Knoppen and Knight, 2022). These changes underline the requirement for adaptive management accounting practices to help an organisation sustain competitiveness within a dynamic market.

The environment of rising competition and the changes in outsourcing and integration of firms favours constructing a value-added chain (Fullerton and McWatters, 2002; Gibbs and Humphries, 2009; Ozdemir et al., 2017). According to Fullerton and McWatters (2002), firms should deliver low-cost, top-quality products on time-for-demand to achieve and maintain strategic competitive advantage. Hence, the firms must establish managerial tools for evaluating and controlling future financial performance and critical resources. They should cover monetary and non-monetary aspects to give feedback on all the business facets. For instance, customer satisfaction or loyalty is a non-financial performance measure; other performance measures, such as quality, cycle time, employee motivation, and innovation capabilities, will add to the financial measures (Fullerton and McWatters, 2002). Next section will focus on Contemporary performance measurement system.

3.3 Contemporary Performance Measurement Systems

3.3.1 Definition and purpose of PMS

A performance measurement system is the process of information collection, analysis, and reporting on an organization or individual performance (Franco-Santos et al., 2012; Kaydos, 2020; Kasale et al., 2023; Spekle and Verbeeten, 2014). The main reason that various firms adopt measuring systems is to boost the management of the

organization (Kaydos, 2020; Lucianetti et al., 2018; Melnyk et al., 2014; Shahadat et al., 2023). It is the role of managers, team leaders, and supervisors to come up with ideas and strategies that will lead to the positive growth of an institution. Also, performance measurement systems improve the control of an organization, sets precise objectivities and responsibilities, comprehend strategic objectives, and determines a firm's process capacities and capabilities (Alsharari, 2024; Asiaei et al., 2021; Asiaei et al., 2023; Bhagwat and Sharma, 2007; Csiki et al., 2023; Chenhall, 2005; Franco-Santos et al., 2012; Garengo et al., 2005; Martinsons et al., 1999; Nudurupati et al., 2021; Hristov et al., 2024). Over the years, business experts are continuously coming up with various performance measurement systems to suit the global changes. Some of these global changes affect the performance of a business, and it is essential to have an in-depth familiarity with a company and how it will survive amidst the continuous evolution of systems.

3.3.2 Evolution from traditional to contemporary approaches

Several researchers noted that nonfinancial performance measures are not a new discovery; over the years, firms have always measured performances in financial and nonfinancial terms (Chow et al., 2006; Cupertino et al., 2023; Gan et al., 2020; Hussain and Hoque, 2002; Omran et al., 2021; Zarzycka and Krasodomska, 2022). Traditionally, nonfinancial measures were used at lower ranks in the organisational hierarchy to enhance task control purposes; on the other hand, financial measures were used at higher ranks for the purpose of management control (Abdel-Maksoud et al., 2005; Aguilera et al., 2024; Anthony et al., 2007; Chong et al., 2023; Ittner and Larcker, 2003; Lau and Sholihin, 2005.; Lau, 2015; Merchant and Van der Stede, 2007; Simons, 1994) . As such, the nonfinancial measures should be emphasised as

essential items to be reported. In the dynamic global environment and increasing competition, traditional performance measures are unsatisfactory and require greater emphasis on nonfinancial measures. Businesses clearly understand now the risks associated with an exclusive focus on financial measures: maintenance of profit margins or return on investment tend to forget issues relating to customer satisfaction, employee engagement, and influence on operational efficiency. The changing business environment entitles an overall look at performance evaluation in terms of quantitative and qualitative measures, providing a fuller view of organisational health and progress.

According to Said et al. (2003), the requirement of holistic view indicates a shift away from an exclusive reliance on financial performance measures toward their inclusion as one measure within a broader measurement system. They also asserted that a mix of financial and nonfinancial must be maintained at every level within the organisation (Said et al., 2003). In that respect, nonfinancial measures of customers' loyalty, innovation rates, or internal process improvements play a central role in strategy formulation and day-to-day operational changes. On the other hand, they indicated that other authors used this term interchangeably for the KPI, meaning only nonfinancial measures to support strategy implementation. Several researchers made the same approach to the differentiation between Critical success factors (CSF) and Key performance indicators (KPI) (Rockart, 1979; De Waal, 2002). They defined CSFs as the limited areas by which adequate results must be achieved for an organisation to achieve competitive success. Poor performance in implementing these areas would mean that the outcomes generated for the organisation from those activities cannot optimise the intended results. Thus, CSFs are activities that demand constant and meticulous management attention. KPIs, on the other hand, represent key metrics

utilised to measure CSF. A critical success factor involves qualitatively describing the strategic elements essential to the organisation's success, which become quantifiable through key performance indicators. By turning CSFs into measurable KPIs, organisations will be in a better place to track and manage their performance regarding strategic goals, thereby ensuring their alignment and continuity of improvement (De Waal, 2002; Etgar et al., 2023; Herath et al., 2023; Milgate, 2004; Tran, 2013).

3.3.3 Challenges in implementing contemporary PMS

A common frustration in performance measurement is - Companies usually need help knowing where to start when reviewing performance measures (Eccles, 1991; Franco and Bourne, 2003; Kaydos, 2020; Korhonen et al., 2023; Merchant and Van der Stede, 2007; Neely et al., 2002; Weiss and Hartle, 2023). According to a range of authors, performance measures are indispensable to guarantee that companies' goals and objectives are achieved (Behn, 2003; Eccles, 1991; Kaydos, 2020; Korhonen et al., 2023; Parmenter, 2015; Weiss and Hartle, 2023). They defined efficiency as a measure of the economic use of a firm's resources, that is, inputs, for a given output level. In contrast, effectiveness measures the extent to which the firm realises its structured goals and objectives. Performance measures are used in evaluating, controlling, and improving production processes. This benchmarking is essential to let organisations fulfil their aims and goals effectively and efficiently.

As Davis and O'Donnell (1997) found, numerous companies need to realise the problems of developing adequate techniques to measure performance. The major problem is that new measures are added to the set ad hoc, resulting from a lack of integration (Franceschini et al., 2007; Neely, 1999; Merchant, and Van der Stede, 2007). Thus, such measures cannot provide an integrated view of the business's

current performance and future direction. Shaw and Ridgeway (1997) noted that no universal blueprint for a joint performance measurement technique has been developed. Many researchers found that no ideal set of metrics exists, either practically or theoretically, for monitoring, enhancing, or upgrading company performance (Bititci et al., 2012; Csiki et al., 2023; Cosa and Torelli, 2024; Franco-Santos and Otley, 2018; Melnyk et al., 2014; Mio et al., 2022; Pavlov et al., 2017; Taticchi et al., 2010). Instead, each company must develop its own set of balance of measures sufficient to manage its operational activities (Bourne et al., 2003; Csiki et al., 2023; Cosa and Torelli, 2024; Eccles, 1991; Franco-Santos and Otley, 2018; Fuertes et al., 2020; Frederico et al., 2021; Kaplan, and Norton, 2007; Korhonen et al., 2023; Melnyk et al., 2014; Pavlov et al., 2017; Taticchi et al., 2010).

The most critical issue many existing organisations facing is developing a coherent and operational performance measurement system that can identify and adopt a set of KPIs and CSFs for their strategic targets with respect to the specific operational context (Camilleri, 2024; De Waal, 2002; Hristov et al, 2022; Laitinen and Kadak, 2019; Parmenter, 2015; Olaitan and Flowerday, 2017; Sirait et al., 2020; Tadić and Boljević, 2015). Without a consistent and comprehensive performance measurement framework, companies would run the risk of fragmented sets of measures not representative of overall performance or strategic directions. In order to deal with this challenge, companies should ensure that their performance metrics are aligned with the strategic objectives and provide an overview of the operations (Adama et al., 2024; Hanson et al., 2011; Kaplan and Norton, 2006; Korhonen et al., 2024; Rompho, 2024; Van Looy and Shafagatova, 2016). Such alignment enables better decision-making and continuous improvement to achieve organisational goals.

3.3.4 Key features of contemporary PMS

A measurement system can be termed "effective" if it promotes anticipated behaviours and least promotes undesired ones (Brooks and Coleman, 2003; Merchant and Van der Stede, 2007; Malmi and Brown, 2008; Neely et al., 2002; Simons, 1994). Due to the massive effect on behaviour found by choice of metrics, "what is measured" is an essential constituent of an effective measurement system (Brooks and Coleman, 2003; Merchant and Van der Stede, 2007; Malmi and Brown, 2008; Mesa, 2007). Brooks and Coleman have summarised, based on Brown (1996) and Thor (1998), the features of the practical measurement system. These characteristics can be excellent guides for the assessment of the KPIs of an organisation. Brown and Thor agree on most of the features, but they also have some dissimilation in some issues. For example, Thor (1998) firmly focuses on relating measurements to the rewards and recognition system. These features imply the need for an integrated performance measurement framework that emphasises specific nonfinancial performance measures, explains the business model, and illustrates how these measures contribute to firm value.

Rockart (1979) opined that the sound performance measurement system should contain the right mix of the financial and nonfinancial CFI and KPI. Concentrating on key problem areas and strategic issues influencing business functioning allows the management to track whether the anticipated goals are achieved. The crucial work process converts an organisation’s vision and mission into a series of objectives, from which it derives its CSFs. These CSFs are then transformed into specific and quantifiable KPIs, creating information bases that anticipate managers’ decisions. According to Geanuracos and Meiklejohn (1993), performance measurement techniques are more used as a decision-making tool than for bookkeeping or reporting

purposes. The authors, however, stress that the effectiveness of the performance measurement is a reason for continuous improvement, mainly by using non-financial performance indicators.

According to Neely et al. (1994b), a performance measurement framework is a method or plan which would assist or aid the company in developing its performance measures. In contrast, performance measures are structured metrics drawn from several competitive priorities that quantify decisions' efficiency and effectiveness. This conceptual approach also underpins frameworks such as the Balanced Scorecard described by Kaplan and Norton (1996a) which is considered in more detail below in section 3.6. Lipe and Salterio (2002) report that classifying performance measures using Balanced Scorecard groupings assists users in recognising redundancies among performance measures. Grady (1991) emphasised that the company must distribute the necessary data through the organisation for these frameworks or tools to be effective. Employees must understand what is expected of them and how their roles relate to the strategy.

In a nutshell, it is the correct measurement system through which an organisation gets the right behaviours. Integrating financial and nonfinancial metrics into its strategy will give organisations the impetus to make better decisions, strive to improve all functions, and deliver superior total performance. All one needs is to create a robust framework that may measure the quintessential performance precisely and communicate expectations and strategic alignment to all rank-and-file employees. The approach fosters a culture of continuous improvement and strategic focus, eventually leading to organisational success.

It is only necessary to note that several benefits have been identified in prior research on integrating nonfinancial performance measures with financial ones. Stivers et al.

(1998) noted that firms seek a better competitive position by employing the best quality management systems, which are essential for administering measurement systems comprised of many financial and looking-ahead nonfinancial metrics.

Also, relative to financial measures, Hendricks et al. (1996) indicated that nonfinancial measures are timelier and thus allow for proactive efforts before adverse financial results occur. Immediately available to assess the impact of current efforts, nonfinancial measures allow managers to effectively and quickly take remedial corrective actions. Medori et al. (1997) state that well-established nonfinancial measurement procedures can offer precise and accurate information. According to Luft and Shields, 2002, nonfinancial measures tend to have a forward-looking orientation, whereas financial measures have a historical orientation. They discovered that individuals' profit predictions are more accurate when using non-monetary metrics compared to financial ones. While financial measures typically describe past performance – what has happened the nonfinancial measures may describe the activities underlying future performance, as noted by Kaplan and Norton (1995).

Previous research, therefore, was conducted on the links between customer satisfaction, as a nonfinancial measure and the current performance of firms; it demonstrated a positive relationship. Anderson et al. (1994, 1997) reported that there is a positive correlation between nonfinancial measures related to customer satisfaction and contemporary accounting performance. Using firms' data about customer satisfaction is reported to improve performance sensitivity regarding the choice of manufacturing strategy. Behin and Riley reported the trends for this case in the U.S. airline industry in 1999, stating that customer satisfaction correlates with future financial performances. Customer satisfaction, as one of the leading performance measures, has been empirically associated positively with future

financial performance, according to Ittner and Larcker (1998a). Banker et al. (2000), utilised time-series data of 72 months for a sample of 18 hotels. They presented that Companies' future financial performance is positively affected by nonfinancial measures (Banker et al., 2000). The findings of such studies conclude that non-monetary metrics are crucial and contribute to improved future performance (Al-Hosaini et al., 2023; Chow and Van Der Stede, 2006; Farooq et al., 2024; Gan et al., 2020; Gu et al., 2024; Said et al., 2003; Israel et al., 2023).

Nonfinancial measures are relatively easy to communicate throughout the organisation (Chong et al., 2023; Dossi and Patelli, 2010; Low and Siesfeld, 1998). Including nonfinancial measures in compensation contracts helps managers align efforts to dimensions highlighted by the measures, leading to performance improvements (Ayi, 2023; Fisher, 2015; Ibáñez-Forés et al., 2023; Malik, 2023; Luthans and Stajkovic, 1999;). According to Ittner et al. (1997), a compensation contract should contain performance measures that provide additional information about the managerial actions shareholders desire to motivate.

Literature on performance measurement also indicates that introducing nonfinancial measures within the measurement systems would help managers comprehend how various strategic objectives interrelate, clarify to employees how their actions are linked to the selected strategic objectives, and set priorities and allocate resources in a relevant manner (Al-Hosaini et al., 2023; Alves and Lourenço, 2022; Chenhall, 2005; Chow et al., 2006; Dossi and Patelli, 2010; Kaplan and Norton, 1996; Kori et al., 2020; Lewandowski and Cirella, 2023; Perego and Hartmann, 2009). Researchers suggested that since nonfinancial measures are oriented more toward the long term than most financial measures, such as cost or profit ratios, they could facilitate continuous improvement in all aspects of a firm's activities (Allui and Pinto, 2022;

Asghar et al., 2020; Banker and Mashruwala, 2007; Chenhall, 2005; Eccles et al., 2013; Ittner and Larcker, 2003; Onwubiko et al., 2024).

Apart from being more direct, nonfinancial measures have the added advantage of being less subject to influence because they usually depend less on judgment of management than balance-sheet estimates or cost allocations (Gross et al., 2024; HassabElnaby et al., 2010; Hofmann and McSwain, 2013; Merchant and Van der Stede, 2007; Said et al., 2003).

3.4 Criticisms of Nonfinancial Performance Measures

Different researchers have cited the following reasons for criticising nonfinancial measures. Some researchers believe that nonfinancial measures are inconclusive (Alves and Lourenço, 2022; Chenhall and Langfield-Smith, 2007; Farooq et al., 2024; Israel et al., 2023; Ittner and Larcker, 2003; Khallaf, 2012; Merchant and Van der Stede, 2007; Micheli and Mari, 2014). They said they can correlate with specific competitive dimensions like the organisational value created per customer, which is not easy to sum up. Here, it sets a paradox by drawing a situation where having the development of a few and limited nonfinancial measures leads to a loss of the overall outlook of the firm globally and where grand sets of indicators become problematic for the employees to manage and comprehend (Alves and Lourenço, 2022; Chenhall and Langfield-Smith, 2007; Ittner and Larcker, 2003; Israel et al., 2023)

Several researchers noted the need for a more diverse range of nonfinancial measures. This diversity, however, presents another challenge - the selection of an appropriate set of measures that is suitable for the company (Franco-Santos & Bourne, 2005 ; Hansen, 2010; Ittner and Larcker, 2003; Lau and Sholihin, 2005) . It is important to note that the lack of comparability is a major challenge when using nonfinancial measures across different companies and periods (Breijer and Orij, 2022;

Davila and Venkatachalam, 2004; Dossi and Patelli, 2010; Maines et al., 2002). Existing literature reveals that the nonfinancial performance metrics disclosed to the public by corporations have differences between companies and over time (Cicchiello et al., 2023; Coram et al., 2009; Maines et al., 2002; Omran et al., 2021; Radu et al., 2023; Raucci et al., 2020; Rezaee and Tuo, 2017; Zarzycka and Krasodomska, 2022). This lack of comparability further diminishes the significance of non-monetary performance metrics and compels investors to place greater emphasis on financial metrics.

3.5 Factors affecting the implementation and Use of PMS

Bititci et al. (2004) state that a successfully implemented and effectively employed PMS will lead to a more participative and consultative management style. This is contradicted by Ukko et al. (2007); their study revealed that even if PMS are used successfully, it does not guarantee an improvement in leadership style. Factors like the measurement linkage to the reward system and the education level of employees positively affect different areas of management (Abdelwahed and Doghan, 2023; Alkandi et al., 2023; Ali and Anwar, 2021; Chi wt al., 2023; Koo et al., 2020; Manzoor et al., 2021; Nnubia, 2020; Persada and Nabella, 2023; Rachmad et al., 2023; Sitopu et al., 2021; Ukko et.al. 2007).

Nudurupati et al, (2010) state that IT has only a very limited influence on PMS design (Ahmed, 2023; Ahmad et.al., 2023; Baiochi et al., 2022; Hung and Siti-Nabiha, 2024; Papulová et al., 2021). According to Lewin (1947), however, resistance to change due to PMS does exist in the design stage. Senior management commitment is required in mitigating and overcoming this resistance (Lewandowski and Cirella, 2023; Naslund and Norrman, 2019; Norhayati and Siti-Nabiha, 2009; Nudurupati et al., 2011; Warrick,

2023). According to Bititciet. al. (2002), senior managers should communicate the potential benefits of PMS to elicit support.

Nudurupati et al, (2010) state that IT plays a significant role in the implementation stage of a PMS. In order to implement the measures successfully, significant effort and commitment is required at every level during the process; capturing, collecting, analysing and reporting PM information. Bititci et al. (2002) state that people whose interests would be compromised by the existence of an effective PMS naturally resist its implementation. According to Meekings (1995), in most companies, there are people who believe they are threatened and this will always create some resistance to PMS. Bititci et al. (2006) and Dunphy and Stacey (1990) recommend that this situation should be handled by senior management. They also argue that depending on their organisational culture, managers should utilise different management styles to influence people's behaviour to mitigate such resistance.

The need for IT support is limited in the use stage of PMS. In order to review and update the measures, however, IT support can be required. For this reason, Nudurupati et al (2010) state that in the use and update stage of PMS, a moderate level of IT support is required. According to Nudurupati et al. (2010), resistance continues to build in people during the stage of using performance measures. Lewin (1947, 1951) argues that the extent of this build-up of resistance depends on how well it was the tackled by senior management at previous stages. Bititci et al, (2006) state that most companies gradually overcome the initial resistance through senior management taking the initiative in the project. In addition, they also state that using an open and non-threatening management style helps companies to overcome the initial resistance.

Bourne et al. (2002) found that top management support plays an important role in the successful implementation and on-going usage of a new PMS. They also indicate that constant participation by senior management is very important to resolve problems when crises and conflicts arise. According to Chan (2004), Emerson (2002) and Kennerley and Neely (2002), senior management commitment and leadership are key success factors for PMS. Nudurupati and Bititci (2005) state that drive and commitment from senior managers are important factors in improving business performance.

Training people is necessary for the successful implementation of PMS (Al Aina and Atan, 2020; Blanchard and Thacker, 2023; Chaurey et al., 2023; Chan 2004; Nudurupati and Bititci 2005; Weiss and Hartle, 2023). Properly trained managers can positively influence PMS development and outcomes (Cavaluzzo and Ittner 2004, p. 249; Kruis and Widener, 2014; Martin, 2010; Tung, 2011). Training allows users to understand PMS concepts and principles and enables both employees and managers to operate in the system (Emerson 2002).

The link of performance to rewards is a vital factor in motivating employees (Rynes et al., 2005; McShane and Travaglione, 2003) and in influencing the effectiveness of PMS (Burney et al., 2009; Johanson et al., 2006; Chan, 2004). McShane and Travaglione (2003) suggested companies need to align rewards with performance and the more employees see the connection between their daily actions and the reward, the more motivated they will be to improve performance. Conversely, some researchers' state that reward linked to personal development programmes or appraisals in the form of payments has proved unhelpful and often counter-productive (Toynbee and Walker, 2008; Rowland and Hall, 2010).

PMS implementation fails in many companies because of lack of IT support (Bierbusse and Siesfeld 1998; Bititci et al., 2000; Bourne et al., 2000; and Neely 1999). Nudurupati et.al (2010) conclude that MIS plays a significant role in the success of PMS. Nudurupati and Bititci (2005) provide evidence that appropriately designed PMS, with support through appropriate IT platforms, appropriately implemented and used with senior management commitment, will improve the identification of weaknesses of businesses, proactive decision-making, continuous improvement, transparency and visibility and positive behaviour of people. They emphasise the integration and automation of data collection and analysis. They also emphasise the importance of data accuracy. Tsakonas and Paptheodorou (2008), state that open access to information will be beneficial to businesses in terms of usefulness and usability. According to Marchand and Raymond (2008), with the evolution of information technologies (including web technologies), PMS can be enriched with new functionalities that allow enhanced support for organizational decision making.

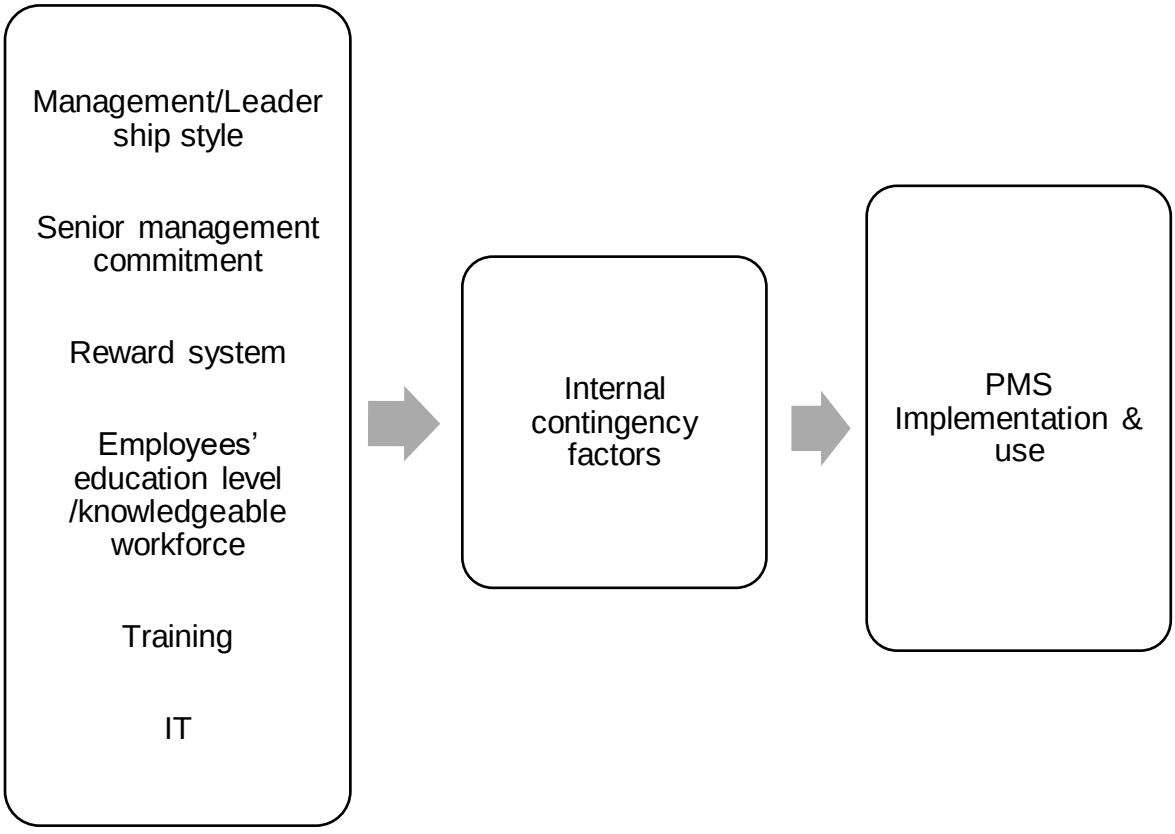
3.6 Research gap

1. Recent literature review of performance measurement in developing countries (Khan,2016) identifies only little research on PMS (Khan et al.,2011; Khan et al.,2010a; Khan et al.,2010b; Khan & Halabi,2009; Hoque & Alam,2004).
2. It is very important to understand the status of PMS in developing countries for many reasons. Several researchers state relatively little research has been done on management accounting themes in developing countries (Hopper et al., 2009; Ezzamel& Xiao, 2011). According to Duh et al. (2008), this issue is even more noticeable because management accounting education and practice is less developed in the developing countries. In addition, development

and progress on PMS of firms in developing countries can be shared with an international audience comprising policy makers, businesspersons and academics who are interested in the progress and development of PMS and who want to build relationships with firms in developing countries or to replicate success stories in developed countries (Khan, 2011).

3. Only little research related to PMS has been done in Bangladesh. Hence, it is important to explore implementation and use of PMS in Bangladesh.
4. There are significant gaps in the literature regarding how internal contingency factors affect PMS in developing countries, especially in Bangladesh. This gap emphasises the need to explore how internal contingency factors affect PMS in Bangladesh.

Figure 3.1: Conceptual Framework (Source: generated by the researcher)



The above conceptual framework (Figure 3.1) is developed from the literature review. The research instrument is developed with the guidance of this framework. This study explores how some internal contingency factors (management /leadership style, senior management commitment, reward system, employees' education level/knowledgeable workforce, training and IT) affect the implementation and use of PMS in developing countries, especially in Bangladesh.

3.7 Conclusion

This chapter includes the discussion of the rise of measurement systems, the need for new measurement approaches, and some of the factors that affect the contemporary measures of performance. The necessity of new performance measurement system and criticisms of non-financial performance measures were also discussed in this chapter. Researcher provided a conceptual framework at the end of the chapter which guides the development of data collection instrument.

The next chapter will provide an overview of the context of this study, Bangladesh.

Chapter 4: The context of study – Bangladesh

4.1 Introduction

This Chapter focuses on the context of this study, Bangladesh. There are 5 sections in this chapter. Section 4.2 discusses about the development of accounting profession in Bangladesh. Section 4.3 discusses on some prior research on performance measurement system in Bangladesh. Section 4.4 explains the reasons behind choosing Bangladesh as the context of this research.

4.2 The Development of the Accounting Profession

In Bangladesh, accounting was developed during the colonial era. During this period, the British investors who were in the country needed a reliable financial information. As a result, auditors came to Bangladesh to provide these services. They were imported from British by the colonial powers (Bryer, 2000). During the time of its formation which was around 1972, there were only around 78 accounting professionals in the whole country (Gomes, 2008). However, over time, this has grown from a small number to around 930 as in 2016 (Anderson, 2002). During its development, there were only 25 chartered accounting firms in the country (Burns, &Vaivio, 2001). This has grown significantly over time to more than 2000 firms (Burns, &Vaivio, 2001).

The following is the chronology of how the accounting profession has developed in Bangladesh. Between the years 1850- 1914, the profession of account became accepted legally in the Indian subcontinent through the company law that was brought into force in 1850 (Uddin & Hopper, 2003). The Indian subcontinent included Bangladesh, which during this period was a British colony. During this period, most of

the regions in this subcontinent were being ruled by foreign powers and mostly by British. As a result, any foreign knowledge that was being imported in the country was being brought to help the British settler in their businesses. It, therefore, contained most of their rules and systems. 1947-1972, was the period that saw separation of these Indian subcontinents (Islam & Dellaportas, 2011). After the separation, there was the formation of the government of Pakistan which accepted the Companies act of 1913 and the Auditors certificate of 1932 (Uddin & Hopper, 2001). In 1971, there was liberation of Eastern Pakistan, which later became known as Bangladesh (Bryer, 2000). It appeared as an independent country after separation from Pakistan.

It was after this independence that there a was formation of the Bangladesh parliament, which was mandated with making laws, changing others, and altering those that the country used to have when it was not sufficiently independent but under Pakistan. One such laws that were changed were the companies' act of 1913 which was replaced with the companies' act of 1994 (Gomes, 2008). The passing of this law saw a breakthrough in accounting in Bangladesh. The act states that a company can be registered and operate as an independent entity from its owner. This act gave individual's powers and ability to form companies, and it also enabled accounting practices to continue and to be legally accepted in the country as a requirement for bookkeeping and other measures. It also made other acts that would help in registering accounting firms, and accounting bodies come into existence. Generally, since the passing of this act, accounting profession in Bangladesh has grown tremendously (Green, 2014). Today, there are more than 500 chartered accountants in the country. The country also has many foreign qualified and registered accounting firms today.

The major role of accounting firms and accountants in general in the country is majorly to provide financial guidance, to do auditing, and present reports of financial positions of companies and the government. Therefore, when one looks at the evolution of the accountancy profession in Bangladesh, it has been in a way that has seen the country change form relaying on foreign imported accountants by colonists to one that can produce its accountants that can be trusted to carry out accounting practices. However over time there have been challenges in matters to do with those accountants that have been compromised (Anderson, 2002). There have been cases of local accounting firms being bribed and as a result not giving the true state of accounts of companies when they are contracted to do so. This happens in that the leadership sometimes can doctor the books of accounts or bribe those internal accountants to do so that when external auditors are called upon to do the auditing, they will not find the true state of the company. They do this to hide to the stakeholders the mess that they may have put the company into. There have also been cases where the external auditors have also accepted bribes from the leadership so that they will not report discrepancies and loss when they are there in reality (Burns & Vaivio, 2001). These are just some of the challenges that have been witnessed over time in the country as far as accounting is concerned. However, generally the profession has grown to be a respectable field that is doing well when it comes to record and reporting financial information in the country.

Bangladesh is not very transparent when it comes to co-operating mandatory disclosure (Islam and Dellaportas, 2011), Out of the 94 companies that were studied, only 44% of these were willing to fully comply with the law and release all the needed financial information to help the accountants and auditors carry out their independent auditing. Although the country has a law that states that all the companies should fully

and unconditionally release the financial records of the past year, not all companies usually do this. Gomes (2008) states that the reason for this reluctance can only be drawn from the very activities that the companies carry out. In the manufacturing sector specifically, there have been cases where companies make losses, but they do not release the actual figures of losses.

On the other hand, there have also been cases where leadership of the companies awards themselves some benefits which they do not disclose to the stakeholders. To hide such practices, these companies fail to release the full accounting reports that can be used to understand the true position of the company. Most of the companies which have been found not to comply with such direction of full discloser have eventually been found to have breached other laws like that of poor financial practices (Uddin & Hopper, 2003). Also, there have been cases where such companies have collapsed while, in essence, these have all along shown that everything is okay in their annual financial reports. When there are keen investigations during such moments of the collapsing, it is eventually noted that in essence these companies were hiding some of their reports so that they do not reveal what is going on under the watch of the leadership.

Therefore, according to Gomes (2008), the greatest hindrance to financial transparency in the manufacturing sector for both medium and large companies is the fact that the companies' leaderships are usually not willing to corporate with the external auditors so that they can help in providing the true figures and numbers as it is required. Islam and Dellaportas (2011) explain that regardless of the profitability of a company, a manager can decide not to comply with the full discloser due to different reasons. There are those companies that actually have in the past been making profit but still do not fully comply with the law of full discloser. On the other hand, even the

size of the company does also not determine whether they will comply or not. There are those companies that are small in size, but yet they do not comply with those directives. There are also those which are large and making profit but are not willing to fully comply. This brings a conclusion therefore that complying with a directive is not about size or whether a company is making losses; it is about ethics and integrity of the leadership. Whether a company is making losses or profit, the law states that there must be full disclosure. Therefore, when a leader has high integrity, and their ethics are unquestionable, they will do the disclosure without hesitating. This is even though some may be even found to have been the ones who have broken the laws or have been involved in dirty dealings, which may have put the company in a poor financial position.

The manufacturing sector in Bangladesh is currently one of the leading sources of the country's GDP. For the past four decades, this sector has grown from total dependent on western help to one that is reliable and one which has been able to provide jobs and employment opportunities to the local people (Bryer, 2000). The country's manufacturing sector comprises of small, medium and large manufacturing companies. For such a big sector to continue thriving, one of the fields that must not be forgotten and which must always be depended upon is that of accounting. It is through accounting that it is possible to carry out Performance measurements and understand the position of the company. Also, it is through accounting that books of accounts and financial reports can be released. They help the stakeholders understand the position of the company (Bryer, 2000). At the same time, they are used in moments like when the company is signing contracts, or it is requesting for financial assistance. Therefore, for this area to continue in its process there must be a careful analysis and support in financial sector. However, this has not been the case so far.

While the manufacturing sector continues to grow and expand in the country, one area where there is a serious challenge is in the area of performance measurements. In most of these companies that are in the country, it is very hard to understand where the companies are as far as their financial position and performance is concerned (Uddin & Hopper, 2001). The performance measurement is carried out to help in understanding what needs to be done and the areas that need improvements. For such to take place, honesty is very important. On the other hand, accounting is part of the performance measurement. It is the one that takes care of the financial sector of the measurement. Most of the companies that are not doing well financially will be found to have also failed in other areas of the performance measurements. Therefore, accounting is very important in this process. There have been cases where companies have refused to release information or have lied according to (Green, 2014). Most of the time shows that there is something that sometimes may not be alright. The company may be hiding the truth due to various reasons such as poor financial performance, which the leadership may not be comfortable to disclose to the stakeholders.

On the other hand, while accounting is very important in the process of performance measurements; it is not the only area that should be considered (Burns & Vaivio, 2001) explains that other areas of performance measurements that are not financial are also very important. For example, one of the requirements of any medium or large manufacturing company is that it must take part in the Corporate Social Responsibility (CSR).This is a requirement that must be fulfilled and which doesn't always entail money. When performance measurement is being carried out, this is one of those areas that should always be considered. The question of whether a company has been carrying out CSR is very important. Another area, for example, is in the human

resource department. How a company treats its employees is also very important. For example, have the employees been given the allowances that they deserve? When one employee is sick, does the company take care of him/her? Are there annual leave days that each employee is entitled to? How many hours per week do these employees work and what is the hourly pay (Uddin & Hopper, 2003)? These are some of the questions that would help to understand the position of the company as far as its relationship with the employees is concerned.

The other area that is very important as far as performance measurement is concerned is the relationship between the company, the state, and the stakeholders. Every sector has those rules and laws that govern it. The work of the government is to set these rules and to implement them. Also, the role of the company is to make sure it has complied with all those rules. Such include environmental laws. Most of the manufacturing companies release waste products after the final products of manufacturing. How the company gets rid of these waste products is very important. There have been cases for example in Bangladesh where companies release waste products to the environment while they're not treated (Bryer, 2000). In such instances, the company releases waste products to the river that will also be used by the public. Such are some of the laws that also should be considered when performance measurement is being carried out.

According to Islam and Dellaportas (2011), when a company is making profit, and yet it does not follow environmental laws, it shows that it is making profit at the expense of the lives and safety of other people. Such is wrong and should not be encouraged. That is why there are laws that should be followed. When carrying out the performance measurements, a company that breaks any of the environmental laws should be fined. The other area is how it relates to other stakeholders. This includes the neighboring

citizens, the government, and the suppliers among others. The relationship that a company has been able to form with these people is very important. It helps in understanding the values and principles that govern the company. Some companies exist to make money. As a result, they do not at all care about those they exploit provided there's profit. On the other hand, there are those companies that care about its stakeholders. Therefore, it is important to make this distinction so that when carrying out performance measurement, it is not only the financial part of the measurement that will be considered. This is because as seen here, a company may be making money but through the wrong means of exploitation and cheating.

As seen in this part of the discussion, the accounting profession in Bangladesh has had a rich history. From the times of colonialism when the country was still part of Pakistan to the creation of the first accountant act in 1994, the country has made tremendous strides when it comes to accounting (Green, 2014). However, the country continues to face huge tasks of maintaining integrity in the field and making sure that those who are mandated with the role of carrying out accounting practices are respected and given the best environment where they can carry out their practice. As seen, there are several hindrances towards realization of fully independent accounting profession in Bangladesh. Part of this is due to the rampant corruption that is in the country. Also, companies most of the time are not willing to disclose their true financial positions and reports. This is despite the country having a full discloser law that mandates the auditors to get all the reports they may need in their practices. To achieve the fully independent accounting profession, it will mean that all the involved stakeholders must each play their roles. One the other hand, it is also clear that performance measurements should not only be about accounting. While accounting is important since it takes care of the financial part of the performance measurement,

other areas of performance measurement should also be considered, which involve the other areas of the practice.

4.3 Previous studies on Performance measurement system in Bangladesh

4.3.1 Overview of PMS research in Bangladesh

There is little literature on performance measurements that specifically address Bangladesh in particular. However, there are plenty of these studies that have been addressing PMS in developing countries. Arguably, most of the challenges, opportunities, and characteristics of PMS in developing countries are almost the same. Most of the literature that has been written on PMS in developing countries address the factors that affect the development of performance measurements and the challenges that hinder these measurements. According to Al-Turki and Duffuaa (2003), the manufacturing sector in most developing countries does not have a very smooth process through which performance measurements can be developed. Since manufacturing sector is not entirely independent in most developing countries, there are still factors that hinder the full development of performance measures. Al-Turki and Duffuaa (2003) cite illiteracy and lack of skills as one of the factors. He states that development and practice of performance measurements require skills that most of the developing countries lack.

4.3.2 Challenges in implementation and use of PMS in Bangladesh

4.3.2.1 Entrepreneurship

Chowdhury (2007) explains some of the challenges that the country is facing as far as its private sector is concerned in a study on how to overcome the constraints of

entrepreneurship in Bangladesh. Although the work of Chowdhury (2007) is largely on entrepreneurship, it offers a clear view of the picture of the country as far as factors that affect the development of performance measurement systems are concerned. Chowdhury (2007) states that one of the significant setbacks on entrepreneurship in the country was illiteracy. Bangladesh has had a troubled past. Due to corruption and lack of visionary leaders, the state did not develop a quality education system that would offer the needed skills in the private sector. Even though in the last few decades the country has had an improvement as far as the number of those who study is concerned, there is still a huge gap that needs to be filled in terms of knowledge and skills. The country has been airlifting most of its bright students to study outside the country due to a lack of quality education in the country. However, most of those who go abroad to study do not come back. As Chowdhury (2007) explains, failure of the people to go back can be attributed to the way they are treated once they come back to the country.

The system in the country is such that there is not enough space for those who have generally studied. These people struggle to get a place where they can be able to offer their skills, especially in the public sector. Therefore, they choose to stay abroad and work there. As a result of these frustrations, the country has continued to lag as far as the development of knowledge and skills that can be trusted in the private sector is concerned. This has dramatically affected the development of the performance measurement system. For such a system to be successful, it does not only need quality and well-organized education system but also requires good policies and political goodwill. All these are lacking in Bangladesh (Chowdhury, 2007). The manufacturing sector has been developing for several decades. There were times almost every manufactured item in the country was being imprinted. However, over

the last few decades, the country has been able to develop a structure where there are several manufacturing companies, both medium and large, that have set base in the country.

However, most of these companies are foreign owned. That means they do not necessarily have local owners. As a result, the technology that such companies use is as usually imported. To operate the said technology, there would need to have people who can not only be trusted but also who have the skills (Chowdhury, 2007). The leadership of these companies, after realizing that the country does not have the required personal, what they are doing today is that they are recruiting for the needed workforce, and then they are training them. Notably, for such training to be successful, these people must have the necessary knowledge that they can only gain in school. Unfortunately, most of these people do not have that education. Therefore, the leadership of these companies that have a long-term plan in the country is taking children from as early as primary school and taking them to better schools either in the state or outside. They are training them and helping them gain the needed skills that they would use later in the future. Once they have attained the required skills, they will then employ them in the companies to provide the needed assistance. However, this is a long-term plan that may take more than a decade to accomplish. Therefore, as of today, the country is still struggling with the lack of enough skills for the development of performance measurement systems in the private sector and explicitly manufacturing division (Chowdhury, 2007).

4.3.2.2 Education

Education plays a significant role in financial education literacy. For a country that has a weak education system like Bangladesh, it becomes very challenging to develop any

financial literacy. The purpose of financial literacy in developing countries and how the same help in the development of performance measurement systems is working that Calderone (2014) did. The aim was to understand what the developing countries can do to be able to get the best out of the private sector. In this area, for a country to be able to develop its sector such that there will be an effective performance measurement system that has been developed, there are two areas that must be observed. One is the area of financing, while the other is the area of skills (Calderone, 2014). The developing of the said measurement system requires finances and know-how.

4.3.2.3 Financial resources

Unfortunately, most developing countries, including Bangladesh, are not well off financially, which has, in turn, affected the skills of its labour force. They mostly depend on loans and grants from developed countries (Calderone, 2014). Also, when the money has been given to the country, it is not well utilized. This habit, unfortunately, is not only in the public sector but also in the private sector. In some companies that are being run from Bangladesh, there are very many cases of corruption and misuse of resources. That is why even the already developed manufacturing companies in the sector are not doing very well. When there have been cases of corruption and misuse of funds, developing a system that will help in measuring development becomes complicated. This is because there is no transparency. At the same time, due to the cases of corruption that have been witnessed, the financial institutions in the country also do not give the necessary support that they are required to give.

4.3.2.4 Corruption and accountability

As a result of the corruption and the failure of accountability by the people expected to spearhead the same, there is a lack of funds that can be channelled in education. Some of the success stories of the education system and skills in developing countries have been as a result of public, private partnerships (Calderone, 2014). This is a situation where the government and public institutions partner with the private sector to develop the infrastructure and the skill-based curriculum that will be relevant in the private sector. In such cases as Kenya and Rwanda in Africa, there has been a success, according to Calderone (2014), where the education system that is currently being used reflects the needs of the country. However, this is not the case in Bangladesh. In these two countries of Kenya and Rwanda, the reason why there has been a success in this endeavour is that the private sector has obtained the support that it requires from the government. On the other hand, the government has become accountable for finances and has played its role. When there are such successes in the education sector, there will be enough skills in the market. This will, in a big way, affect the manufacturing industry positively. The results will be the development of an effective performance measurement system for the medium and large companies in the sector.

In their article on how digital devices can be used in developing countries to increase literacy, Wagner et al. (2014) stress the dangers that are there when a country has a shallow illiteracy level. According to Wagner et al., (2014), the only way a nation can be able to overcome the challenges of development is when it has invested in education and attainment of skills. The reason why most developing countries are still lagging is that they have not developed their institutions to a level where they can offer

the needed labour force. The institutional theory explains that for any country to be able to achieve its target as far as manufacturing is concerned, it must start by strengthening those institutions that are very crucial in offering the needed skills. One such institution is the education institution. This is where a country can feed the increasing demand for labour force (Wagner et. al., 2014). One similarity in most of the developed countries is that their manufacturing sector is designed to a level where almost every item they use in the country is manufactured in a very country. This makes the development of measurement systems straightforward and effective.

However, in developing countries, things are quite different. The countries do not have what it takes to propel its manufacturing sector. The institutional theory sees a country as having many institutions that are interconnected (Wagner et al., 2014). According to this theory, the failure of one of the institutions will fail the rest. For example, when the education sector as an institution is not performing well, the same will be transferred to the manufacturing industry. When the workforce does not have the skills to do the work in the manufacturing sector, it means what will be manufactured will also be of poor quality hence transferring the same problem in the market. That is why following the institutional theory would mean coming up with ways and means through which the literacy level of any country must be improved for such a country to be able to offer the needed skills in the manufacturing sector. Only then will the developing countries be able to have an effective performance measurement system.

4.3.2.5 Gender literacy gap

Bangladesh, as a country, has been affected by an imbalance in gender literacy. This is a country that has such a huge gap when comparing the level of education for girls and boys (Antonio &Tuffley, 2014). Most of the parents in this country believe that

educating a girl is a waste of one's money and time. This is because most of the girls will be married. Their role should, therefore, be to get children and stay at home to take care of them. This culture has consequently affected the level of girls who have been able to study. According to Antonio and Tuffley (2014), the reason why the country is still struggling it the manufacturing sector is because, for a very long time it failed to acknowledge the fact that girls and boys are equal and that what men can do, women can do it too. Therefore, since the country has a more female gender than the male gender, it means those who have been educated are very few compared to the needs and demands of the labour market. The manufacturing sector is the one that has been profoundly affected. One finds that there are no needed skills that can be used for manufacturing in large and medium companies.

However, over the last decade, there have been campaigns and sensitizations from the lobby groups to educate girls, too (Antonio &Tuffley, 2014). The focus has been to take as many girls to school as possible. The challenge has been that most parents are still holding on to the culture that does not allow the girls to study. However, there has been a notable success every year; the number of girls in the schools has been increasing. Poor gender representation in the job market has been one of the other reasons why the performance measurement system development has been a challenge. There is not enough labour force, and the available one has been majorly made up of one gender. To change the narrative would mean continuing with the efforts that are being made to make sure that as many girls as possible are also being trained on the manufacturing skills.

4.3.2.6 Leadership

The literature on performance measurements that is from developed countries, reveals that it is possible to have a smooth and streamlined PMS. According to Chenhall and Langfield-Smith (2007), performance measurement in America has been carried out successfully for many years. In United States, the question is not whether it is possible to carry out performance measurement without hindrance or interference. Rather, the question is what should be improved so that it will be more intensive. Usually, there is cooperation between the leadership of the manufacturing companies and the auditors when performance measurement is being done. This includes both accounting and non-financial measurements that may be carried out. Chenhall and Langfield-Smith (2007) state that companies usually comply with all the requirements and follow the law such that it will be clear to understand the level of performance that the company has attained after the performance measurement has been carried out.

Saad and Patel (2006) explain that in India, the process of carrying out performance measurements is done through the following the law. There are set outlaws in India that relate to performance measurements. It is upon the company to follow these laws and give all the necessary support to the team carrying out performance measurements. In such cases where firms are cooperating with the auditors in carrying out performance measurements, it is possible to understand the level of growth not only of the company but also of the whole sector. That is why; it is always possible to state the level of growth of different sectors of the economy in developed countries. One can understand for example level of growth of the manufacturing sector in India or United States. This is due to how each of the companies, small, medium and large

have voluntarily provided the required support and information to the team that carries out the performance measurements.

In the manufacturing sector and specifically in the large and medium-sized companies also, some leaders make decisions. The decisions they make determine the direction the companies take. The policy that these leaders make in terms of how to handle staff, how to utilize finances, and how to carry out the day-to-day duties have a very big effect not only on the company but also on the country. Most of them become unaccountable which has eventually affected the manufacturing sector. The poor policies that the leaderships of the companies have made over time have made it very hard for performance measurement to be carried out as will be shown in this part (Otley, 2016). There is a lot of literature that is available, and which supports whey the developing countries continue to suffer due to poor policies that affect the manufacturing sector and make it hard to carry out performance measurements.

4.3.2.7 Poor policies

In 2014, Woolcock & Narayan did research which focused on the implications for development in social capital among the developing countries. According to them, this is what makes people in any society to be able to act and work collectively (Woolcock & Narayan, 2014). They assert that in developing countries, this idea was weakened. To them, it is ironical that the countries in the developing countries had weak social capital. They say the irony comes in that most of the developing countries especially in Africa and Asia have had a very rich history of social community. In most of these countries, their communities have been known to co-exist together and do things communally. However, when it comes to the idea of building the nation together, they state that has been very weak.

Woolcock & Narayan (2014) Offer two reasons for this; the first one is that few people who have had the opportunity of rising above the other have formed a wall that has been very hard to be eased by the whole nation. In other words, the rich and powerful make it hard for common citizens to contribute. The work of the many is to provide and pay for the few rich to enjoy. The other reason that they offer is that even though there may be willingness to work together in the building of the nation, it becomes very hard due to the literacy levels in these nations. Taking the case of Bangladesh for example, the illiteracy level is very high. Very few people have been able to aces quality education. This is to the poor policies that the government has put in place, which continue affecting performance measurements in manufacturing sector (Woolcock & Narayan 2014). Therefore, due to these poor policies and lack of education, the idea of building the nation together may not be actualized because there is little know-how of the process to do it.

Lloyd-Sherlock (2013) came up with an article on the policy challenges in developing countries while paying much attention to Bangladesh and its manufacturing sector. Lloyd-Sherlock (2013) explains that for a very long time, the same old poor policies have been recycled, and the results have been poor development and challenges in performance measurement. According to him, developing countries have a problem with recycling ideas. Even when an idea has been seen not to work, they continue recycling it hoping for new results. Arguably, he states that it is foolishness to continue using the same method of doing something yet expect a different result. To him as he states, this has been the problem in the manufacturing sector of Bangladesh and which needs some rectification.

Lloyd-Sherlock (2013) brings an example of education system and how it has not worked for a very long time. The manufacturing sector requires skills and expertise.

Lloyd-Sherlock (2013) States that the education system of some nations such as Bangladesh has existed for decades. However, this system has not been able to produce leaders who can stand and build the nation. Such an education, instead of being skill-based has, for a long time been exam based. Therefore, he proposes that for the nation to change and for results to be observed, things must be done differently. People must be accountable. Policies must be changed. Regime change is a must. The nation's rebuilding process must be done in a way that will have future in mind. The policies that will be developed must focus on making the nations be able to work for it.

In other words, there must be an idea of self-sufficiency in the minds of the policymakers. An example is in the area of debt and borrowing for companies in the manufacturing sector to the bank and a country from abroad. Some of these nations borrow without having an idea of why they are borrowing. They do it so that there can be enough to be stolen or misused. The projects that are carried out with the borrowed money most of the time are not viable. Therefore, there is needed to come with ways that can take such habits. This is because when money is borrowed but misused, the process of conducting performance measurement becomes foreign. That is why the institutional theory proposes that there must be a way through which the institutions in the developing countries are changed, and new ones are developed. Institutions are the ones that build a nation. They are the ones that determine what will be done differently. They must be in a way that will favour the policies that will be developed. On the other hand, some of the large manufacturing companies in Bangladesh have high debts that they have gotten from financial institutions. There have been cases of receiverships that these companies have been put on or acquisition by the financial institutions due to huge amount of debts that they have been able to repay. This can

be attributed to poor policies from the leadership of these companies, and the results have been a lack of growth, which has, in turn, affects performance measurements.

4.3.2.7 Other issues

Most of the challenges that are in developing countries are common. Therefore, some of the literature that has been undertaken in other developing countries regarding factors affecting performance measurements in the private sector is the same. The challenges that these countries encounter have some common features such as corruption, unemployment, poverty among others. Most of the institutions are marred with corruption both in public and private sectors. In privet sector for example in Bangladesh, corruption has hindered growth of the medium and large manufacturing companies such that it is hard to carry of performance measurements or to develop a performance measurement system. Institution theory suggests that the country where institutions, whether public or private aren't accountable, then the country's development will be hindered, and therefore development of performance measurement systems will also be negatively affected. It gives an account that institutions are the ones that drive a nation. Whether it is a public or private institution, when there is no accountability and transparency, the institution cannot stand, and the citizens of that nation will suffer.

In Bangladesh, corruption has been a challenge in the manufacturing sector, affecting both large and medium-sized companies. However, the corruption that takes place in public institutions is the one that has greatly affected the private sector and more so lager and medium-sized companies. Due to the level of corruption for example in the public offices, the manufacturing industry in private sector has also been highly affected. The literature below shows how corruption in public officers has affected the

performance measurement systems in large and medium-sized companies in manufacturing sector.

Olken and Pande (2012) researched one of the issues that affect performance measures in developing countries. In their article about corruption, they explain that one of the major hindrances to development and a factor that negatively affects the performance measures in the developing countries is when those in power use dishonesty fraudulent to rule. Government officials and leaders of public institutions fail to be accountable (Olken & Pande, 2012). Notably, every public official must be accountable to the trust that has been bestowed on them. In other words, they must always and at all-time respond to questions that are put to them about the resources that they have been entrusted with. However, this is not the case for most developing countries. As a result, it becomes challenging to have performance measures. Measuring performance needs a clear way in which the project has been done. But in developing countries, this becomes very hard.

The other way through which corruption affects performance measurement is that resources that would have been used to do a specific project go into pockets of individuals (Olken and Pande, 2012). Notably, when resources have not been used to fulfil a stipulated purpose, then there is a problem because they will not be available, and it will be hard to understand whether they were used in the right way. For example, when resources that were used to build a school were used in other means like enriching individuals, it will be hard to do a performance measure on that project.

Zafarullah & Siddiquee (2001) wrote an article on the level of corruption in Bangladesh and how it has inhibited growth and affected performance measurement. They say that in Bangladesh, corruption in public offices is a prevalent issue that needs critical

analysis. They give several levels and types of corruption through which development had been affected and, in the process, affecting performance measurements. One of the ways through which corruption has affected the performance measurements is through the delay in service delivery and completion of projects (Zafarullah and Siddiquee, 2001). One of the measures of efficiency is fast and transparent services. However, in Bangladesh things are different. Zafarullah and Siddiquee, (2001) explain that even though the country initiates projects, they take too long before completion, while others have already stalled. However, in the paper, it shows that funding has already been done for these projects. Therefore, the question that ranges is where does the money that is meant to complete these projects go?

Zafarullah and Siddiquee (2021) offer an answer to the above question. They explain that the reason why these projects take long before completion is because those who are given the contracts use the funds allocated to the projects. The result of this is that it becomes very difficult to do performance measurements in such a situation (Zafarullah and Siddiquee, 2001). The fact that there is no transparency means that there is no way the performance can be accessed and well measured. Therefore, this is why corruption affects performance measurements.

4.4 Reasons behind choosing Bangladesh

Bangladesh is chosen for this study for various reasons. The reasons are:

1. Lack of research: As discussed earlier (Chapter 3), lack of research has been done in management accounting in developing countries, especially in Bangladesh. This research is filling the gap of management accounting literature of developing countries.

2. The accessibility to data: Researcher is from Bangladesh. Hence, it was easy for the researcher to gain access to Bangladeshi companies. Also, researcher is aware of the culture, accounting practices and backgrounds of organisations.
3. Unique management control functions: Bangladesh is a perfect case to study PMS with contingency theory as there are many unique characteristics in the control practices in Bangladesh. In most of the Bangladeshi companies, formal performance metrics are not given priority. Instead, informal control mechanism, as for example - loyalty, strong connections and reliable relationships are given priority. In addition, most of the companies adopt a hybrid control system which include mix of traditional control system and western formal control systems. This is a perfect context to continue contingency theory-based study.
4. Social and cultural issues: There are several distinctive social and cultural factors in Bangladesh which can significantly affect the implementation and use of PMS. High power distance culture influences the way performance feedback is communicated and received. This also affect how employees accept management control system. In addition, collectivist culture exists in Bangladesh which can challenge the effectiveness of individual performance metrics because people emphasis more on group harmony over individual performance in a collectivist culture. It is important to understand how these social and cultural factors are affecting the implementation and use of PMS.
5. Economic issues: Bangladesh is moving to a lower-middle-income economy from a low-income economy (Zafar, 2020). The traditional control systems are not effective in this changing circumstance. So, companies need to adapt PMS aligned with the changing economic condition which is the fundamental

principle of contingency theory. It is necessary to understand how companies in Bangladesh adapt PMS in this dynamic situation.

4.5 Conclusion

The aim of this chapter is to give an overview of Bangladesh. This chapter includes description of the development of the accounting profession in Bangladesh and analysis of some prior studies on performance measurement system. The chapter ends with the explanations of the reasons behind choosing Bangladesh as a context of the research.

The next chapter (Chapter 5) provides discussion on management research methodology in general and also elaborate information regarding the methods that were used to collect, analyse and present data for this study.

Chapter 5 Methodology

5.1 Introduction

This chapter focuses on management research methodology in general and the method chosen for this research. This chapter discusses several recommendations and alternatives for undertaking qualitative research. This chapter also discusses about the methods chosen for this study and the reasons for choosing specific method.

5.2 Research methods

5.2.1 Research Philosophies

Philosophy helps to understand the connection between data and theory. It guides researchers to collect and present their findings. Various ontological and epistemological assumptions are used by the researchers as the base of their methodologies. Social issues are dealt in management and business-related studies. This kind of research involves human interaction. Data collection methods used in this kind of research differ from the methods used for scientific research. According to Collis and Hussey (2011), philosophy can be categorised into two ways – subjective and objective. They can also be referred as philosophy of social science and philosophy of science. Objective philosophy intends to be free from personal influence. On the other hand, subjective philosophy stresses on observation, experience and interpretation of individual's understanding of reality. Easterby-Smith et al., (2012) suggested four factors to explain these assumptions. These factors are - epistemology, methodology, ontology, and method/ techniques. These factors are explained here.

5.2.2 Ontology

According to (Easterby-Smith et al., 2012), ontology deals with the nature of existence and reality. It is important for researchers to sketch on various ontological assumptions in order to improve quality of research. These assumptions are – realism, relativism, internal realism and nominalism. Realism makes several assumptions such as - truth is singular, the world is external and concrete and real scientific development can only be done by focusing on observation that confirm the phenomenon under investigation. Easterby-Smith et al. (2012) observe that realist scientists consider truth within proclaimed scientific laws is autonomous of its creation process.

Relativism paradigms denounce the concept of definitive facts and instead argue that facts only make sense from the perspective of the observer a there are multiple truths. Truth rightly understood can only be realised by reaching an agreement with principal protagonists. In terms of Easterby-Smith et al. (2012), a good example of a relativist discourse is one on climate, in which despite existence of consensually ceded evidence, each side of the divide gather other evidence in support of their perspectives but because of the domineering vested pecuniary and political interests. Normalists go an extra mile to suggest the concept of truth is entirely elusive as the names and the labels people attach to experiences are personalized and highly dependent on individualised reinvented languages and discourses.

5.2.3 Epistemology

According to Easterby-Smith et al., (2021), epistemology captures different ways in which people inquire in quest to understanding their social and physical environment. Generally, the primary focus of epistemology is on exploring knowledge as it relates to justifications, truths, its very scope and the criteria used in justifying knowledge. The

following sections will discuss various parts of epistemologies, with particular emphasis on positivism, critical realism and interpretivism.

According to Easterby-Smith et al. (2021), positivism is based on the notion that social world is external. Its definitive properties ought to be assessed only by using objective measures as opposed to subjective inferences that are sensational, reflective and intuitive. On the contrary, the experiences in realism significantly objective in nature, easy to test and to some extent, autonomous of detractive explanations as argued by Myers et al., (2013). To them, the concept of what is real ought to be knowable, measurable, static, and that only one external truth exists. These perceptions essentially limit observers' involvement during the research as he/ she should not be biased and should learn to abstract him/ herself from the entire process.

Positivist paradigms seek to frame casualties through an abstraction process of deduction and hypothesis testing. The belief that they should operate within known boundaries give preference to quantitative techniques as they allow counting and measuring. Positivism paradigm is the most suitable in testing theories and conducting deductive research. By adopting positivism paradigm, it is possible researchers would reach similar conclusions provided study is conducted under the same context and conditions. This is to say, it is the best approach in securing research validity. Procedurally, positivism reduces aspects of analysis to simple, measurable concepts that can be easily subjected to statistical generalizations for uniformity. Interestingly, this paradigm deploys extended samples but still leaves researchers with options of breakdown problems into smallest units (Easterby-Smith et al., 2021). By adopting a positivist approach, one has to rely on existing theories and to come up with hypotheses that must be tested and proved, refuted, or inform more developments during the course of the research (Saunders et al., 2012).

Interpretivism/constructionism was constructed to fill the apparent deficiencies of positivisms that made it extremely difficult to suffice research requirements of social scientists. The central plank of the Interpretivism is that reality is purely subjective in nature since it is defined the level of one's know how since its major focus is on exploring interconnectedness of social phenomenon which culminates to interpretive insights (Collis & Hussey, 2021). The crust of the constructionism paradigm is that the world is culturally constructed, which is far beyond the realm of abstraction of personal perspectives and experiences that ultimately constitutes the foundation of knowledge creation. Easterby-Smith et al. (2021) explains that constructivism leads to creation of scholars such as Shotter (1993), and Berger & Luckmann (2016), and that it advances notions that persons make sense of the world around them by orally sharing their lived experiences through language as the primary communication medium. Reality from the perspective of Interpretivist philosophers is dynamic as it is constantly changing since an observer is an integral part of it. This is to say that it then lacks Priori dependent and independent variables; instead, its main focus is on the sense-making complexity of emerging situations (Myers, 2019). Interpretivist research is incentivized by a desire to make vital discoveries. Since, reality is an abstract concept, inherently difficult to measure, interpretivists favor qualitative tools and techniques. Thus, concepts discovered follows from deductive abstractions. The approach is subjective in nature, prone to biases as researchers base their findings from personalized perspectives. The validity and acceptance of qualitative research are drawn from the degree of its freshness, its propensity to inform discovery of new concepts and themes, the suitability of research design, and completeness in the collection and analysis of data. According to Easterby-Smith et al. (2021), most focus is on people,

their feelings, thoughts, and nature of interpersonal communications (whether verbal or otherwise).

Critical realism is a reconciling approach, which, just like rationalists noted, countenance the subsistence of natural order of social discourses, but opposes that the same can be detected or even observed merely through observation of the pattern of events. Critical realists take pleasure in observing the actual phenomenon (Walliman, 2011). According to them, three major ontological domains exist – real, actual and empirical (Easterby-Smith et al., 2012, p. 29). The first one, the reality is formed by mechanisms and causal powers that cannot be easily detected through application of human faculties. The second one, actuality, is constituted by actions and events resultant of mechanisms and causal powers which may or not be seen based on the underlying conditions. The last one, empirical domain, is formed by individuals' perceptions and experiences that arise as a response to their actual interactions from actual phenomenon.

The three domain levels, viewed together, reveal a structured ontology. Besides, they correspond to tripartite on ontological positions that entail internal realism, realism, and relativism (Easterby-Smith et al., 2012).

Table 5.1: Methodological implications of different epistemologies

(Easterby-Smith et al., 2012)

Ontologies	Realism	Internal Realism	Relativism	Nominalism
Epistemology / Methodology	Strong Positivism	Positivism	Constructionism	Strong Constructionism
Aim	Discovery	Exposure	Convergence	Invention
Starting Point	Hypotheses	Propositions	Questions	Critique
Design(s)	Experiment	Large surveys; multi cases	Cases and surveys	Engagement and reflexivity
Data types	Numbers and facts	Numbers and words	Words and numbers	Discourse and experiences
Analysis/ Interpretation	Verification/ Falsification	Correlations and regression	Triangulation and comparison	Sense-making; understanding
Outcomes	Confirmation of theories	Theory testing and generation	Theory generation	New insights and actions

5.3 Methodology

Widely speaking, methodology encompasses a number of strategies deployed to conduct a study (Wilson, 2010: p. 3). Its main concern is on the general research approach which among other include but not limited to theory application, data collection, and analysis. Based on the dynamics involved, particularly the choice of variables and the phenomenon investigated, it can be inductive or deductive. The nexus between specific ontologies, methods and epistemologies are rather conspicuous. To exemplify this claim, realist, and internal realists, for instance, apply themselves to positivists epistemologies and methods, while constructionists favor internal realist and germane ontologies which subsequently direct them into using archival research and interviews (Collis & Hussey, 2021).

5.4 Research approach

Most researchers are either inductive or deductive in their approach. Deductive research applies when a researcher wants to base a study from a knowable domain. A researcher then generates certain hypotheses which the research will proceed to prove or disprove, by subjecting it empirical scrutiny. An inductive approach is applied when a researcher proceeds to draw inferences based on the prior collected and analyzed data. It is often applied when the researcher intends to develop own theory or for exploratory study when the research gap exists making it difficult to properly explain a new phenomenon. It can also appear in the form of explanatory research designed to answer “how” and “why” in research, particularly if the context is particularly critical.

5.5 Research methods and techniques

These encompass all the processes and instruments applied to gather pertinent data, perform analysis, and guide the degeneration of conclusions (Easterby-Smith et al., 2021). Previously, the paper has shown an undeniable relation between ontologies and epistemologies with methods. The sections that follow will offer a summation of various research methods. However, the research will refrain from sweeping description of all methods, instead will focus on describing the most relevant to the research at hand. These include survey research design, quasi-experimental, experimental, case studies, action research, grounded theory and ethnographical design.

5.5.1 Experimental designs

The term experimental design describes the process of distributing subjects to an experimental or control group. Naturally, the conditions within an experimental group are redesigned (constitute the independent variables), the resulting effects are then evaluated individually (the form the dependent variables), which will either affirm or disprove hypotheses. The practice is prevalent in medical and natural sciences studies, as well as in analysing organizational behaviour. The approach confers a number of benefits, among them being ease in duplicating step because of the clarity of experimental design. Notwithstanding that, experimental designs are often impractical and prone to unethical research since altering the conditions could cause harm to the study population. Classical experiments and quasi-experiment are widely known. In some fields such as management, however, classical experiments are few and inappropriate since randomly allocated variables are untenable. Suitability of quasi-experimental designs derive from their ability to cure the problems of randomly assigned variables.

Often, positivism research designs tend to presume that their answers are unequivocally true. The researcher begins by generating a hypothesis which they then seek to reject or prove. Quasi experiments and experimental designs are ideal for most studies. Experiments are conducted in a controlled environment, which makes it possible for the researcher to scale down to a few pertinent variables while keeping others constant. Usually, the procedure begins by selecting a sample population in which participants are randomly allocated in either control or experimental groups. Certain interventions are then implied in the experimental group, and none of those measures is taken on the control group. Random assignment is undertaken to ensure

uniformity of the group, eradicate biases and enhance internal validity. Most field experiments feature, matched pairs designs, independent sample design, single-subject design, and repeated measure design. Repeated measure design occurs when a researcher conducts multiple studies in different contexts. Here, a researcher has dual groups for which allows comparative analysis. Matched pairs design is more thorough as it seeks to eliminate salient differences between subsisting groups by either matching pairs or allocating as is necessary. The concept of single-subject design becomes relevant when a researcher has different subjects at hand, which would generalizations of findings difficult. Despite this challenge, a single-subject study is designed to produce findings that can help to understand the phenomenon studied (Collis & Hussey, 2021).

In a quasi-experimental design, consolidation of the control and experimental groups, random selection is rarely used. Rather, subjects are enlisted using predetermined groups formed through other criterions. In some designs, it is possible to use pretest or post-test comparison. Quasi-experiments are more transparent, repeatable, and valid, but this does not cure them of their inherent problem of lack of the slippery ground in drawing inferences (Saunders et al., 2012). Most research papers, however, prefer using behavioural and laboratory experiments (Carmona et al., 2011). These bear certain advantages such as the promise of retaining control, measurement precision, a higher level of internal validity, and ease of replication (Awasthi et al., 1998). Despite that, lab experiments suffer a lack of representative samples and can be faulted for the possible effects of instrumentation (Carmona et al., 2011). Recognizing this problem, Awasthi et al. (1998) have argued that lab experiments are often conducted in an artificially generated environment thus lack the addition of factors that informs context uniqueness.

5.5.2 Survey research design

Surveys research designs are essentially deductive in nature and align to positivist strategies (Saunders et al., 2012). Surveys answer simple questions such as “who,” “what,” “how much,” and “how many,” thus, useful in conducting descriptive and exploratory studies. In any specific dataset, there is always an underlying assumption that there is a regular pattern, that’s however, difficult to construe for reasons of the great size of variables and data for which surveys allow simultaneous measurement of different variables to reveal potential relations between (Easterby-Smith et al., 2021). Surveys enable collection of data primarily by asking pertinent questions intend to capture participants’ attitudes, opinions, facts and behaviours (Collis and Hussey, 2021). Findings are then subjected to statistical methods of data analysis for ease in generalizing the results to a particular population. To huge populations, samples are collected randomly to provide unbiased subgroups. A researcher will then apply certain statistical tools to test applicability of the sample findings (Collis & Hussey, 2014). Often, cross-sectional designs apply to surveys, which necessitate use of largest samples to make it possible to measure various factors as well as allow examination of relationship between variables. Surveys occur in different types: inferential, factual, and exploratory.

Factual surveys aim at collecting objective data. They emphasize collection of data that is relatively factual in nature. Opinion polls and market research are good examples of factual surveys (Easterby-Smith, 2021). In a factual survey, the overriding aim of a researcher is to collect a percentage of people that meet the study criteria. A researcher is open to deploy whichever suitable means such as questionnaires and structured interviews to collect data. Each of these approaches has unique

shortcomings, which behove the researcher to consider beforehand. The validity of structured interviews, for instance, could suffer the problem of social desirability. On the other hand, Inferential surveys are prevalent in marketing and psychology fields. Inferential surveys seek to establish relationship between variables regardless of hypotheses and assumptions. At the initial stages, the researcher focuses on eliminating variables that appear to have connection with other variables, discovering all dependent variables, and finding ways to measure responses by subjects. Exploratory surveys measure a phenomenon and with an aim of discovering the patterns the data reveals. Unlike in the latter, it begins by identifying all factors that appear connected to discern causation. Arguably, it is important for a researcher to have knowledge in identifying both dependent and predictor variables. Cluster analysis techniques and Factor analysis are important tools that enable exploratory surveys as they guide investigation of patterns and interrelations between various variables.

Activities in a survey research entail discovering the research purpose, which hinge on predetermined objectives, and the type of research, which is either analytical, descriptive, longitudinal, and cross-sectional. One must first learn how they operationalise all the key constructs before developing survey instrument. In sampling, it is imperative to define study population and make a determination on the frame. Data collection and survey administration is also an important activity and entails activities such as distribution of surveys, printing, persuading respondents, tracking responses and acquiring access to respondents. Data collected is then analysed quantitatively using both inferential and descriptive statistics. Resulting data may suggest relationship or otherwise.

Survey questionnaires manifest several shortcomings such as random selection of subjects and doubtfulness in generalization of results. More so, data collected could be subjective as respondents use their perceptions in measuring variables.

5.5.3 Archival research

Archival research breath some life to the use of documents and such other records as the primary source of data collection (Saunders et al., 2012). In regard to this, archival research makes it possible for a researcher to utilise subsisting data even without bearing some relationship with the organization or the individuals that conducted the first-hand study. Usually, these sources are historical; are deemed credible even when the publishing organizations cease to exists. A study whose main sources of data are mainly secondary is deemed archival (Collis and Hussey, 2021). These types are detached and gravelly subjective yet largely ubiquitous. In fields such as management and business, past annual reports provide insightful data, which sets the basis for informing future business activities many years after (Easterby-Smith et al., 2021). However, information collected is limited as it provides scanted data that do not fully fit within the frame of preceding studies. Equally challenging issues are accessibility issues, information censorship and confidentially that imports (Saunders et al., 2012). Due to these challenges, Awasthi et al., 1998 recommends combining archival research with other methods to allow greater understanding as various methods interact on complex ways to increase validity.

5.5.4 Mixed methods

Mixed methods approach is borne from constructionist and positivists epistemologies. They combine quantitative and qualitative approaches in a study. Proponents of this

approach hail enhanced validity, generalizability of findings, and potential in contributing to subsisting theoretical frameworks. The issue of sequencing and dominance when combing both qualitative and qualitative methods is one such practical issue alluded. Sequencing refers to ordering of methods, while dominance entails significance attached to each method in terms of resource allocation (Easterby-Smith et al., 2021). Authors such as Awasthi et al., (1998) recommends mixed methods for its ability to improve research's findings external validity.

5.5.5 Ethnography

Simply put, the term ethnography refers to "nation writing" (Baker & Foy, 2003). Essentially its observation but goes far than this since it is not an outsider observation since the researcher has to immerse himself/herself fully, to form part of the study population. This makes it for the researcher to have firsthand information on the reasons people assign particularised meanings to their behavior. Ethnographic research is particularly suitable since it allows deeper understanding of the study population. A distinguishing element between a simple observation and ethnography is that, in the latter, the researcher's level of engagement with the population being studied. A simple observation is often disjointed and unlike ethnography, more objective. In many ways, ethnography is mostly open-ended as ethnographers can choose whichever side to start even without any question in mind. Studies of this kind are often subjective, as final conclusions are often shaped by individualised perceptions (Collis and Hussey, 2021).

In typical ethnographical study, a researcher is much like to be influenced by a number of factors that may steal objectivity. Issues such whether the study is overt, amount of access allowed, researchers' role, methods of data collection adopted, and data

analysis techniques used, determine the scope of validity of the final study. In the same vein, it is prudent to make a distinction between etic and emic perspectives. Descriptively, emics refers to unique sounds of each language that can exclusively be understood by its speakers, while etic are features that can be easily understood by outsiders, though they are still inaudible to the language speakers. In terms of Easterby-Smith et al., (2021), the two concepts can be simplified as outsider and insider perspectives. Ethnographic research are different from case studies based on the time expended in the field and the extent of the obligation to engage with the activities of the people studied. Its main justification is on the depth of knowledge that ensures time spent in the field. Ethnographical studies take much time in both data collection and analysis.

5.5.6 Action research

This design seeks to provide answers to real problems while building the current knowledge base (Myers, 2013). It is a reactive study that informs inquiry designed to avail solutions to practical subsisting organizational problems by informing collaborative and participative approaches (Saunders et al., 2012, p. 183). It has unique features that draw from both intervention and demonstrate research strategies. Different from a typical consultancy, an action researcher can elect whichever methodology, contribute to it and where possible, publish findings. The initial stages are diagnostic, is collaborative to aid in understanding the actual scope of the problem from where a researcher shifts to therapeutic stages that features introduction of new certain changes and along with scrutiny of their impacts (Myers, 2013). Its principal merits are that it allows depth insights that difficult in applying other methods, as well

as provide a platform for a researcher to gradually observe changes as they occur (Li & Tang, 2009).

5.5.7 Grounded theory

Grounded theory double as a methodological approach, a result of a research and method of inquiry (Saunders et al., 2012). Understanding it for what it is, grounded theory attempts to inform unstructured observations as the researcher can start by no priori research questions, research idea, and continue to collate data as it accrues, with hope that after a rather rigorous exercise by applying thematic analysis, the exercise could lead to development of theory (Baker & Foy, 2003). In management research, grounded theory could be used to capture the contexts that inform various actions as a result make it possible to have sufficient understanding of issues. Grounded theory is used along with other methods such as ethnography, discourse analysis and participant observation. In discourse analysis, the main focus is on language speeches, subject emotions, and nature of conversations. Narrative analysis is essentially stories that often double as an explanation, but in research they may reveal more about the story. According to Myers (2013), grounded theory is inherently a qualitative method whose primary purpose is to develop a theory supported by certain data sets that must have been analysed systematically.

In conceptualizing grounded theory, Glaser and Strauss (2017), argued that the basic purpose of a research was to develop a theory that draws from a number of studies that juxtaposes various incidents, situations and contexts. The two authors, however, differed from each other in certain aspects with most profound areas of contestation being on the role of a theory and subsequent presuppositions both of which could be traced to their philosophical affiliations. Glaser is a realist , while Strauss is a

nominalist. Their differences can further be affiliated to their epistemological affiliation. Apparently, Strauss supports appear to be in support of weak positivist assumptions, while Glaser carries herself as a constructionist. The variance in their philosophical beliefs greatly infiltrates their analysis of qualitative data, thus the difference. If constructionism assumptions naturally prioritize, intuitive and inductive interpretation. Any attempt to convert qualitative data into quantitative one leads to a deductive interpretation (Baker & Foy, 2008). Grounded theory is rarely applied in cultural researches because of high costs of research and the level of access allowable. Despite that, they, too, allow depth analysis and insights that cannot be achieved elsewhere (Efferin & Hopper, 2007).

5.5.8 Narrative inquiry

A narrative is essentially a story which could be a personalized account of events or an interpretation of the chronology of events or a particular incidence (Saunders et al., 2012). It is either constructionist or qualitative in nature. Narrations that demonstrate dominant organizational realities enjoy a special place in comprehensive studies. Narrative inquiries are indispensable in some fields since stories information acquired from these sources can never be acquired using other conventional methods. An observing participant could help in developing and communicating stories. These stories can also be collected using interviews in which a researcher asks participants to narrate stories or their own accounts. The role of a researcher who may also double as an analyst in this method is critical. Care must be taken because social stories help in constructing histories that form part of the identity of study population. Based on the researcher's role, narrative inquiries can be detached (Easterby-Smith et al., 2021). Narrative inquiries are applicable in number of contexts, such as where the size of the

sample is large enough, where participants are few, or where interview observations are derived from an entire organization.

5.6 Case study approach

Case studies are empirical inquires that govern investigations of contemporary phenomenon for a depth understanding within a real context, particularly where the line between a context and the phenomenon is difficult to draw (Yin, 2014). In business research, case studies rely on empirical data from organizations in attempt to understand the subject matter. However, according to Myers (2013), case study utilises multiple sources of data, most of it comes from documents and interviews. Case studies help to gather detailed data on people's behaviours. The researcher in case study design has got no power to manipulate research context as they are stripped of freedom to set it up. Nonetheless, they are methods of preference in answering "how" and "why" in a research topic.

The primary merit of case study is its apparent validity, particularly if it exploits a subject so well written that other researchers just give it credit. Unfortunately, most case studies lack salient features of a conventional scientific designs, their findings are difficult to generalize, and the size and diversity of the samples make it possible to reach different interpretation on the same subject matter. The truthfulness of these allegations is indisputable; thus, precaution should be taken to adopt a clear design beforehand. Most data are gathered through direct observations, interviews and personal contacts. Additionally, the period of data collection can be extended, but the researcher is not limited since data can be collected using live observations or by recording past accounts of events. Events and individuals can form units of observation. However, limited access to organizations can limit access to data.

Interesting, however, philosophical foundations of case studies do not have to be constructionist since they too can be positivist or adopt a middle ground of the two. Where case studies lead to theory development, this occurs inductively by either applying descriptions or analysing phenomenon as they emerge. Unlike grounded theory, they don't begin from a point of ignorance on a subject. Presumptively, a researcher imports prior knowledge on the subject since they combine deduction and induction both in selection and interpretation of data.

Typical case study research falls in several stages: case selection, data analysis, data collection, and report writing. The first stage, case selection, uses different criteria from the one used in surveys. However, in cases of multiple contests, case studies must be carefully selected to address the subject matter. In the second stage, investigation, it is important for the researcher to apprise him/herself with the context. Collis & Hussey (2021) express fears of possibility of underlying implicit opinions that might affect final results of investigations. In regard to this, it is important to reflect on various philosophical assumptions that guide best practice. In the third step, data collection, it is important for the researcher to understand all influencing dynamics that impact quality of data. Some excellent methods of data collection include: observations, interviews, questionnaires and documentary analysis but, data could be quantitative, qualitative or both. Practice has unveiled various case studies that include descriptive, theory building, and explanatory (Voss et al., 2010). In explanatory case studies, the researcher is merely trying to establish causality of variables. Descriptive case studies find their use in historical studies and surveys to describe chronology of events and describe the context. On the other hand, exploratory study helps to develop propositions and hypotheses to guide future investigations.

5.6.1 Designing case study

Research design has a major purpose of ensuring that the research objectives set out in a case study achieved. In case study research, a research design usually comprises of the objectives of the study and the description of the data to be studied. Research design is therefore the general approach that is applied in answering the various research questions. Consequently, it offers direction regarding the approach for data collection with the requisite justification. According to Patton (1990), there are a number of research methods that could be applied and thereby the need to justify the technique chosen. In choosing the type of research method, a researcher ought to consider the nature of the research problem as well as the expected output. Similarly, the time that has been dedicated to research an impact on the appropriateness of the research methodology including the sample sizes.

Planning research requires decisions to be made not only on the manner in which data is to be collected, but also regarding its testing. Some research projects are based on validating literature whereas others are set to expand existing theories. A researcher should therefore determine the intent of the research before making a choice of the research design. Nevertheless, the research budget available needs to be taken into account in choosing the research design. Often, researchers are forced to take a particular design owing to limitation of resources.

Determination of unit of analysis is another important consideration when choosing research design. Unit of analysis could be groups, industries, organizations or individuals. The appropriate design would be one that covers all the units of analysis effectively and efficiently.

Case studies could either be single or multiple where according to Bell et al., (2022), a single case study is appropriate under circumstances that are revelatory, unusual,

critical, common, or longitudinal. On the other hand, multiple case studies are carried out to investigate differences and similarities between cases. The main objective of carrying out multiple case studies is to provide validity to a certain phenomenon.

Longitudinal case studies involve collection of data that has an intervening time. Therefore, such studies are conducted before and after a certain intervention with the objective being to assess the impact of the influence. Crowther and Lancaster (2012) observed that longitudinal case studies are useful in studies seeking to assess impact of a certain intervening or independent variable. The major advantage of carrying out such studies is the fact that they help to describe attributes that are significant about people or organizations. Unfortunately, such studies are unable to describe significant data attributes regarding organizations or people though they could help to explain changes in such attributes.

5.6.2 Undertaking case studies

To carry out the analysis, a case study was chosen to achieve the set research objectives. This involved a number of steps namely; data collection, data reduction, presentation and analysis. A case study protocol helps with not only having a prepared list of questions but also the procedures and rules that need to be followed during an interview (Kallio et al., 2016; Rashid et al., 2019; Yin, 2009). Use of case studies is therefore considered useful as it helps to improve reliability of study. Subsequent studies could therefore be undertaken where uniform data is collected in case similar research is conducted in future.

5.6.3 Data collection for case study research

Data collection involved use of several approaches to ensure validity of information. The approaches that were employed in this study included archival records, documentation review, interviews, observation of participants, direct observation of phenomenon and physical artifacts.

Interviews according to Cooper and Schindler (2014) are a primary data collection technique that is useful in business and management research particularly where qualitative research is required. Interview involves direct involvement of a researcher with the role of listening, prompting and encouraging the research (Bolderston, 2012; Bredal et al., 2024; Brounéus, 2011; Ruslin et al., 2022; Taherdoost, 2022). Interviews could be structured, semi-structured or unstructured (Adeoye-Olatunde and Olenik, 2021; Belina, 2023; Brinkmann, 2014; Dubovsky, 2024; Longhurst and Johnston, 2023; Low, 2019). Where a structured interview approach is used, a set of questions is prepared beforehand and the order of the interview is highly regulated. This is important where certain feedback is required with some set expectations. Further, structured interviews are useful if the researcher has limited time or budget (Adams, 2015; Phellas et al., 2011; Ünlü et.al., 2024). On the other hand, semi-structured interviews involve both per-formulated questions but with limited opportunities to collect other feedback from the interviewees. The research in such cases would have the flexibility of asking additional questions or asking interviewees to provide suggestions or additional feedback. Cooper, Schindler and Sun (2006) observe that semi-structured interviews allow researchers to try different questions based on responses given and thereby allowing respondents to understand the research objectives (Adeoye-Olatunde and Olenik, 2021; Belina, 2023; Blandford, 2013; Ruslin et al., 2022). Semi-structured interviews are equally useful in collecting information

regarding a subject that is not well researched or where triangulation of data and other resources is necessary (Adeoye-Olatunde and Olenik, 2021; Belina, 2023; Kallio et al., 2016; Petrescu et al., 2017; Ruslin et al., 2022). Respondents are also afforded an opportunity to speak their mind which could offer important insights to the researcher regarding the study.

Several researchers have used semi-structured case studies with a view to collect both quantitative and qualitative information (Belina, 2023; Blandford 2013; Low, 2019; Kaeedi et al., 2023; Ruslin et al., 2022; Wallwey and Kajfez, 2023). However, interview that are semi structured tend to have challenges of generalizing research findings. External validity of the study is equally diluted since researchers have to exercise subjectivity when analyzing such data (Adams, 2010; Cole, 2023; Guest et al., 2013). Participant observation approach involves collection of data by simply observing events or people in situ. The researcher is therefore interested in understanding where people or subjects of study are including the role that they are playing. Close observation is also possible though it might be harmful to those observed (Adams, 2015; Blandford 2013; Kallio et al., 2016; Mulhall, 2003; Nii Laryeafio and Ogbewe, 2023). Therefore, Cassel and Symon (2004) observe the need for researchers to be extra careful and not to delve into areas that do not relate to the research topic. Further, it is critical to keep updated records regarding the observations made (Archer et al., 2016; Van den Eynden et al., 2011). Careful planning of observation visit is also important to ensure that there is no time wastage and at the same time to focus the study on the research subject (Cohen et al., 2017; Lofland et al., 2022; Moser and Korstjens, 2018).

Triangulation is an approach that is meant to enhance validity and reliability of research by employing more than one research technique (Amadi, 2023; Abdalla et

al., 2018; Donkoh and Mensah, 2023; Golafshani, 2003; Hammersley, 2008; Hussein, 2009; Moon, 2019; Turner et al., 2017; Vivek et al., 2013). Having multiple tools is important in ensuring that the research findings are not biased. Patton (1990) observes that by using triangulation, research findings resulting from different techniques are compared for consistency. For a study to be considered reliable, its findings must be corroborated by findings (Anney, 2014; Bergh et al., 2017; Golafshani, 2003; Johnson et al., 2020; Rose and Johnson, 2020; Sürücü and Maslakci, 2020). Therefore, it helps to avoid cases where researchers jump into conclusions that are not backed by sufficient data evidence. Such cases would result to eroding the reliability of a research. Use of multiple tools is therefore highly encouraged as it improves the quality of research.

5.7 Data analysis

Data analysis involved conversion of data into a form that can be analyzed (data reduction); presentation of data is summary form and the actual analysis. Each of these phases is described here below in detail.

The first point in data analysis involved conversion of the raw data into a form that is possible to analyse. Transformation of data is meant to make it possible to be understood. For qualitative data, analysis could be through coding and hermeneutics. Data reduction will include transformation of data, its simplification and selection to manageable form. Coding involves classification of data into categories thereby making it easier for researchers to analyse qualitative data. However, it is quite a challenge to analyse qualitative data given the fact that it might be voluminous. Structuring such data is imperative to ensure that it can be understood easily and in a coherent manner. Further, it ensures that such data can be analysed in an objective manner.

Data coding is equally important since it allows researchers make use of available computer software technologies for data analysis. Once data is properly coded, it could be input into some specialized data analysis tools such as SPSS that could help to not only analyse the data, but also present it in useful forms. This in turn increases the efficiency of the research and at the same time cut the research budget. However, for these tools to be useful, it is important for researchers to carry an appropriate data coding.

Presentation of qualitative data involve preparation of document summaries, conducting analysis of meetings, having contact summary sheets and carrying out interim site summaries. The major challenge is ensuring coherence is maintained with any missing elements taken into account. Since data is unstructured in a qualitative research design, use of techniques such as logic models and pattern matching is important.

Coding involves association of numbers or codes to some common phrases or terms. According to Cooper, Schindler and Sun (2006), coding helps a researcher convert data into various categories. Coding of incidents similarly allows qualitative data to be arranged as per certain categories thereby making it possible to compare incidents within related categories. This enables researchers to decipher data patterns within categories which can form the basis of conclusions and development of theories.

Codes can be created before field work commences where a provisional list is generated from the conceptual framework, research problem, research questions or other research variables. This approach helps researchers to link key areas of study with the data collected. The second approach involves using a grounded approach. A grounded approach is where the researcher starts by collecting data and then using a

context sensitive approach, creates codes that are used during data analysis. This approach is useful where a researcher might not have adequate hindsight regarding the study. The third approach involves application of a mix of the first two techniques. Using this approach, a researcher is required to simply describe the general subject of interest, and the codes are assigned either inductively or at a later stage once data is collected. Axial coding could also be used where data is put together after rearranging categories in a rational manner. A researcher could also opt for selective coding where a core category is selected and then this is related to others.

Presentation of data is useful in ensuring that information is organised in a manner that facilitate analysis and ease the process of reaching study conclusions. Data could be presented in a number of forms such as visual where information is systematically provided to allow users reach valid conclusions. Data presentation is also useful in allowing a researcher draw conclusions regarding each of the research questions. Listing could also be done as part of data presentation such as through the use of matrices, incident charts and event listings.

Analysis of qualitative data could be undertaken using a research journal which is an approach of maintaining timeline and narrative research process (Hennink et al., 2020; Hyers, 2018; Khoa et al., 2023; Nasheeda et al., 2019). This is very useful particularly when carrying out research. Other than the diary approach, documentation could be used where detailed site reports are prepared (Morgan, 2022) . Such documentation would be the basis of writing comprehensive reports that organises data into a structured and coherent format. When writing reports, it is imperative to maintain the same structure as that of the research (Dehalwar and Sharma, 2023; Levitt et al., 2021; Nasheeda et al., 2019). This would in turn allow comparison of different cases. Time is of essence when preparing reports to avoid a situation where the researcher

could forget some of the important data that might have been collected (Buljan, 2023). Researcher could opt to write minutes, memoranda, newspapers, proposal or annual reports (Tennent and Gillett, 2023). Collaboration of the information collated with other sources makes it easy for inferences to be drawn which could help to further investigation (Yin, 2014). In this case, the researcher made references to webpages of the company so as to offer a richer picture of the cases before the visit as well as after the visit. This helped researcher to have knowledge about the Companies before the visit.

Qualitative data analysis is meant to identify, interpret, examine and compare themes and patterns through the use of an iterative process (Bingham, 2023; Locke et al., 2022; Naeem et al., 2023; Neale, 2016; Ngulube, 2015; Reyes et al., 2024; Richards, and Hemphill, 2018; Srivastava and Hopwood, 2009). Drawing and verifying of conclusions is usually the first step in qualitative analysis. Researchers are required to be keen in reading and interpreting reports as well in carrying out transcription.

A within-case analysis could be used to gain an understanding of the case and at the same time to identify unique patterns (Eisenhardt & Graebner, 2007; Møller and Skaaning, 2017; Pawson, 2024). Causalities and explanations should be identified from the case using one of the four techniques (Miles and Huberman, 1994). The first technique is referred to as an explanatory effect matrix that presents a set of change factors and traces critical processes and outcomes. The second approach involves designing a causal network that displays the most relevant predictor and response variables. The third option is the use of dynamic matrix whereas the last approach involves making predictions using data collated (Miles and Huberman, 1994).

Cross case analysis seeks to identify patterns among several cases and therefore it involves a number of steps (Borman et al., 2012). The first step involves ordering displays and thereafter display of data in terms of concepts, case or time thereby enabling comparison for drawing study findings. Cross-case analysis according to Bell et al., (2022) help to improve internal validity when analysing qualitative data. Using this form of analysis, hypothesis testing could be undertaken as a basis of developing propositions (Eisenhardt & Graebner, 2007). In addition, it allows application of non-parametric statistics to explore and test patterns even where the sample sizes are small. An array of case study data could be presented in the form of a chart to increase internal validity of the study (Yin, 2013). In addition, pairs of cases could be selected where differences and similarities within cases exist.

5.8 Evaluating quality of research design

Good research collates information that provides appropriate answers to each of the research question (Zohrabi, 2013). This requires construction of research quality criteria which sets the stage for carrying out valid research (Easterby-Smith et al., 2021; Eisenhardt & Graebner, 2007).

Validity of research

Internal validity can be improved in a qualitative study through the use of positivist designs which help to minimize all plausible alternative explanations for distinctions found between groups. This could be achieved through random assignment and having experienced groups. Samples should also be homogeneous. Mortality, maturation and variability in history unfortunately dilute internal validity. Conversely, external validity relates to ability to generalize results beyond what has been studied in research. Sampling, access and having the same contextual factors is necessary before a study's conclusion can qualify for generalization. Use of positivist research is

meant to allow external validity by ensuring that similar results are realized if research was to be repeated (Easterby-Smith, 2012).

A research ought to be of quality in terms of the appropriateness of the methodology applied as well as having a systematic process (Barker and Pistrang, 2005; Dada et al., 2023; Tranfield et al., 2003). An objective approach ought to be applied in selection of data and data collection tool, data reduction, presentation of data and analysis (Khoa et al., 2023; Leech and Onwuegbuzie, 2007). Inferences and conclusions for the study should also be supported by the results of data analysis. It is equally critical to control the relationship between the interviewee and researcher so that the results are not manipulated (Baker and Foy, 2003).

Table 5.2: Case study tactics for four design tests (Source: Yin, 2014)

Tests	Case Study Tactic	Phase of research in which tactic occurs
Construct validity	Use multiple sources of evidence	Data collection
	Establish chain of evidence	Data collection
	Have key informants review draft case study report	Composition
Internal validity	Do pattern matching	Data analysis
	Do explanation building	Data analysis
	Address rival explanations	Data analysis
	Use logic models	Data analysis
External validity	Use replication in multiple case studies	Research design
Reliability	Use case study protocol	Data collection
	Develop case study database	Data collection

Logical coherence of the research is an important factor to consider when determining quality of social research. Four qualities are necessary namely; construct and external validity, reliability, and internal validity (Yin, 2014). The correctness of the measures that were used in a study is considered as construct validity (Yin, 2014). On the other

hand, external validity relates to the ability to generalize research findings (Yin, 2014). Identification of an appropriate theory could help to address issues relating to external validity. Internal validity is required in causal and explanatory studies where causation is tested (Yin, 2014). In such studies, it is imperative to differentiation between causative factors and spurious relationships. To enhance internal validity, a number of techniques are used such as logic models and pattern matching (Yin, 2014).

In a qualitative study, reliability of research findings could be assessed from the whole study in terms of how the study has been conceived, data collected, analyzed and conclusions reached based on the results of data analysis. A research study is said to be reliable if a different researcher using the same process would arrive at similar conclusions. This is achievable if a researcher makes elaborate documentation of all the procedures followed as well as the case study protocol which could help in the process. Researchers should therefore adopt objective approaches and documentation for the study should be one that could allow validation of the results through independent research.

5.9 Research design for this study

5.9.1 Methodology chosen for this study

The strategy for data collection and analysis is called methodology and methodology is the most critical factor in any research design. Various factors affect methodology. The factors are – accessibility of resources, selection of ontology and epistemology, and the nature of the research – inductive or deductive. The factors in this research were – scarcity of resources, anticipated access difficulty, inductive research and relativist and constructionism as ontology and epistemology respectively. Interview – based methods utilised by the researcher as this research aim to explore how the

internal contingency factors affect PMS. Easterby-Smith (2012) suggested the following methods for constructivist – case study research, action research and ethnography. Ethnography requires extensive resources and access. Hence, this method was removed from the list. Similarly, action research was removed from the preference list as it requires excessive level of access. Qualitative case study permits developing connections among researcher and the subject. Also, the level of access and resources required by the case study were right the researcher's existing resources. Hence, the chosen research method for this research was qualitative case study method. In addition, 'how' research question can be answered with the help of case study (Yin, 1994).

Multiple cases provide the opportunity to compare and contrast the data collected from the different organisations (Eisenhardt,1991). In this research, the use of performance measures is compared between multinational and local companies. Moreover, six cases are selected as more than two cases strengthen the validity of findings (Miles et al 1984, Yin 2014). Hence, multiple case study chosen for this research (Yin, 2003). The economy of Bangladesh is a condensed economy. Few sectors are dominating the industrial and export landscape of Bangladesh. These sectors are – fast moving consumer goods (FMCG), garments and pharmaceuticals. The country has a quite limited industrial base. Hence these sectors are facing similar infrastructural, regulatory and industrial challenges although they are operating in different sectors. So, it is justified to include manufacturing companies from different sectors in one study.

The aim of this research is to explore how internal contingency factors affect PMS in developing countries. Both primary and secondary data sources were used in this research in order to answer two research questions. Semi-structured interviews were

conducted to gather primary data. Secondary data collected from literature review and case Companies' documents. Interview guide was developed by reviewing previous literature. Interview guide helps interviewer to decide the best way to utilize available time (Patton, 2002). It allows interviewers the options to explore and investigate the comments from interviewees while going through the interviews. Open-ended questions help to create good understanding between the interviewee and interviewer which promotes good flow to the discussions. Hence, interviewees feel encouraged to provide their complete experiences in open-ended questions.

After undertaking literature review, researcher identified that most of the research of performance measurement system has done in developed countries and there is a gap in PMS research in developing countries such as in Bangladesh. Due to the globalisation and internationalisation, many multinational and foreign companies are locating in developing countries like Bangladesh. Hence, it is important to conduct an exploratory empirical investigation in developing countries like Bangladesh. The conceptual framework developed in Chapter three is utilised in the empirical investigation. The conceptual framework is aimed to explore the internal contingency factors affecting PMS in Bangladesh.

All interactions with the participants were carried solely by the researcher. This allowed researcher to realise participants realities holistically which helped to gather rich qualitative data. The research is not depending on prior theory and is exploratory in nature. Hence, the research approach of this study is inductive. This research is subjective as the research involved opinions of people from different context for the same thing. The research questions of this research are 'why' and 'how' questions. All points described congregate towards a subjective, constructivist approach (Creswell,

2014; Easterby-Smith et al., 2012; Eisenhardt & Graebner, 2007; Berger & Luckmann, 1971; Lincoln et al., 2011).

5.9.2 Data collection

The researcher used different data collection tools and techniques including semi-structured interviews, personal observations, site visits and secondary sources such as company documents and websites.

Semi-structured interview instrument was developed based on the conceptual framework which was developed by reviewing related literature. The instrument was developed in an adaptable manner so that emerging paths could be explored during the interview. The Interview instrument was reviewed after couple of interviews as some of the questions were repetitive. Researcher removed the repetitive questions. Researcher also added some new questions with new themes which evolved from different interviews.

Researcher asked the questions with her own words and in some cases, researcher asked the questions in Bengali as the interviewees were more comfortable with this language. Also, sometimes researcher had to change sequence in order to investigate follow up questions.

Semi-structured interviews were conducted in two multinational and four local medium and large manufacturing companies in Bangladesh. The Interview protocol was prepared based on the conceptual framework (see Chapter 3, Figure 3.1) developed from the literature. 45 in-depth interviews were undertaken and, on an average, each interview lasted around 55 minutes. In order to increase the research validity and reliability, triangulation was exploited in different ways (Yin, 2014). The data collected from different sources (literature, secondary sources such documentation, and cases)

was triangulated. In addition, the findings obtained from one case were triangulated against the findings from the others.

Significant time and energy are dedicated by qualitative researchers in order to identify organisations for data collection. The main problem of qualitative research is getting access to organisations for fieldwork. In this research, family and friends helped researcher to get access to the companies. Only companies that expressed and consented to participate were included. All the cases were selected from same sector which is manufacturing sector. The cases were selected from Bangladesh only. Altogether 45 interviews were conducted. The researcher ended interviews when further interviews were not generating new insights and participants were repeating the responses provided by previous interviewees.

Table: 5.3 Overview of the cases

Case	Interviews	Types of business	Designations of interviewees
A (9 Interviews) Multinational Company Fully owned by parent company in UK	1	Fast moving consumer goods manufacturer	Head of procurement
	2	Fast moving consumer goods manufacturer	Head of supply chain
	3	Fast moving consumer goods manufacturer	Commercial controller
	4	Fast moving consumer goods manufacturer	Manager (local buying)
	5	Fast moving consumer goods manufacturer	Production manager
	6	Fast moving consumer goods manufacturer	Human resource executive
	7	Fast moving consumer goods manufacturer	Quality control manager
	8	Fast moving consumer goods manufacturer	Supply controller
	9	Fast moving consumer goods manufacturer	Company secretary
B (8 Interviews) Multinational Company. Fully owned by parent company in Germany	10	Chemical company	Operations manager
	11	Chemical company	Safety manager
	12	Chemical company	HR talent management manager
	13	Chemical company	Sales manager
	14	Chemical company	Production manager
	15	Chemical company	Associate finance manager
	16	Chemical company	Distribution manager
	17	Chemical company	Rewards and system manager
	18	Knit composite manufacturer	Executive director

C (8 Interviews) Local Company Family owned	19	Knit composite manufacturer	General manager
	20	Knit composite manufacturer	Assistant general manager
	21	Knit composite manufacturer	HR and compliance manager
	22	Knit composite manufacturer	Deputy production manager
	23	Knit composite manufacturer	Assistant HR manager
	24	Knit composite manufacturer	Production manager
	25	Knit composite manufacturer	Assistant production manager
D (7 interviews) Local Company Family owned	26	Textile manufacturer	Chief executive officer (CEO)
	27	Textile manufacturer	Senior manager (admin, HR and compliance)
	28	Textile manufacturer	Assistant manager (HR and compliance)
	29	Textile manufacturer	Production manager
	30	Textile manufacturer	Assistant production manager
	31	Textile manufacturer	Senior finance manager
	32	Textile manufacturer	Assistant finance manager
E (7 Interviews) Local Company Family owned	33	Pharmaceuticals	Commercial manager
	34	Pharmaceuticals	Quality control manager
	35	Pharmaceuticals	Production manager
	36	Pharmaceuticals	Assistant production manager
	37	Pharmaceuticals	Assistant quality manager
	38	Pharmaceuticals	Assistant commercial manager
	39	Pharmaceuticals	Marketing manager
F (6 Interviews) Local Company Family owned	40	Knit composite manufacturer	Head of production
	41	Knit composite manufacturer	Finance manager
	42	Knit composite manufacturer	Head of marketing and merchandising
	43	Knit composite manufacturer	Production manager
	44	Knit composite manufacturer	Assistant production manager
	45	Knit composite manufacturer	Compliance manager

5.9.3 Data analysis

Researcher transcribed all the interviews before starting the analysis. It is necessary to deeply understand the issues involved in the interviews. Researcher listened the audio recordings of the interviews numerous times to deeply understand the issues involved in the interviews. Researcher took notes of the relevant issues while listening the recordings. In order to analyse the interviews, following three activities were

followed - data reduction, data display, and conclusion drawing and verification (Miles and Huberman, 1994). Researchers utilise both inductive and deductive approach to analyse qualitative data. Both approaches are explained in part one of this Chapter. Researcher used deductive approach in this research. At first, researcher developed categories based on the conceptual framework and the content analysis of collected data. Researcher identified recurring themes from the interview transcripts and document analysis. Identifying themes was helpful to reduce data and to recognise consistencies. Researcher read interview transcripts, field notes and documents repeatedly to identify frequently mentioned phrases, keywords and topics. Researcher then grouped related codes into themes and formulate storyline related with each theme. The following table (5.5) shows examples of codes and themes from Case A.

Table 5.4: Examples of Codes and Themes

Themes	Codes
Drivers	Mix of participative and authoritative management style Senior management commitment Training Non-resistant to change Linkage of reward with performance Holistic performance measurement system & Integrated IT system Educated employees
Barriers	Lack of knowledgeable workforce
Moderators	Western controlled management Communication

5.9.4 Reliability and validity

The researcher attempted to minimise threats to the reliability and validity of interview data by asking to follow up questions (McKinnon, 1988), by immediately transcribing audiotapes and field notes and by emailing transcripts to the interviewees for verification and modification (Annisette& Trivedi, 2013). The threats to reliability and validity were further reduced by selecting interviewees from different departments in every case (Miles & Huberman, 1994; McKinnon, 1988). Researcher conducted 45 interviews with interviewees from different levels of the organisation and ended interviews when the responses became repetitive. This increases the internal validity of this research.

5.9.5 Ethics

Ethical issues are necessary for every research. Researchers can avoid harm by following ethical principles. Ethical approval was taken for this project. MMU's ethical guidelines were followed by the researcher in this research. Interviewees were informed about the purpose of the research before the interviews. Interviewees were also informed about the issues related to confidentiality. It was clearly mentioned that confidentiality would be maintained for all materials and individuals' identity would not be identified. Pseudonyms were used in order to protect individuals' identity.

5.10 Conclusion

This chapter offers several recommendations and alternatives for undertaking qualitative research. This chapter includes discussion on the factors to take into consideration when choosing a research design. This chapter also discusses the

methodology utilised in this research.The next chapter (Chapter 6) focuses on within case analysis of the six cases.

Chapter 6 Findings & analysis of the results

6.1 Introduction

This chapter focuses on within case descriptive analysis of the six cases. The principal aim of within case analysis is to become 'intimately familiar' with the case materials collected.

6.2 Company A: Multinational Company

6.2.1 Background information

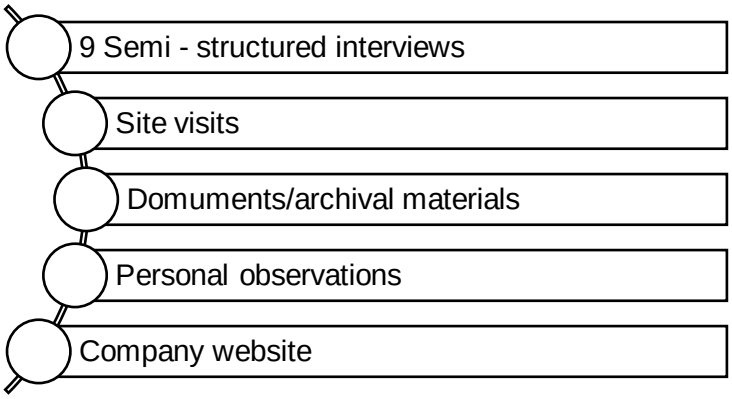
Company A is part of a UK based multinational company which operate in 60 countries and sells products in 160 countries around the world. It produces household and healthcare products. Company A is a market leader for fast moving consumer goods (FMCG) both locally and globally. Company A has 350 employees (including shop floor workers) and in 2023, it generated revenue of £47 million in Bangladesh and £14.6 billion globally. While the innovation and new product development takes place in their head office in the UK, the site in Bangladesh is focussed on production and sales. The company is successfully using performance measures for many years.

6.2.2 Data collection activities

Prior to the field visit researcher searched A's website extensively in order to gain knowledge about the Company and its business. Nine semi-structured interviews were conducted. Interviewees include Head of procurement, Head of supply chain, Commercial Controller, Manager (local buying), Production manager, human resource executive, quality control manager and Supply controller and company secretary.

Interviews lasted between 50 minutes to 1.5 hours. All semi-structured interviews were recorded with prior permission. The researcher was also allowed access to a range of documentary evidence which includes financial statements, annual reports, social investment reports etc. In addition, researcher did the office and factory visits that allowed the researcher to record own observation about visual communication of targets and achievements. Figure 6.1 exhibits the data collection activities of case A.

Figure 6.1: Data collection activities at Case 'A'



6.2.3 Performance Measures in Case A

Company A uses balanced scorecard as their performance measurement framework which consists of three dimensions which are – better financials, better environment and better society. The financial dimension includes the financial figures like – Net revenue, segmental revenue, sales, profits, net working capital, etc. The better environment dimension includes how the sets out how they minimise emissions, water use and waste. The better society dimension includes the objectives associated with the stakeholder groups: workplace (this means the employees), healthier lives (how they improve health and hygiene behaviours through their products, brand educational programmes and corporate social investment) and products (increasing revenue

through sustainable products). They set realistic targets for each measure in order to improve performance and monitor progress against those targets. Table 6.1 exhibits a list of financial and non- financial measures used in Case 'A'.

Table 6.1: Examples of performance measures in use in 'A'

Financial Measures	Non-Financial Measures
Better financial: *Net revenue* *Gross margin* *Adjusted operating gross margin* *Earnings per share* *Developing markets of net revenue* *Health and hygiene of net revenue*	*Better society:* *Workplace* *Gender diversity* *Lost workday accident rate* *Healthier lives* *People reached with health and hygiene messaging* *Save a child every minute* *Products* *Net revenue from more sustainable products* *Better Environment:* *Green houses gas emissions* *GHG emissions per unit of production* *Carbon footprint per dose of product* *Water* *Water use per unit of production* *Water impact per dose of product* *Waste* *Factories sending zero waste to landfill* *Manufacturing waste per unit of production*

6.2.4 Framework derived from A's data analysis

The following framework derived from the data analysis of case A.

Table 6.2: Framework from case A

Drivers	Mix of participative and authoritative management style Senior management commitment Training Non-resistant to change Linkage of reward with performance Holistic performance measurement system and Integrated IT system Educated employees
Barriers	Lack of knowledgeable workforce
Mediators	Western controlled management Communication

6.2.5 Drivers in implementing and using performance Measurement system

Company A adopted authoritative style management style in design and implementation stage. The parent company of Company A develops KPIs based on their strategic areas. These KPIs are then shared across all their offices around the world. The KPIs for the CEO of the Bangladesh offices came from the parent company,

outside the country. CEO's KPIs were then cascaded down to departmental heads. Departmental heads then distributed them to their subordinates.

Company A sets realistic targets for each measure in order to improve performance and monitor progress against those targets. They cascade down these organisational targets from top to bottom level in order to achieve company goals.

> "*Once everyone in the organisation achieves their goals, company will achieve its goal*". Head of Supply Chain and Logistics.

The company expects every employee to contribute at three levels or aspects, which are: leadership, business performance and personal development plans. Their performances on these aspects are measured through capabilities and criteria, which they call KPIs. For instance, leadership performance is based on individuals' leadership capabilities, which are judged against specific criteria. Similarly, business performance is directly linked with their organisational goals and the measures are deployed to various levels. Personal development plans are linked with their skills development and growth. Individuals' targets are set for the whole year. Individual KPIs are not given to the shop floor workers. Normally group targets related to production volume and safety issues are given to them.

Although Company A adopted an authoritative style in design and implement stages of PMS, they adopted participative style in use and review stages of PMS. Employees can speak with their line manager before deciding any target. If a target is not fulfilled, employees get alert emails. If their performance is too bad then they have to discuss and explain it further, so that it will not be repeated in future. Individuals have the full opportunity to discuss about their own KPIs and targets with his/her line manager. After the discussion, based on the personal circumstances of the employee, if it is

logical, line manager can amend the targets, while the senior management will approve them. New performance measures and KPIs are always deployed from the head office and everyone must have to follow those rules/policies as part of their job.

> "*They have no other choice rather than to follow those practices, although the employee have right to discuss their targets with their line manager*" - Commercial Controller.

> "*We maintain friendly and participative environment in our office. So no one feel that they are left alone with their targets. They can speak with their superiors any time regarding their job, which is very different from the local companies in Bangladesh. No one is scared to ask anything to his/her line manager and the result is their contribution to the improved performance.*" – Head of Procurement.

The senior management team of Company A is keen to use and update PMS and they use related up to date PMS information in their decision-making. The parent Company is able to check remotely whether all performance related information are up to date. This creates pressure on management to use PMS as part of their day-to-day job. Using PMS holistically and having integrated IT system help them to trace the performance of business in a systematic way. These enables managers to see how far are they to achieve their own targets as well as their subordinates' targets. The company makes sure that every employee understands his/her targets and are capable to achieve those targets. Line managers and subordinates have one to one meeting to set individuals' targets. Managers also arrange necessary training to

improve employees' skills so that they become capable enough to achieve their targets. Employees (including senior management) get notification emails if they are behind of their targets. Management committee (Directors) have regular meetings (every month) on the KPI results and link the poor performance to improvement projects. Managers' annual review, increment and promotion depend on their performance based on their targets. Hence, they work hard to use and update PMS regularly.

Company A provides great emphasis on training. Employees have to attend regular training focusing on various aspects throughout the year via online or face-to-face. They have one formal training every year in relation to PMS and employees have the opportunity to learn through 'My learning' site. It is mandatory for any new employee to attend PMS related introductory training. Through this training, they will be able to learn what is PMS, how to measure performance, how to decide KPI's for himself, what kind of KPI's are used in this company etc.

Company A never faced any resistance from employees while implementing and using performance measurement. Employees are required to follow the instructions from superiors as agreed in the employment contract and in order to run the business smoothly. Employees put information in system and his line manager double check the information. No one can avoid using the PMS as he will be triggered though the integrated IT system for not fulfilling his targets. Therefore, no one can hide himself behind the system and everyone have to use PMS.

Employees are not forced to achieve certain targets. Employees sit with their line manager and decide their own targets. Employees have the option to discuss with

their line manager if they think that they will be unable to achieve any specific target. Line manager will revise the target if employee can explain the reason logically.

'Actually, there is nothing here to force on others. Subordinates know that their line manager will not give them such objectives/targets that are not acceptable. They also know that their boss is there to help them all the time to boost their performance. If they think they cannot achieve any targets, they can speak in review and there is chance to revise the targets'. Head of Procurement.

Reward system is directly linked with employees' performance on their KPIs. They get increment and promotion based on the results of their individual KPIs. They get bonus based on their team performance as well as the whole organisation's performance.

However, they do not consider performance appraisal as only tool for increment or promotion. Employees can get increment/promotion even if they do not meet all their set targets. Their achievements outside there set targets are also considered for all kind of rewards. Senior management also considers any realistic reasons behind the failure of achieving targets.

'May be someone did not achieve his/her set targets but he set some examples somewhere which gave the company better financial or control measurement benefits. He will still be able to get increment or promotion based on his achievement although he did not achieve his own objectives for any realistic reason'. Commercial Controller

Employees are aware of getting all benefits based on their performance. They know that their work will be paid off appropriately. Hence, they are reluctant to use PMS in their daily routine as part of their job and this lead to increased performance of the company.

Company A is using integrated PMS in a holistic way with the integrated IT system in their business. This allow them to enjoy the full benefits of PMS. They are able to identify the weak areas of their business and can improve them accordingly. As for example,

> "*Our sales KPI have gone down and trade expenditure has gone up, when we analysed the facts and reports, we identified the root cause to be failure of our promo".* Head of Procurement.

> "*We enhanced the distribution infrastructure which was reflected in increased sales volume*". Head of Supply Chain and Logistics.

Most of the data used to measure their indicators are captured in their sophisticated ERP system which is being used in every department of the company. Employees are responsible to spontaneously input any data which is associated to his/her duties to the ERP system in order to keep the performance data up to date.

The company recruits well educated employees as they believe educated workforce can help their company gain competitive advantage to succeed.

> *"We recruit educated and talented people as our employees. Our company provide opportunities for personal development, safe and healthy working environment to the employees. Educated people help to increase company performance."* -Supply controller and company secretary.

6.2.6 Barriers in implementing and using performance Measurement system

According to the interviewees it is hard to find employees with knowledge of both PMS and IT in Bangladesh. However, they manage to attract the best employees because of their higher salary and brand image.

'*Employees feel proud to work here and they are happy with the benefits they receive here'*. Head of Supply Chain and Logistics

6.2.7 Mediators in implementing and using performance Measurement system

Good communication is highly valued in company A. It is widely believed that Company can achieve better performance by supporting teamwork.

> "*Once everyone in the organisation achieves their goals, company will achieve its goal*". Head of Supply Chain and Logistics.

They produce monthly report of "bluebook/scorecard" results which show how they are doing in terms of their targets, how are they doing compare to previous period. This report is communicated to relevant people in a shared folder. Everyone (except the shop floor workers) who has the access to company's online system can see the company scorecard and understand where they are in terms of their own targets. In addition, Management committee (Directors) have regular meetings (every month) on the KPI results and link the poor performance to improvement projects. They give priority to KPI results and they use this information in their decision making.

If a target is not fulfilled, employees get alert emails. If their performance is too bad then they have to discuss and explain it further, so that it will not be repeated in future. Individuals have the full opportunity to discuss about their own KPIs and targets with

his/her line manager. After the discussion, based on the personal circumstances of the employee, if it is logical, line manager can amend the targets, while the senior management will approve them.

6.3 Company B: Multinational Company

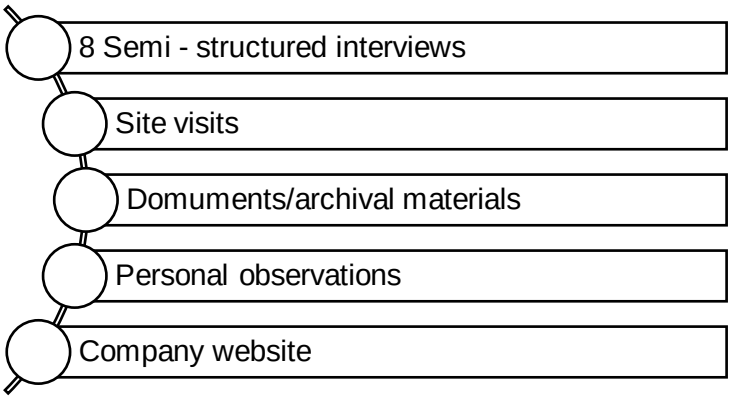
6.3.1 Background information

Company B is part of a German based multinational company which operates and sells products in more than 100 countries around the world. It produces industrial, process and specialty gases. Company B has 410 employees (including shop floor workers) in Bangladesh. The company is successfully using performance measures for many years. They are using their own framework.

6.3.2 Data collection activities

Prior to the field visit researcher searched B's website extensively to gain knowledge about the Company and its business. Eight semi-structured interviews were conducted. Interviewees include Operations manager, Safety manager, HR talent management manager, Sales manager, production manager, associate finance manager, distribution manager and Rewards & system manager. Interviews lasted between 50 minutes to 1.5 hours. All semi-structured interviews were recorded with prior permission. The researcher was also allowed access to a range of documentary evidence which includes financial statements, annual reports, social investment reports etc. In addition, researcher did the office and factory visits that allowed the researcher to record own observation about visual communication of targets and achievements. Figure 6.2 exhibits the data collection activities of case B.

Figure 6.2: Data collection activities at Case B



6.3.3 Performance Measures in Case B

Company B designs Key performance indicators (KPI) is three areas. First one is financial, compliance and innovation, second one is safety and environmental protection and the third one is employees. Financial, compliance and innovation aspect include – Financial (share price, revenue, profit etc.), compliance (contacts integrity line), innovation (expenses in research and development, employees in the research and development etc.). Safety and environmental aspect include – resources consumed emissions, waste and recycling, transport, trainings, certified sites, environmental incidents. Employees' aspect includes – employment structure, employee retention and benefits, diversity, employee training, occupational health and safety. They set realistic targets (KPIs) for each measure to improve performance and monitor progress against those targets. They cascade down these organisational targets from top to bottom level to achieve company goals. Table 6.3 exhibits a list of financial and non- financial measures used in Case 'B'.

Table 6.3: Examples of performance measures in use in 'B'

Financial Measures	Non-Financial Measures
share price revenue profit	compliance contacts integrity line Innovation expenses in research and development employees in the research and development Safety and environmental aspect resources consumed emissions waste and recycling transport trainings certified sites environmental incidents Employees' aspect employment structure employee retention and benefits diversity employee training occupational health and safety.

6.3.4 Framework derived from B's data analysis

The following framework derived from the data analysis of case B.

Table 6.4: Framework derived from B

Drivers	Mix of participative and authoritative management style Senior management commitment Training Non-resistant to change Linkage of reward with performance Holistic performance measurement system and Integrated IT system Educated employees
Barriers	Lack of knowledgeable workforce
Mediators	Western controlled management Communication

6.3.5 Drivers in implementing and using performance Measurement system

Company B has offices in 9 regions. Every region has different numbers of countries. Bangladesh office is falling in Southeast Asia region. They have 11 offices in this region. At first, KPIs are fixed for the whole group in Germany. Then these KPIs are distributed to 9 regions which are then divided to the countries in those regions. The

KPIs of Southeast Asia region is distributed to 11 countries offices. The country manager of respective country office will then distribute them to his/her subordinates and the subordinates then distribute them to their subordinates. All employees are allocated few KPIs based on their job responsibilities. Employees' performances are measured by the results of their respective KPIs. Individuals' targets are set for the whole year; they are measured and reviewed at the end of the years.

Their KPIs are both leading and lagging indicators as well as deployed from top to various lower levels. Company B publishes non-financial performance indicators about sustainable management in its annual Report. They provide supplementary detailed information on this topic in the Corporate Responsibility Report. These reports are publicly available on their website. Most of the data used to measure these indicators are captured in their web-based software named company B internal. Employees are responsible to spontaneously input any data which is associated to his/her duties to the internal software in order to keep the performance data up to date. They produce monthly report of their organisational performance results which show how they are doing in terms of their targets, how are they doing compared to previous period. Every departmental manager has to attend conference call meeting with other 10 countries departmental managers and respective head of the region once in every month. They discuss the KPI results in this meeting.

> "*Every month we have a conference call meeting with other 10 regional countries' manager along with the head of the region in order to find out how we are doing in terms of our target. If we are not doing well, we have to answer why we are not doing well. If any country achieves better performance, the manager of that country office discusses how they achieve this performance.*' Operational manager.

Individuals have the full opportunity to discuss about their own KPIs and targets with his/her line manager. After the discussion, based on the personal circumstances of the employee, if it is logical, line manager can amend the targets. New performance measures and KPIs are always deployed from the head office and everyone must have to follow those rules/policies as part of their job.

> '*This is a top down process. KPIs are coming in a very transparent way from top to bottom. So, there is no chance for anyone to disagree with any of them*'. Talent management manager.

Employees get bonus, salary increment and promotion based on their individual performance.

> '*Monetary rewards encourage employees to perform better'*. Talent management manager.

6.4 Company C: Local Company

6.4.1 Background information

Company C Is located in Tongi Industrial area in Gazipur district of Bangladesh. Company C is a Knit composite company who produces 100% export quality readymade garments. They supply garments to companies such as– H&M, New look, Sports Direct, Ever Last, Firetrap, Select etc. C is a local Company and sister concern of a large group of companies. The Chairman of the group started his business with a small retail store selling sharees and printed fabrics in 1982. Within 2 years in 1984, his first dyeing and printing factory started production of sharees, salwar kamiz, shirting and printed fabrics. This factory was producing for local market. Currently, there are ten sister concerns under this group which produce for both local and international markets. C is the youngest concern of this group. Established in 2014, Northern currently has around 800 shop floor workers and employees that are expected to increase to 2200 in the next year. The owner of the group holds the position of Chairman for the whole group and his 26 years old son is the Managing Director of Company C. The 26-year-old Managing Director (MD) educated in UK took the responsibility of this Company and since then he is aiming to modernise the management of this Company.

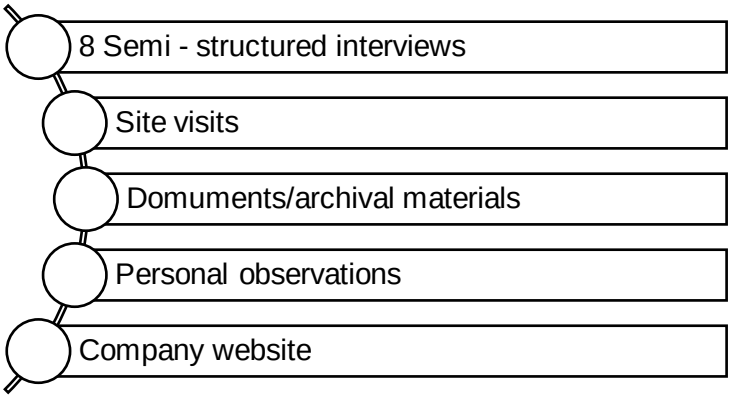
This is a huge project with an estimation of 26000 employability. This is a pilot project and currently they are situated in the same building with their sister concern C Garments Ltd. Next year they are moving to their 10-storied building in Savar, Dhaka, Bangladesh. They are nurturing everything in this pilot project. As for example, how employees behave with the implementation of modern management systems.

C has a hierarchical structure with many layers. Chairman (owner) is the Chairman for the whole group, managing director, executive director, CEO, General manager, deputy general manager, Assistant general manager, Manager (various departments), Deputy manager (various departments), Assistant manager (various departments), Senior officers, Officers, junior officers, Assistant officers, Supervisors, then 7 grades of shop floor workers (last post is helper).

6.4.2 Data collection activities

Prior to the field visit researcher searched C's website extensively in order to gain knowledge about the Company and its business. Eight semi-structured interviews were conducted. Interviewees include Executive director, General manager, assistant general manager, HR & compliance Manager, deputy production manager, assistant HR manager, assistant production manager and Production manager. Interviews lasted between 50 minutes to 1.5 hours. All semi-structured interviews were recorded with prior permission. The researcher was also allowed access to a range of documentary evidence which includes production performance reports, health & safety policies, daily sewing & finishing defect analysis report, daily sewing and finishing rejection analysis report (includes all buyers), monthly print summary of defects & rejects. In addition, researcher did the office and factory visits that allowed the researcher to record own observation about visual communication of targets and achievements. Figure 6.3 exhibits data collection activities in Case 'C'.

Figure 6.3: Data collection activities at Company C



6.4.3 Performance Measures in case C

Company C is using both financial and non-financial measures in its business. However, they do not have an integrated set of performance measures. They add new measures when it is required. They also require including measures to adjust with new legislations set by government or any specific requirements set by the buyers'. Currently, they are using non-financial measures in their production department only.

Table 6.5: Examples of performance measures in use in case C

Financial Measures	Non-Financial Measures
Revenue *profit* *sales*	*Production volume variance* – (number of actual units produced in a specific period – number of budgeted production units in a specific period) * budgeted overhead rate per unit. *Production efficiency* *Defect rate* – defect damage the visual look of fabrics resulting huge quality issues. Defect rate represents the rate of defective

	items. Some defective products with minor faults can be reversed to good quality products. *Reject rate* – the rate of defective products that cannot be reversed to a good product with repair. *Employee development* – the process to develop employees' skills by providing various training programs. *Factory environment* – This refers to the existing condition of the factory. Every factory has to follow the rules and regulations set by government. The factory condition should be safe for the employees and it should not pollute the environment. *Safety* - this represents the safety of employees. As for example, in some jobs, employees are required to use hand gloves and masks. *Zero tolerance to Sexual harassment* – sexual harassment is a form of sex discrimination that takes place in the workplace. *On-time delivery* – meeting the agreement date for supply as per the buyers chosen date.

6.4.4 Framework derived from C's data analysis

The following framework derived from the data analysis of Northern.

Table 6.6: Framework derived from case C

Drivers	Authoritative management style Senior management commitment Training Non-resistant to change
Barriers	Lack of knowledgeable workforce Lack of integrated IT system Non-holistic performance measurement system Non-linkage of reward with performance
Mediators	Western educated Managing director Communication

6.4.5 Drivers in implementing and using performance Measurement system

The senior management of company C has adopted a largely authoritative management style throughout the lifecycle of PMS.

> *"It is not possible to manage a large company without being authoritative in important decisions". Executive Director.*

The senior management decides the measures and they inform the measures to departmental manager. Everyone has to agree with the measures decided by the senior management and no one can disagree with this. Senior management and departmental manager sit together to decide performance indicators or targets.

> *"The decision makers are experts in this business. Therefore, they know very well which measures are effective for company's improvement. If they*

decide to implement something new, everyone have to work on this." Executive Director.

However, if Departmental manager cannot achieve the set targets, he has the opportunity to discuss about this. They can raise any issues that restricted them to achieve certain targets. As for example, they received raw materials later than the projected date due to a transport strike or a strike in the port which delayed the target production date. Senior management always give considerations of any issues those are logical and rearrange the targets.

The senior management is very keen to successfully implement a holistic performance measurement. They believe that IT infrastructure plays an important role for successful implementation of PMS. They hired a renowned foreign company and invested huge amount to develop their IT infrastructure and to design and implement the PMS for them. However, they are not going to introduce a framework like BSC, as management is worried that it will be difficult for the employees to understand this concept as most of them are not well educated. For this they are planning to set KPIs for individuals based on the company's strategies. Senior management is committed to provide necessary training to the employees to understand their KPIs.

They are in the process of introducing computerised machines which will provide them accurate data and also will reduce the time needed for data capture which is very important for successful implementation and utilisation of PMS.

Training is considered as an important aspect in company C. They have many training programs throughout the year. The emphasis on training involves comprehensive development programs for employees. Recently, they have introduced a fast track career progression training for its shop floor workers. The entry post for shop floor

worker is helper and after 5 promotions they become operator. It normally takes at least 1 year for a helper to be operator. They selected 13 helpers with school level education and send them to different production lines for training and put that group under a continuous monitoring process through human resource (HR). In order to avoid the chance of interruption, production department was not given the monitoring responsibilities. HR had a target to achieve their progress in 20 days. However, they achieved the desired results within 14 days and all 13 helpers were promoted to operator. Soon, HR will send them to institute for training. Employees are happy and motivated with their improved performance. On the other hand, Company gets skilled Operators which is in high demand in Knitting sector in Bangladesh.

> *"We will do it again very soon. This is very encouraging and it is beneficial for us as it is very hard to find operator now a day in knitting sector. These operators are in high demand at present". HR Manager*

Training is also provided to understand various performance measures so that employees have clear concept of how to achieve their targets.

Company C is a privately-owned company and employees have to follow the instructions from their superiors as part of their employment agreement. Company C never faced any resistant from employees' in relation to implement and use performance measurement which helps them to successfully implement and use PMS.

6.4.6 Barriers in implementing and using PMS

The senior management provide emphasis on employee retention. They provide different kind of benefits based on employees' performance, like – accommodation facilities, providing car loans on interest free instalments, holiday packages etc. Senior

management believes that company can achieve sustainable performance growth if its employees stay with it for longer time. In case of shop floor worker, they provide promotions and gifts (cash or prize bonds) based on their performance.

> *"Our Chairman and Managing director understand that they are not able to provide benefits and rewards 100% accurately as they don't have a Systematic Framework in place."- Production manager.*

At present, they are providing rewards when they find out someone's good performance but they are feeling that there is necessity of a systematic way which will show them the performance of every individual automatically at some specific period of time. Then, it will be easier for them to provide rewards linked with employees performance. By this way they can treat their employees in a fair way. Senior management understands the importance of linking rewards with performance in order to achieve the benefits from PMS.

Managing Director (MD), who wants to modernise the management of this Company, is giving emphasis on hiring knowledgeable people rather than experienced people with lower educational level.

> *"Education is really important in order to implement any modern management strategies like PMS. We can achieve 100% more efficiency through hiring knowledgeable workforce. Educated and young graduates learn very quickly as they utilise their knowledge of theories/technologies to their practical work. On the other hand, experienced people without proper educational background work based on estimation. For example – an experienced person will measure the weight of a T-shirt by measuring shoulder, chest etc. manually and will find out an estimated weight. But an*

educated person will put all the measurement in the CAD software and will find out the accurate weight. Company can save a lot of time and money by saving in every product." - Executive director.

They are struggling to get educated employees with knowledge of Performance measurement and IT. Most of their managers are non-graduate with many years of work experience. They are not comfortable with IT system and performance measurement. However, Northern is investing huge amount for training existing and new employees.

Company C is using both financial and non-financial measures in its business but it doesn't have a performance measurement framework, as for example, Balanced Scorecard. Northern is not using performance measurement holistically, they are using non-financial measures only in their production department. As a result, they can only identify the weaknesses of production department only not for the whole company. As for example, they identified lack of skills resulted increased defect rate. They provided training to improve peoples' skills which lead to reduced defect rate.

The company is currently using customised ERP software in some departments. In their production line, every machine operator has some specific target to produce per day. At the end of the day, the supervisors of specific production line have to count the production manually and he has to input it in the system manually. All authorised employees (from departmental managers' level) can access this information from their system.

"Data collected is accurate and up to date but the process is time consuming and cost a lot of money." - Production Manager.

The company is planning to invest in installing automated data capturing systems to capture the production data automatically. Senior management is very keen to successfully implement the performance measurement framework. They believe that IT infrastructure plays an important role for successful implementation of PMS. They hired a renowned foreign company and invested to develop their IT infrastructure and to design and implement the holistic PMS for them. However, they are not developing a framework like BSC. They are developing KPI's derived from their strategies without using any established frameworks.

6.4.7 Mediators in implementing and using PMS

Senior management of C provides great emphasis on 'Good communication'. It is widely believed that lack of communication lead to employees' unrest and loss in production.

C's emphasis on high-quality communication is evidenced by use of many ways to reduce the distance between management and workers which includes shop floor workers. C has a participatory committee in order to reduce the distance between the management and shop floor workers. This committee includes Executive Director (representative from management), Production manager and shop floor workers from all production units and they have a meeting once every month. This committee works as a medium between owners, management and employees. Through this committee management can be sure that all employees are getting their salaries and welfares on time. On the other hand, employees can deliver their message straight to owners and management. Participative committee reduces the chance of unexpected labour strike which is a common scenario in Bangladesh.

"Labour strike arise because of the distance between management and workers (specially shop floor workers). If there is distance between management and workers, different group do the game play in middle, such as, few factory workers and some workers' organisations. In our country, it happens regularly. However, there is no record of labour strike in our group. Staff relationship is important to increase company performance and to implement and use PMS". Executive Director.

In addition to the participatory committee, they have some other policies in place to maintain zero tolerance to abuse and sexual harassment. Firstly, they have a welfare manager who is responsible to find out whether any grievance is taking place. Secondly, if employees are not feeling comfortable to speak with welfare manager, they can put their complain anonymously in 'Complaint and suggestion box' which is kept in toilet area. There is a committee to look after the complaints from the 'Complaint and suggestion box'. Every Saturday they check the complaints and take actions accordingly. Thirdly, they have an 'open door' policy to see HR. Employees can go to see HR any time they require. They do not need to make any appointment. Lastly, employees can contact the owners any time with any complain in a specific number. Only owners will receive that call.

Another significant area of communication within the company is regular meetings related to the Company's performance. They have performance meeting every week on Saturday morning which includes top management to check their production deviation, achievement and total loss. They set their weekly target in this meeting which then will be evaluated on the following week.

It is also considered vital that all employees should be informed about weekly targets and achievements. Weekly targets and previous week's achievement is visible in the walls of both office and factory.

The 26 years old MD completed his studies in UK. Since he joined Company C, he is aiming to modernise the management of Northern. He is committed to implement holistic PMS in the company knowing that it will be very expensive for the company. He decided to hire renowned foreign company to develop their IT infrastructure and to design and implement the PMS for them.

The MD gives all departmental managers flexibility and authority with regards to their job. They can discuss their ideas with senior management and implement their ideas.

> *"The situation was not like this before the new MD started and it is very rare in local companies in Bangladesh. The overall performance of the company improved with this change". Executive Director.*

However, if senior management decides to implement any measure/policies/procedures, the employees must have to follow those.

6.5 Company D: Local Company

6.5.1 Background information

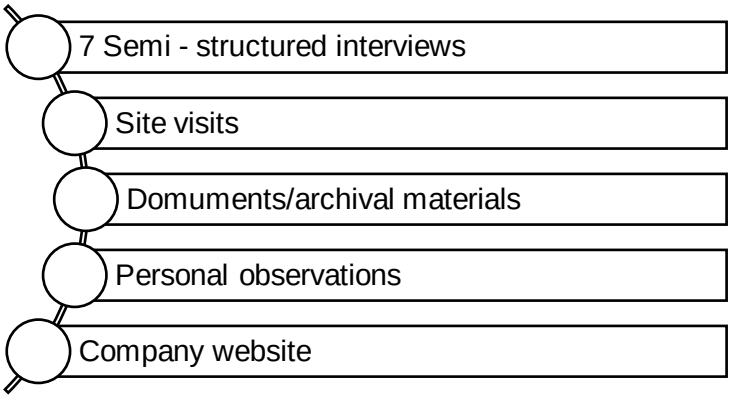
Company D produces Denim garments (both local and export quality). They are a major supplier to companies such as– Levis, H&M, GAAP, Regatta, J.C. penny, Sears, American eagle etc. D is a local Company and sister concern of a large group 'Group D limited'. D group establishes strong backup linkage facility that includes several projects of spinning, weaving, knitting, yarn dyeing, denim, knit dyeing, printing and finishing. D Denim ltd. has around 6,500 employees. The owner of the whole group holds the position of Chairman for the whole group and for D. D group is a composite textile-manufacturing complex that employs 35,000 people. This situates only 20 km away of the Capital of Bangladesh, Dhaka. D group limited covers an area of 43 acres and includes 28 different concerns related to garments that allow the buyers to take buying decision in a single place. The factory size of D group is 9, 72,000 square feet. Company D installed imported modern computerised machineries in order to provide quality textiles to meet the demand of their customers. D Group started manufacturing and export garments business in 1986. In only two decades, D garments become a group and one of the major manufacturers and exporters in Bangladesh. In addition to apparel and textile sector, group D is also involved with Agro based industry, Cement manufacturing Industry, telecommunication business, Banking business, Energy business etc.

6.5.2 Data collection activities

Prior to the field visit researcher searched D's website extensively in order to gain knowledge about the Company and its business. Seven semi-structured interviews

were conducted. Interviewees include Chief executive officer (CEO), Senior Manager (Admin, HR & compliance Manager), assistant manager (HR & compliance), production manager, assistant production manager, Senior Finance manager and assistant finance manager. Interviews lasted between 55 minutes to 1.5 hours. All semi-structured interviews were recorded with prior permission. The researcher was also allowed access to a range of documentary evidence that includes production performance reports, health & safety policies etc. In addition, researcher did the office and factory visits that allowed the researcher to record own observation about visual communication of targets and achievements.

Figure 6.4: Data collection activities at Company D



6.5.3 Performance Measures in Company D

Company D is using both financial and non-financial measures in its business. However, they do not have an integrated set of performance measures. They add new measures when it is required. They also require including measures to adjust with new legislations set by government or any specific requirements set by the buyers. Currently, they are using non-financial measures in their production department only. Table 6.7 exhibits a list of performance measures in use in Case D.

Table 6.7: Examples of performance measures in use in Company D

Financial Measures	Non-Financial Measures
Revenue/sales Net profit Gross profit Profit margin Current ratio Asset turnover ratio Inventory turnover ratio Return on assets	Defect rate Production rate Delivery on time Sales variations Training Environmental measures (includes two different measures) 1. Factory working environment 2. External environment – wastage dispatch etc.

6.5.4 Framework derived from Company D's data analysis

The following framework derived from the data analysis of Company D.

Table 6.8: Framework derived from Company D

Drivers	Management style Non-resistant to change Training
Barriers	Lack of Senior management commitment and absence of Corporate Management/Culture Lack of integrated IT system and non-holistic performance measurement system Non-linkage of reward with performance Communication

6.5.5 Drivers in implementing and using PMS

Strict authoritative management style is present in D. Most of the decisions require Chairman's consent. Senior management have to wait for Chairman's decision for everything. The company lost many deals as the Chairman doesn't have enough time to check everything on time.

> 'He is a charismatic man. He is working hard but as he is working alone and he is involved in almost every decision, he cannot finish all works on time. We are the ultimate sufferer as we are left behind because of the delay'. CEO.

Chairman does not want to divert authority to others. Sometimes, he wants to make everything systematic and divert authority to others but later he changes his decision.

> '*There is no corporate management; it's a one man show, which is a great problem to success. Senior management is very unhappy for this. If I had the authority, I would implement corporate management first. I would like to provide flexibility to everyone in order to take their decisions*.' CEO.

CEO decides the measures. However, Chairman need to authorise the measures before implementation.

D is a privately owned company. Employees are obliged to abide by the instructions from the superiors. They will lose their job if they do not agree with the decisions of their superiors. They can explain the reasons if they are not able to achieve their target. However, they cannot refuse to follow any policies that is working as a strong advantage to use any new measure.

The company is very keen to train people. Employees get training regularly related with their job and safety. As for example – at Present, earthquake is an important issue in Bangladesh and the workers have been given training on what they should do during the earthquake. D provides training to employees when they introduce new measures.

6.5.6 Barriers in implementing and using PMS

The Company becomes big without any prior planning.

> *'From the top to bottom no one is happy. Every one get their salary on time here and every one is highly paid. When we are saying we are not happy, we mean that nothing is planned here. The company becomes so big and nothing happens in a planned way. If they would predict that company will become so big, they could plan accordingly. It was not predicted that the company will be so big. It gets bigger and bigger day by day based on the requirement. Nothing could be done systematically'*. CEO.

D increased the size of business (both in terms of number of employees and size of the plant) every time they received any new contracts. Employees are not happy with the way they have to finish the work. They have to move here and there to finish any particular job.

> '*As for example, we have to install new machine with new requirement. However, we could not install in the place where it was required due to lack of space. Hence, workers have to come from one place to another place to finish the work. This is wastage of time and energy. We cannot overcome these sort of problems*' .CEO.

CEO and all departmental managers want to implement holistic performance measurement. They believe that using the non-financial measures improves their performance. However, the Chairman of the company is not that keen to implement it. He is confused to take any decision regarding this. He sometimes want to implement holistic performance and later on decides not to go for it.

Senior management believe that they need corporate management in place to implement holistic performance measurement. However, Chairman does not want to divert authority to others. Sometimes, he wants to make everything systematic but later he changes his decision.

> '*There is no corporate management; it's a one man show, which is a great problem to success. Senior management is very unhappy for this. If I had the authority, I would implement corporate management first. I would like to provide flexibility to everyone in order to take their decisions*.' CEO.

Normally, in family owned business, Owner's bring family members in business. However, the situation is different in company D. Chairman (72 years old) did not involve any of his family members in this business. There is no inheritor to run the business after him. Employees are worried about their future as there is no one to run the business after the Chairman.

Company D is using both financial and non-financial measures in its business but it does not have a standard performance measurement framework, as for example, Balanced Scorecard. D is using non-financial measures only in their production department. As a result, they can identify only the weaknesses of production department. They identified problems with factory working environment and waste disposal and improved their factory working environment and wastage disposal.

All of D's machines are computerised. They are collecting exact production rate from the machines. Line manager register the data from the machine. This could help D to set up integrated IT system that is important for successful implementation and use of PMS with less cost. However, the company is not able to get the benefit, as the Chairman is not committed to implement any new process.

Company D provides 7% increment every year to all of their employees. In addition to this, they have another reward procedure for the shop floor workers. They have 14 different departments and 3 shifts running in every department. Every month they select three workers from three shifts with highest production level. They are given monetary reward and a certificate.

> '*In order to motivate employees, company arrange yearly picnic, parties during different festivals etc*.' Senior Manager (Admin, HR & Compliance).

Chairman of the company doesn't encourage innovation. The CEO, who is a textile engineer, invented a machine that is 80% cheaper than buying from abroad. They are using this machine in their production unit but CEO did not receive any kind of appreciation for inventing the machine.

Company D provides significant importance on the day-to-day production functions. Every day they check the deficiencies between targets and achievements. Production manager prepares the report through excel and present this report to the CEO on daily basis. Every morning they have a production meeting to tell the target of that day. They provide the performance results on boards on the wall, so everyone can see the performance results.

However, their departments do not liaison with each other. There is also a communication gap between workers and management. Lack of communication is a strong barrier for Riverside to successfully implement and use PMS.

> '*The workers and management do not believe each other .That's why we face labour unrest/ strikes frequently*'. Manager (Admin, HR & Compliance).

6.6 Company E: Local Company

6.6.1 Background information

The office of Company E is located in Uttara, Dhaka and the factory of E is located in Sreepur, Gazipur District in Bangladesh. E is a pharmaceuticals company who produces medicines and nutritionals for all kinds of animals. E is a local Company and sister concern of E Corporation Limited. E started its business on 2009. E is one of the few companies who produce veterinary health care products in Bangladesh. Company E has 220 employees. E produces the products only for the local market.

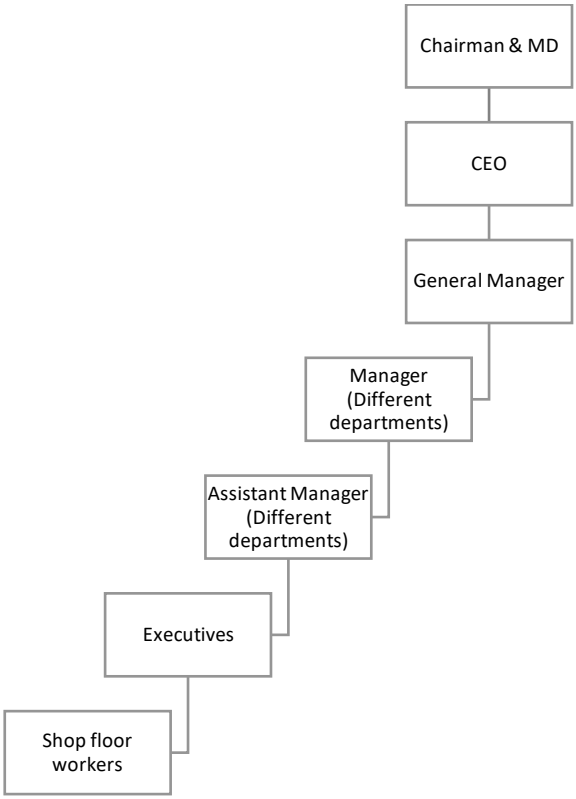
Table 6.9 Product range of Company E

Poultry Products	Large Animal Products	Aqua Products
Therapeutics Nutritional Premix and Feed Additives	Therapeutics Nutritional Injectable	Zeolite Pellet Binder

E Corporation limited was founded in 1984 and it has four sister concerns. The owner of the group holds the position of Chairman and the Managing Director of the whole group. He is also the Managing Director of Company E. The CEO of E is a mechanical Engineer with lots of experience in Pharmaceuticals Manufacturing companies in Bangladesh. He also holds a MBA degree.

Company E has a hierarchical structure with many layers. Figure 6.5 shows the hierarchical structure of Company E.

Figure 6.5: Structure of Company E



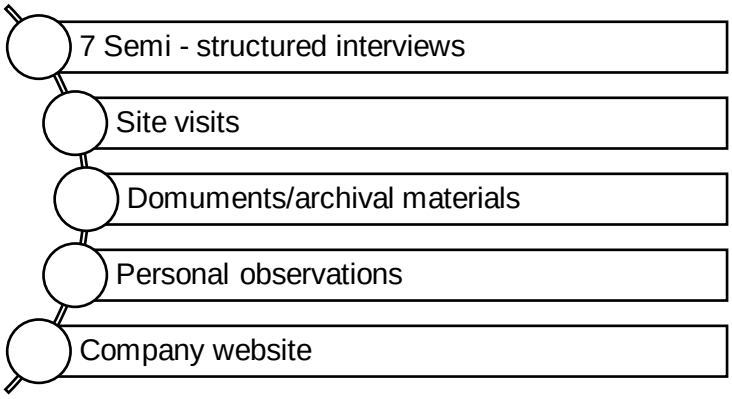
6.6.2 Data collection activities

Prior to the field visit researcher searched E's website extensively in order to gain knowledge about the Company and its business.

Seven semi-structured interviews were conducted. Interviewees include Commercial Manager, Quality Control Manager, Production Manager, assistant production manager, assistant quality manager, assistant commercial manager and marketing manager. Interviews lasted between 50 minutes to 1.5 hours. All semi-structured interviews were recorded with prior permission. The researcher was also allowed

access to a range of documentary evidence which includes weekly and monthly production reports, draft of list of prospective KPI's, health & safety policies. In addition, researcher did the office and factory visits that allowed the researcher to record own observation about any visual communication of targets and achievements.

Figure 6.6: Data collection activities at Company E



6.6.3 Performance Measures in Company E

This company is using both financial and non-financial measures in its business. At present, they are using non-financial measures in two departments – sales and production department. Table 6.10 exhibits a list of performance measures in use in Case 'E'.

Table 6.10: Examples of performance measures in use in company E

Financial Measures	Non-Financial Measures
Revenue / Sales *Profit (Gross profit, Net profit)*	*On time delivery* *Distribution channel expansion* *Production volume* *Product quality* *Training* *Factory environment*

6.6.4 Framework derived from company E's data analysis

The following framework derived from the data analysis of Company E. Table 6.11 represents the framework derived from company 'E'.

Table 6.11: Framework derived from company E

Drivers	Mix of Participative and Authoritative management style Senior management commitment Training
Barriers	Lack of knowledgeable workforce Non-holistic performance measurement system Non-linkage of reward with performance
Mediators	Educated senior management Communication

6.6.5 Drivers in implementing and using PMS

Senior management (Up to Departmental Head) enjoy the benefits of participative management style between them and Owners. Departmental managers can add any new measures with the authorisation from Managing Director. The Owner of the Company provide the flexibility to senior management in order to modernise the company. As part of this, Commercial Manager is working towards implementation of holistic performance measurement system.

> "*I have been given full authority by top management to implement different policies that is beneficial to the company. This flexibility definitely encourage me to provide my best to the company". Commercial Manager.*

> '*We have the flexibility and authority to add any new performance measures'*. Production manager.

However, senior management adopted authoritative style to deal with other employees in all stages of performance measurement.

Senior management is very keen to successfully implement holistic performance measurement. They are hiring people with working experience with performance measurement framework in multinational companies.

> '*I have 14 years of work experience in performance measurement process in a famous multinational company in Bangladesh. This Company hired me to design and implement performance measurement framework for them'*. Commercial manager.

At present, they are developing integrated performance measurement for the whole company. As part of that, they are developing key performance indicators. At this moment, they are not planning to design framework like balanced Scorecard.

> '*We don't have enough knowledgeable persons to understand the scorecards. As we are a new company, designing a framework like balanced scorecard will be a bit extensive. Primarily, for next few years we will provide training to our staff to understand KPIs. Then we will move toward the balanced scorecard, if required'*. Commercial manager.

Training is clearly valued in E. Senior management is very keen to provide training to employees.

> *"Without on the job training, employees cannot apply what they learned from their degrees. We are emphasising more and more on training. I am following the footsteps of Multinational Companies. They invest a lot on training their employees and get the benefit straightway and for the long run. We make sure that everyone gets proper training related with their profession"*. Commercial Manager.

They provide training to employees when any measure is introduced. The Owner and senior management are committed to provide ongoing training to all their employees to understand KPI's and indicators before implementing holistic performance measurement system.

6.6.6 Barriers in implementing and using PMS

At present, they are developing holistic performance measurement for the whole company. As part of that, they are developing key performance indicators. At this moment, they are not planning to design framework like balanced Scorecard.

> '*We don't have enough knowledgeable persons to understand the scorecards. As we are a new company, designing a framework like balanced scorecard will be a bit extensive. Primarily, for next few years we will provide training to our staff to understand KPIs. Then we will move toward the balanced scorecard, if required'*. Commercial manager.

At present, they do not have an integrated IT system for the whole company. However, they are not struggling much for this as their business is not huge at this moment. Similarly, they are not facing much problem related with IT skilled workforce, as they do not require that sophisticated IT system in their business. However, they have plan to expand their business. Hence, they will implement integrated IT system in the whole company. They will hire consultant for implementing integrated IT system. They are worried that they will face difficulties to recruit people with IT & performance measurement knowledge.

Company E is using both financial and non-financial measures in its business but it does not have a performance measurement framework, as for example, Balanced Scorecard. E is not using performance measurement holistically; they are using non-financial measures in their production and sales departments. As a result, they can only identify the weaknesses of these two departments only not for the whole company. By using PMS results E improved their decision making. As for example,

they increased their sales by enhancing distribution infrastructure and by linking reward based on performance.

They do not have any integrated software for the whole organisation. For accounting department, they use tally software and for reporting purpose they use excel. They input the performance data manually. For every department they have specific personnel to input the data. As for example – Inventory officer gives input of all information related to inventory, Production manager input the information of production department, quality control manager input the quality related information. Every week they check the deficiencies between targets and achievements. They understand the importance of implementing integrated IT system to implement holistic PMS successfully. Hence, they hired a consultant company to help them to introduce integrated IT system.

At present, they are giving award (monetary) to sales department only. However, recently they introduced some financial initiatives which help tremendously to motivate employees to improve their performance. One of these initiatives is to provide lunch money to employees.

> *"We are providing all employees money for lunch. We received the result immediately. Employees become very happy and they try their best to complete their work on time (before leaving for home)"*- Commercial Manager.

Another initiative is related to annual sick leave.

> *"We have seen that people tries to use them all irrespective of whether they need them or not. This effect our production and business seriously. We*

recruited as many people as required. If some of them go on sick leave, we cannot manage our production. We cannot hire more people than we require. If we hire more people, there will be no work for the extra workforce all the time. In order to protect this, we declared now that they can encash half of their holiday leave if they want. We get tremendous success in this case as they are getting cash for this. This enables us to improve our performance without hiring more people". Commercial Manager.

Senior management of E understands the importance of linking reward with the performance in order to successfully implement and use the holistic performance measurement system. They are planning to introduce award to all departments.

'*We believe that monetary reward increases the performance of employees. We are planning to introduce reward system for the whole organisation. We will be able to do it easily once we will start to implement and use the full sets of KPIs*'. Production manager.

6.6.7 Mediators in implementing and using performance Measurement system

The owner of E wants to implement modern management system in this company. In order to achieve this goal, he recruited educated people in senior management. As for example, CEO is an engineer and MBA with many years of experience in pharmaceuticals industry, Commercial manager holds business degree with extensive experience in performance measurement system, Quality control manager is a pharmacist. With the flexibility from owner, senior management is working hard to establish modernise management system, holistic performance measurement is part of this process.

Company E gives emphasis on good ‘Communication’ within the Company. Reporting is carried out on a regular basis in order to make sure that no surprise occurs in performance measures indicators. Different departmental managers send their weekly reports to commercial manager. Commercial manager produces monthly report based on all the weekly reports. Every month he has meeting with the managing director in order to check how they did last month and decide how to achieve more improved performance. They provide the performance results on boards on the wall of both office and factory, so everyone can see the performance results. They do not produce any report publicly based on their non-financial measures. They only produce reports on financial report.

6.7 Company F: Local Company

6.7.1 Background information

Company F is a Knit composite company who produces 100% export quality readymade garments. It is situated in the Badda area of Dhaka city. Company F has a 1, 32,000 square feet, six-storied factory. F's market is in USA and Europe. They supply garments to companies such as– Stooker brands GMBH, Colombus, Defacto, Bershka, Hersfelder, Koton, Carters, Piazza Italia, J C Penney, DRI DUCK, LIDL, Pull & Bear, Terranova, ALCOTT. F is a local private Company and one of the two sister concerns of 'F group'. Company F has 2400 employees. Ninety percent of these employees are shop floor workers in production department. Only 10% employees work in management and office. The owner of the group holds the position of Chairman of the group and her husband is managing director (MD) for company F. Table 6.12 shows a list of products of Case 'F'.

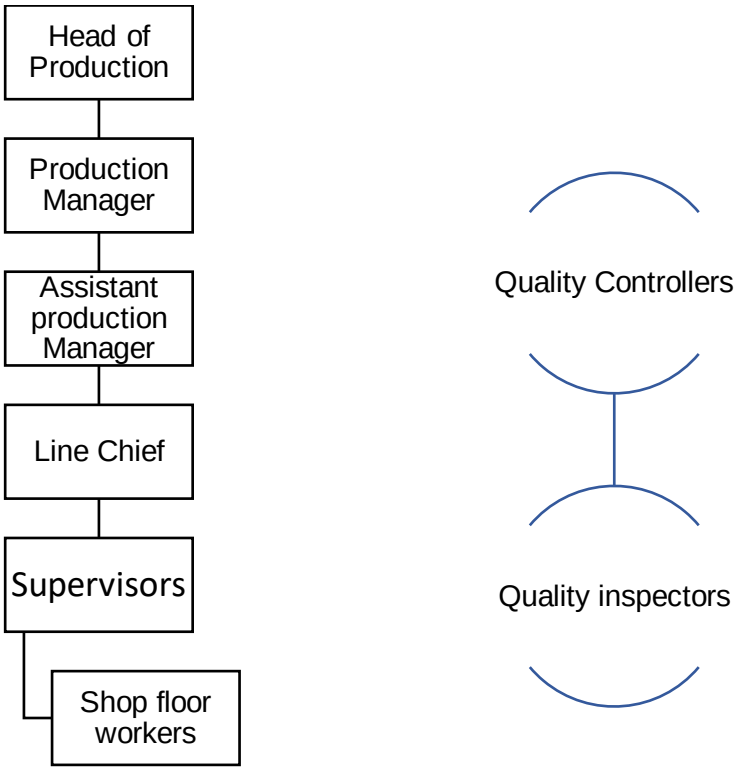
Table 6.12: Product range of company F

Products	Trousers Casual jackets Cargo pants All kinds of woven items

MD and Head of marketing & merchandising look after marketing department. They do not have any more employees in this department. Compliance manager looks after both the Human resource and compliance issues. Most of their work force are involved

in production and quality control departments. F has many layers in production and quality control departments to smoothly run the business while ensuring to produce quality products for its customers. Figure 6.7 exhibits organisational chart of 'production and quality department' of Case 'F'.

Figure 6.7: Organisational chart – Production and Quality control department of F

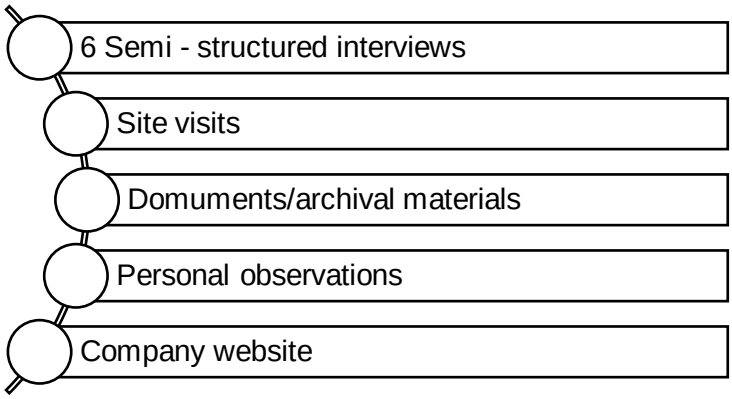


6.7.2 Data collection activities

Six semi-structured interviews were conducted. Interviewees include Head of Production, Finance manager, Head of Marketing & merchandising, Production Manager, assistant production manager and Compliance manager (looks after both the Human resource and compliance issues). Interviews lasted between 40 minutes to 1.5 hours. All semi-structured interviews were recorded with prior permission. The

researcher was also allowed access to a range of documentary evidence that includes Employee handbook, health & safety policies, weekly and monthly production reports. Moreover, researcher visited both office and factory that allowed the researcher to record own observation about the working condition interaction between mangers and other employees. Figure 6.8 shows data collection activities at Case 'F'.

Figure 6.8: Data collection activities at company F



6.7.3 Performance Measures in company F

This company is using both financial and non-financial measures in its business, but it does not have a standard performance measurement framework, as for example, Balanced Scorecard. They are using non-financial measures only in their production department. Table 6.12 exhibits a list of performance measures in use in Company 'F'.

Table 6.13: Examples of performance measures in use in company F

Financial Measures	Non-Financial Measures
Revenue / Sales *Profit (Gross profit, Net profit)*	*Production volume* *Production efficiency* *Defect rate*

Turnover	*Working hours* *Work environment* *Training- number of trainings* *Health & safety –Fire trails.* *Accident rate – number of accidents* *Child labour – No child recruitment* *Wastage management – reuse wastage as much as possible, following rules related to waste removals etc.* *Sexual harassment – zero tolerance*

6.7.4 Framework derived from company F's data analysis

The following framework derived from the data analysis of company F.

Table 6.14: Framework derived from company F

Drivers	Authoritative management style Senior management commitment Non-resistance to change
Barriers	Lack of knowledgeable workforce Non-holistic performance measurement system Lack of integrated IT system Non-linkage of reward with performance
Mediators	Educated senior management Communication

6.7.5 Drivers in implementing and using PMS

Owners of company F adopted authoritative management style throughout the lifecycle of PMS. MD decides any new measures and targets. He gives the targets to Head of production department. Head of production and production manager sit together and provide the targets to the supervisors and shop floor workers. No one have the opportunity to argue about the targets. They have to follow the orders.

Chairman and Managing director of F are very keen to implement holistic performance measurement. They are planning to introduce KPIs in few years.

> '*Our MD wants to introduce KPIs in our company* in next few years. We are planning to recruit more educated people before introducing KPIs. We will need to provide lots of training to the existing employees to understand KPIs as most of our employees are not very educated.' Compliance manager.

They also understand the importance of IT infrastructure for successful use of holistic PMS. They hired consultants to develop necessary IT infrastructure for them.

Senior management of F are also aware that computerised machines can provide them accurate data and reduce data capturing time which is important for successful use of PMS. However, at present they cannot afford so expensive machines.

Company F never faced any resistance to change. All employees are aware that they have to follow the instructions of their superiors. If any employee shows resistance to change, he/she can be fired from the job.

'*New employees are given training that they have to obey their seniors and they have to follow senior's instructions. People with work experience know that whatever boss will say is an order and they have to follow the order'*. Head of Marketing & Merchandising.

Senior management arrange counselling if any employee is not following the orders. The employee get a warning if his/her behaviour does not improve after the counselling. If they do not find any improvement after certain period, then they issue him/her a notice that he/she will be fired after certain period. Employees have no other choice.

6.7.6 Barriers in implementing and using PMS

Most of their employees are shop floor workers who are not educated. In addition, they have many employees in management who have many years of work experience without education background. They are now recruiting more educated people as they are aware that they will struggle to implement and use holistic PMS without the knowledgeable people.

'It is hard for garment company to be systemetic as we have too much work force in shop floor and also too much interference. It is easy for multinational company to use systematic PMS as they have limited workforce and every body is educated there. It is easy to train and motivate educated people for this kind of work but it is not that easy in local garments sector because there are lack of educated people. In local companies, there are many people in management level only with their experience; their education level is not that good. They understand only their work but they don't understand that there are many other things

except their own work, as for example, self-improvement, benefit of the company etc. They don't have the sense of these factors. Hence, it is very challenging to implement in garment sector'. Head of Marketing & merchandising.

However, they are hopeful that they will be able to recruit more educated people as the situation is changing now. More educated people are interested to work in this sector now because of the higher salary and the mindset of people are changing towards this industry.

'*There was a time that educated people never wanted to come in garments sector. But now a days educated people as for example, textile engineers are coming in this sector as a merchandiser. Foreign companies (like H&M) improves the circumstances of this sector. This improvement happens in last 10 years. Before, 15 years no girls wanted to marry anyone if they work in garments. But the mind set of people has been changed now. The employees of this sector are getting handsome salary now'*. Head of Production.

Company F prefers to count individual's performance to the team performance and they provide the award individually.

'Our company's production depends on individual's performance. We provide more importance on increasing individual's performance as we think if individual's performance increases that will increase the team performance'. Head of Marketing & Merchandising.

At present, they are providing reward (non-monetary) to shop floor workers only in a small scale. They have three shifts running in their factory. They provide gifts every month to the best three workers from three shifts with highest production level. However, senior management understands that all employees' performance should be evaluated in a systematic manner and monetary rewards should be provided based on their performance.

> '*We know that reward is very important to improve individuals' performance. We are planning to introduce some kind of monetary reward for every department in a systematic way with the help of individuals performance with their KPIs*.' Head of Production.

Company F is using both financial and non-financial measures in its business but it doesn't have a standard performance measurement framework, as for example, Balanced Scorecard. They include new measures when required . They are using non-financial measures in their production department only. Hence, they can identify the weaknesses of production department only. As for example, they reduced their accident rate in factory. Most of their non-financial measures are set due to the requirements of buyers. Normally Managing director and Head of production set the targets and decide any new measures.

> '*Buyers will not take our orders unless we fulfil their requirements which include some non-financial measures as* for example - child labour'. Head of Marketing & Merchandising.

They also have to add non-financial measures due to the changes in government policies.

'*Most of our non financial measures are introduced based on the requirements of buyers and government policies*.' Head of production.

'There are some measures set by BGMEA (Bangladesh Garment Manufacturers and exporters association) which we need to follow as a rule. As for example, fire trail. We have been said by BGME that we must have to do two physical fire trails in a year and we have to keep someone from third party who will monitor this'. Manager Compliance

F does not have any integrated software for the whole organisation. Every day they check the deficiencies between targets and achievements. They input the performance data manually.

'*Data collected are accurate as every data is checked by three different personnel. As for example – production related data are provided by individual line chief, quality control manager and by me*.' Production manager.

Senior management of company F understand the importance of integrated software and holistic performance to run their business more effectively. They hired consultants to develop integrated software and holistic PMS for them. However, they will not develop any performance measurement framework. They will implement KPIs.

6.7.7 Mediators in implementing and using PMS

Both the CEO and MD have business degrees. They are very keen to recruit educated people in this company. The head of marketing and merchandising, head of production and compliance manager have business degrees with substantial experience in garments sector. Senior management understand the importance of holistic PMS for

smooth running of the business. They are aware of the necessity of educated people to successfully implement holistic PMS. Hence, they are focusing on recruiting more people that are educated.

'Good communication' is highly regarded in F. Every morning, they have a production meeting to tell the target of that day. They also discuss about the previous day's achievement and deficiencies and how they can improve today's performance. In addition, Production manager prepares the performance report using excel every week and send this report to Head of production department who then sends the reports to managing director. Based on the performance report, MD sets the future targets. However, there is no visualisation of performance results in the walls/dashboards of both office and factory.

6.8 Conclusion

This chapter focuses on within case descriptive analysis of the six cases. All six companies are analyses in depth. Following are the tables which include summary analysis of six companies.

Table 6.15: Summary analysis of multinational companies

Dimensions for analysis of cases	Multinational companies	
	Case A	**Case B**
Resources	Integrated IT system with ERP software, My learning for online training Senior management committed to PMS.	Integrated IT Company B internal for training through their web. Senior management committed to PMS
PMS Design	Using balanced scorecard with three dimensions – economic, environmental and social dimensions. KPI's designed and generated from parent company in UK. Line managers set the targets with the individual employees.	Using their own framework with three dimensions - financial, compliance and innovation dimension, safety and environmental dimension and individual employee dimension. KPI's designed and generated from parent company in Germany. Line managers set the targets with the individual employees.
PMS Implement ation	PMS implemented in a holistic way in the entire organisation.	PMS implemented in a holistic way in the entire organisation.
PMS Use & review	Results of PM are shared on company's intranet. Collective performance reports are produced once a month. and management committee review these results. However, management and employees review the performance data on a daily/weekly basis. Employees with access to intranet can check how they are doing in terms of their performance against targets. Individual's KPIs are reviewed once a year	Results of PM are shared in company's intranet. Daily meetings in some departments for assessing the daily targets. The KPI reports are prepared every month. Departmental managers have to attend monthly conference meeting with other regional departmental managers and head of the region of that respective department. Employees with access to intranet can check how they are doing in terms of their performance against targets. Individual's KPIs are reviewed once a year
Contingency factors	Senior management adopt authoritative management style in design phase, while they adopt participative style in implementation &use phase of PMS. Although employees at Bangladesh office are not involved in design phase, they are committed in using PMS. The pay increment and promotions are based on individuals' performance. Company runs bonus scheme, which is based on both individual and team performance. Company has a policy to hire employees who are graduates with some IT skills& hence they have good knowledge workforce. However, their knowledge and education on PMS is limited.	Senior management adopt authoritative management style in design phase, while they adopt participative style in implementation and use phase of PMS. Although employees at BD office are not involved in design, they are committed in implementing and using PMS. The pay increment and promotions are based on individual performance. Bonus is based on individuals' performance. Company has a policy to hire employees who are graduates with some IT skills and hence they have good knowledge workforce. However, their knowledge and education on PMS is limited.

Impact on business	They are able to see how the company is performing against targets and past performance. This enables them to avoid any surprise in performance. They use monthly PM results to make necessary changes to improve sales and reduce trading expenses. It improved their decision making. As the employees are rewarded based on their individual and team performance, they work hard in achieving the targets, which is contributing to the overall business performance.	They are able to see how the company is performing against targets and past performance. This enables them to concentrate on areas of poor performance. They use PM results in identifying the employees who are underperforming to support and develop them further. As the employees are rewarded based on their individual performance, they work hard in achieving their targets, which is contributing to the overall business performance.

Table 6.16: Summary analysis of local companies

Dimensions for analysis of cases	Local companies			
	Case C	**Case D**	**Case E**	**Case F**
Resources	Some departments are integrated with ERP software, not the whole company Senior management committed to PMS.	Computerised machines to capture data Different IT systems and no integrated system to collate information, MS Excel for reporting purpose. Lack of Chairman's commitment to the PMS	Different IT systems and no integrated system to collate information Tally software for accounting purpose MS Excel for reporting purpose. Senior management committed to PMS.	Different IT systems and no integrated system to collate information MS Excel for reporting purpose. Senior management committed to PMS.
PMS Design	Using both financial and non-financial measures. However, there is no integrated PMS framework. Senior management decide the measures, while senior management and departmental managers set the individual targets.	Using both financial and non-financial measures. However, there is no integrated PMS framework. CEO decides the measures, while CEO and departmental managers set the individual targets,	Using both financial and non-financial measures. However, there is no integrated PMS framework. Managing director and departmental managers decide the measures and set the individual targets.	Using both financial and non-financial measures. However, there is no integrated PMS framework. Technical director and production manager decides the measures and set the individual targets.
PMS Implement ation	PMS implemented in production department.	PMS implemented in production department.	PMS implemented in production and sales department.	PMS implemented in production department.
PMS Use & review	Results of PM are shared on company's intranet. Collective performance reports are produced once a month and management committee review these results. However, management and employees review the performance data on a daily/weekly basis. Employees with access to intranet can check how they are doing in terms of their performance against targets. Individual's KPIs are reviewed once a year.	Results of PM are shared on company's intranet. Collective performance reports are produced once a month and management committee review these results. However, management and employees review the performance data on a daily/weekly basis. Employees with access to intranet can check how they are doing in terms of their performance against targets. Individual's KPIs are reviewed once a year	Performance results are provided on the walls of shop floor for employees. Departmental managers prepare weekly report for commercial manager, who in turn produces reports for MD monthly. MD and commercial manager assess the performance and decide future targets.	Performance results are provided on the walls of shop floor for employees. Departmental managers prepare weekly report for commercial manager, who in turn produces reports for MD monthly. MD and commercial manager assess the performance and decide future targets.

Contingency factors	Senior management adopt authoritative management style in all stages of PMS. Although employees at lower levels are not involved in design and implementation phases, they are committed in using PMS. Company does not have any formal reward policies. Employees get increment and promotion only when their performance comes in light. Most of the employees of the company are non-graduates who have limited or no knowledge on PMS and IT.	Senior management adopt authoritative management style in all stages of PMS Lack of the commitment from Chairman restricting people from using PMS. Absence of corporate culture restricting use of PMS. Company runs a 10% annual increment policy which is not related with performance Most of the employees of the company are non-graduates who have limited or no knowledge on PMS and IT.	Senior management adopt authoritative management style in all stages of PMS. Although employees at lower levels are not involved in design and implementation phases, they are committed in using PMS. Company provides rewards only to the sales work force. Most of the employees of the company are non-graduates who have limited or no knowledge on PMS and IT.	Senior management adopt authoritative management style in all stages of PMS. Although employees at lower levels are not involved in design and implementation phases, they are committed in using PMS. Most of the employees of the company are non-graduates who have limited or no knowledge on PMS and IT.
Impact on business	The full potential benefits of PMS were not realized as it is implemented only in one department. They are able to see how production dept. is doing in terms of its targets and past performance This enables them to identify and improve weak areas like-reducing defect rate, increasing production volume, etc. in that department. As the employees are not rewarded based on their performance, they are not motivated in achieving their targets, which is affecting business performance.	The full potential benefits of PMS were not realized as it is implemented only in one department. They are able to see how production department is doing in terms of its targets and past performance. By using PM results, they are improving in environmental issues both internal (factory working environment) and external environment (wastage disposal). As the employees are given pay increment regardless their performance, they are not motivated in achieving their targets which is affecting business performance negatively. Lack of commitment from chairman is restricting people to use PMS.	The full potential benefits of PMS were not realized as it is implemented only in two departments. They are able to see how production and sales departments are doing in terms of their targets and past performance. It improved their decision making. For example, this enables them to make necessary changes to improve sales. As only the sales forces are rewarded, employees in other departments feel neglected and are not motivated in achieving their targets, which is affecting business performance.	The full potential benefits of PMS were not realized as it is implemented only in one department. They are able to see how production department is doing in terms of its targets and past performance. By using PM results, they have improved safety within their organisation. For instance, they reduced accident rate tremendously. As the employees are not rewarded based on their performance, they are not motivated in achieving their targets, which is affecting business performance.

Chapter 7 Discussion and analysis of the results

7.1 Introduction

This chapter attempts to answer two research questions of this study. The research questions are - how PMS implemented in practice in Bangladesh and how do contingency factors affect the implementation and use of PMS in the manufacturing companies in Bangladesh?

7.2 Research question one – how PMS implemented in practice in Bangladesh?

7.2.1 PMS implementation in multinational companies

Both multinational companies (cases A and B) use performance measures successfully. Company A uses Balanced Score Card (BSC) which has three dimensions - economic, environmental and social dimensions. Company B is using their own framework which consists of three dimensions - first one is financial, compliance and innovation, second one is safety and environmental protection and the third one is employees. Both companies develop KPIs based on their strategic dimensions/areas. The performance of these areas is measured by a specific set of KPIs. These KPIs are then shared across their respective organisations. The KPIs for the CEO/Head of the Bangladesh offices came from the parent companies, outside the country. They then cascade down their KPIs to departmental heads who subsequently distribute them to their subordinates. This process continues down to the bottom of the organisational tree; each individual and/or teams are set targets to contribute to the global KPIs.

7.2.1 PMS implementation in local companies

Local companies (cases C, D, E and F) use both financial and non-financial measures, but do not use frameworks such as BSC. They add new measures as required. While they understand the benefits and importance of holistic PMS, none of the local companies have actually implemented holistic PMS. Most of the participants in these organisations, however, state that integrated PMS is something they intend to implement. Company C has said that they already hired consultants who are developing PMS for them. They are also introducing computerised machines which will provide them accurate data and also will reduce the time needed for data capture. Company E and F hired employees with relevant experience who are in the process of developing integrated PM for them. However, initially, none of the three companies are developing a framework like BSC. These companies are developing KPIs derived from their strategy without using any established frameworks. They selected some critical strategic dimensions of their companies and developed the KPIs based on these. Commercial manager of company E said, “we are following the footsteps of multinationals and are developing KPIs to achieve our objectives”. Although company D is benefitting from using non-financial measures, they are unable to move towards a holistic PMS as their chairman is unsupportive.

7.3 Research question two – how do contingency factors affect the implementation and use of PMS in the manufacturing companies in Bangladesh?

7.3.1 The ways contingency factors affect the implementation and use of PMS in multinational companies.

For both multinational companies, senior management are committed to making PMS successful throughout its lifecycle. For companies A and B, the measures are designed and generated by the parent organization. Individuals set their targets via face-to-face meetings with their line manager. In all of these cases, individuals have the opportunity to discuss and decide their targets collaboratively with their line manager. Both companies implemented PMS in a holistic way, which helps to provide a transparent view of the whole organization's performance. They have provided integrated IT systems throughout the company. Company A has daily and weekly meetings with managers and their department staff to review their performance targets. Here, the management committee has formal meetings at the end of every month to review PMS. The results of collective performance measures are shared via the company's intranet. Employees with intranet access can check how they are doing in terms of their own targets. Company B has daily meetings with managers and departmental staff to review their performance targets. Collective performance reports are prepared every month. In company B, at the end of every month, every departmental manager has to attend a meeting with the other 10 regional countries' departmental managers and the head of the region of that respective department. For both companies, individuals' KPI results are formally reviewed annually, although line managers review the targets with the employee mid-year in order to check whether

their performance is in line with their targets. Employees can check their performance online every month.

In the multinational companies' senior management used authoritative styles to design PMS. But they adopted participative styles in implementation and use phase of PMS to overcome employees' fears of PMS. This increases the chances of success with PMS and is in line with the work of Bititci et al. (2004). It is evident from the literature that on the one hand PMS has a positive influence on people as it acts as a reward system. On the other hand, it also has a negative influence as it exposes some people, which sometimes lead to resistance. In the case of Bangladesh, however, due to the nature of the high power distance aspect (Hofstede, 2010), senior management use PMS as a positive influence by linking it to their reward systems. Unlike western countries, the people in these organisations neither have an option of hiding behind data nor resisting PMS implementation. People do not challenge management decisions and always tend to obey what senior managers say as the uncertainty avoidance aspect (Hofstede, 2010) is high in Bangladesh. These solve the issues related with resistance raised by Bititci et al. (2006) and Nudurupati et al, (2010).

Both multinational companies linked reward with performance. Company A linked their measures with the reward system (e.g., bonuses) based on both individual and team performance. Salary increments and promotion are also based on personal performance. Similarly, company B award Pay increments and promotion based on results of individual's KPIs. However, they provide bonuses based only on individual performance. As a matter of policy, all three multinational companies' hire educated staff with some IT skills. However, their knowledge and education on PMS is limited. They provide training to employees to understand PMS. Researchers suggest that training allows users to understand PMS concepts and principles, and training people

is necessary for the successful implementation of PMS (Al Aina and Atan, 2020; Blanchard and Thacker, 2023; Chaurey et al., 2023; Chan 2004; Emerson 2002; Nudurupati and Bititci 2005; Weiss and Hartle, 2023).

7.3.2 The ways contingency factors affect the implementation and use of PMS in local companies.

In case of local companies, senior management decide the measures and the targets. Employees have to follow the targets given; otherwise, they might lose their jobs. None of these companies use PMS holistically. Companies C, D and F only use PMS in their production department. Company E uses PMS in the production and sales departments. None of the cases have a formal reward system to give increments and promotions based on performance. None of the local cases have integrated IT systems throughout the organization. Case C uses an ERP system that is linked with most of the departments, but not with the whole organisation. Case D have computerised machines which allows them to efficiently produce information, but senior management is not committed to PMS. Senior management of cases C, E and F understand that an integrated IT system throughout the company is very important for successful PMS. Hence, they are investing in the implementation of an integrated IT system throughout the company along with the implementation of holistic PMS. At present, all local cases lack educated staff who do not have enough knowledge of PMS and IT. This is in line with several previous research (Duh et al., 2008; Newcomer and Caudle, 2011; Ngubane 2022). So, these companies require lots of investment to train staff to understand PMS and use of IT. Company C produce performance reports each week for senior management only. Senior management then decide future targets. In company D, in the production department, every morning there is a meeting of the manager &staff. Reports are produced every day for the CEO who determines

future targets. In company F, departmental managers prepare weekly reports for the commercial manager who subsequently produces monthly reports for the MD. The MD & commercial manager decide future targets. In company F, informal meetings are held every day in the production department to establish targets. The production manager prepares a weekly performance report for the technical and managing directors. The technical director and production manager decide any new measures.

Senior management of all four local companies adopted authoritative management style throughout the lifecycle of PMS. As the power distance and uncertainty aspect (Hofstede, 2010) is high in Bangladesh, people of these companies do not challenge senior management's decision. Hence, resistance to use PMS is non-existent here. This solves the issues regarding resistance raised by Bititci et al. (2006) and Nudurupati et al, (2010). They don't have any system to reward people based on their performance. In company C, E & F, if, by chance, anyone's good performance comes to the attention of the senior management, he/she are given increments or promotion. Company D provide 10% salary increment to all employees irrespective of their performance. Inevitability, many good performers remain unrecognised and this may demotivate the individuals concerned and the workforce as a whole. Local companies have lack of educated staff that has little or no knowledge of IT and PMS. This is in line with some previous research (Duh et al., 2008; Newcomer and Caudle, 2011; Ngubane 2022). These companies have to invest a lot to train these staff.

Senior management of three local cases (C, E and F) decided to move towards integrated PMS holistically to improve performance of the entire company. Here, they are worried that it will be difficult for their employees to understand this concept as most of them are not well enough educated. Bearing this in mind, they are not going to introduce a framework like BSC. They set KPIs for individuals based on the

company's strategies. They are planning to link employees' reward and promotion with the KPIs. Thus, every employee will have a clear view of their responsibilities and career progression, which will motivate them.

7.4 Similarities and differences of the affect of contingency factors on PMS in multinational and local companies.

Both multinational companies are using integrated PMS in a holistic way with the integrated IT system, they enjoy the full benefits of PMS. They are able to identify the weak areas of their business and can improve them accordingly. As for example, sales department of company A found that their sales target was going down and trade expenditure was going up. When they analysed the facts, they identified that failure of their promo was the reason for this happening. They changed their promo and boost up their sales. In case of company B, when they found any employee is not performing well according to his target, they speak with them to find out the reason behind this. They then provide him support and training as required in order to improve performance. They also rotate employees to different departments, if they find out that the employee can perform better in different department with his skills. Employees of all three multinational companies know that their career progression depends on their performance. They also get bonus and increment based on their performance. Linking reward with performance increase the performance of company by motivating employees to achieve their targets, which ultimately boost company performance. This supports the study of Ukko et al. (2007) but challenging the research of Rowland and Hall, 2010.

As the local companies are not using PMS holistically, they can only identify the weaknesses of specific departments, not the whole organization. Company C is using PMS only in production department and hence they can identify the weaknesses of

production department. For an instance, they identified lack of skills resulted increased defect rate. They provided training to improve peoples' skills which lead to reduced defect rate. Company D improved a lot in their factory working environment and wastage disposal. By using PMS results company E improved their decision making. As for example, they increased their sales by enhancing distribution infrastructure. Company F reduced their accident rate in factory. All of these companies would achieve more improved performance by using PMS throughout the company. None of these companies use an integrated IT system. Also, most of their employees lacks IT skills. Implementation and use phase of PMS require capturing, collecting, analysing and reporting PMS information. Company D have computerised machines which enable them to capture, collect and analyse most of the information automatically. However, Company C, E and F don't have computerised machines in place. Hence, they have to capture, collect and input information manually which takes long time. This is also a risk for data accuracy and hence working as a barrier for PMS. This supports the study of Nudurupati et al, (2010).

None of the local companies have any formal reward system in place. Hence, employees are not motivated to achieve their targets, which are affecting their companies' performance badly. Senior management of cases C, E and F take this matter seriously; they understand the importance of monetary reward to improve performance (Ukko et al., 2007) and want to introduce the reward system across the whole organization. This is in line with several research studies (Burney et al., 2009; Johanson et al., 2006; Chan, 2004). They are struggling, however, to link performance to rewards for all employees as they are unable to view the performance of individuals or teams transparently as they do not have integrated PMS in place. This is in line of the research of McShane and Travaglione (2003). On the contrary, some researchers'

state that reward linked to personal development programmes or appraisals in the form of payments has proved unhelpful and often counter-productive (Toynbee and Walker, 2008; Rowland and Hall, 2010). All these local companies are happy with the improvement of the departments where they are using PMS. So, all of them (except company D, due to a lack of commitment from their chairman) are moving towards integrated PMS and integrated IT systems.

Several researchers argue that the education level of employees positively affect different areas of management (Abdelwahed and Doghan, 2023; Alkandi et al., 2023; Ali and Anwar, 2021; Chi wt al., 2023; Koo et al., 2020; Manzoor et al., 2021; Nnubia, 2020; Persada and Nabella, 2023; Rachmad et al., 2023; Sitopu et al., 2021; Ukko et.al. 2007). Employees of both local and multinational companies have lack of knowledge in PMS which is a barrier of success of PMS. However, from literature it is evident that employees don't have much knowledge of PMS in the developing countries as management education and practice is less developed there (Duh et al., 2008; Newcomer and Caudle, 2011; Ngubane 2022). All of these companies trying to overcome this problem by providing regular training on PM.

Chapter 8 Conclusion and Contribution

8.1 Introduction

This Chapter focuses on to provide a brief review of this study. The chapter starts with providing an overview of the study which follows a summary of main findings. Then, contributions and practical implications are discussed. The chapter finished with discussing the limitations and recommendations for future research.

8.2 Overview of the study

This research is done in the field of PMS. This research answered two questions: (1) How PMS implemented in practice in Bangladesh? and (2) How do contingency factors affect the implementation and use of PMS in the manufacturing companies in Bangladesh?

At first, this study discussed contingency theory. Contingency idea is viewed as a critical theoretical technique that gives a holistic view and useful insights into a company's practices (Daft, 2015; Daft & Armstrong, 2021; Otley, 2016; Linh, 2024; Waterhouse &Tiessen, 1978; Zou, 2024). According to contingency theories, Organisation can achieve higher performance if there exists a higher level of fit between organisation's PMS and its operating environment (Chenhall, 2003; Handoyo et al., 2023; Nguyen et al., 2023). It can be harmful for an organisation if there is absence of fit between its sources of competitive advantage and PMS (Ittner, 2008; Melnyk et al.,2014; Simons, 2019). Hence, it is important that the study of impact on PMS shows the system users how the combination of PMS and the context can enhance organisational performance by aiding to take high quality decisions (Al-Surmi

et al., 2022; Burney & Widener, 2007; Chenhall, 2003; Chenhall, 2005; Dimes & de Villiers, 2021; Gomes & Mendes, 2023;Henri, 2006; Kaplan & Norton, 1996; Malina & Selto, 2001;). In addition, it is also important to show which operational context will influence PMS (Bourne et al., 2005). Franco-Santos and Bourne (2005) highlighted contextual factors those stress the setting of the PMS in which it operates. They also splitted the contextual factors in two groups – internal factors and external factors (Anis & Shauki,2023; Broccardo et al., 2023; Daft, 2015; Donaldson, 2006; Franco-Santos & Bourne, 2005; Mintzberg, 1979; Otley, 1980). Internal factors refer to the factors related to organisational context and external factors refer to the factors related to environment and industry features (Daft, 2015; Franco-Santos & Bourne, 2005; Grant, 2021; Handoyo et al., 2023; Johnson et al., 2017; Nguyen et al., 2023; Shahadat et al.,2023). Because of the time and resource constraints, this research focused solely on internal factors. Internal factors selected for this study are – Management/leadership style, Top management commitments, Reward system, training, resistance to change, technology/IT and knowledgeable workforce.

Secondly, this research reviewed the literature of PMS. It is revealed from the literature review that (1) many studies took place in order to explore the concept and advantages of PMS. However, only few research has been done to provide facts on how PMS is implemented in practice. (2) Also, most of the research were undertaken to identify the adoption rate of PMS in organisations instead of examining the way of implementation of the PMS in the organisation. These studies confirmed the use of PMS by two ways - one way is by gathering information from respondents and the other way is gathering information on the use of measures (both financial and non-financial) in those organisations (Camilleri, 2021; Gago-Rodríguez and Vikson, T., 2023; Hoque and James, 2000; Budimir et al., 2021; Ismail, 2007; Islam and Tadros,

2012; Gosselin, 2011; Hendricks et al., 2012). These studies did not offer enough facts on the way of implementation and development of the PMS and their components in practice. (3) Most of the research of performance measurement system is done in developed countries. Little research has been done in developing countries to explore the benefits of using PMS. There is a gap in PMS research for developing countries and the main reason for this research is to contribute towards this gap. Due to the globalisation and internationalisation, many multinational and foreign companies are locating in developing countries like Bangladesh. Hence, it is important to explore the application of PMS in developing economies. The main focus of this research is to explore the way PMS been implemented in Bangladesh and to identify the contingency factors affecting use of PMS in Bangladesh and thus contribute to the performance measurement systems literature and thus the management accounting literature in general.

Thirdly, this study discussed about the methodologies. In first part of methodology, researcher discussed about the general methodologies used in management research and then discussed about the methodology used in this research. Researcher used multiple case study approach and semi-structured interviews were conducted as main method to collect data. In addition to semi-structured interviews, researcher also conducted documentary review and observation. A conceptual framework was developed based on the literature review which then helped to develop instrument to guide data collection. Data analysis was conducted by using three activities suggested by Miles and Huberman (1994). These activities are – data reduction, data display and conclusion drawing & verification. Data was collected from six companies – two multinational companies and four local companies. Altogether, 45 interviews were

undertaken. In the second part of this chapter, researcher discussed the findings of this research. The summary of findings can be found in next section.

8.3 Major findings

The main reason for this research was to fill the gap of literature of PMS in developing countries. The first research question of this study is – how PMS implemented in practice in Bangladesh. This study investigated six manufacturing companies in order to answer this question. The result shows that multinational companies are using PMS successfully. They are using PMS holistically. However, local companies are not using PMS holistically. They are using PMS in some departments.

Multinational companies are using standard PMS framework. They develop KPIs based on their strategic dimensions/areas. The performance of these areas is measured by a specific set of KPIs. These KPIs are then shared across their respective organisations. However, local companies are not using any framework like BSC. They add new measures as required. These companies are developing KPIs derived from their strategy without using any established frameworks. They selected some critical strategic dimensions of their companies and developed the KPIs based on these.

Second research question of this study is – how do contingency factors affect the implementation and use of PMS in the manufacturing companies in Bangladesh? The study shows that multinational companies are successfully using integrated PMS framework in holistic way. They use an authoritative style when designing PMS, but they use a participative style in implementation and use phase. In these cases, senior management commitment, regular training, sophisticated IT infrastructure, reward linked with performance play an important role in successful PMS implementation and

use. On the other hand, the local companies do not use PMS holistically or apply an integrated PMS framework. They include measures when they are required. They use an authoritative style in the whole process of PMS. In these cases, non- linkage of rewards with performance, lack of integrated IT support and lack of educated workforce are barriers to PMS success. However, as the senior management of all these companies are committed to making PMS successful, they are trying to overcome these deficiencies. They are moving towards the implementation of integrated PMS holistically throughout the company. They are also hiring educated staff, providing training to the existing workforce and implementing integrated IT support.

In an authoritative style, leader normally takes decisions (Likert, 1967). Employees have limited input in decision making process. In this style, flows of decisions and directions are - leader to the employees. Contingency theory states that the authoritative style becomes successful if the leader is respected, and the authority of leader is clearly evident. Because of the high-power distance people do not challenge management and they respect the leaders. This in turn provides smooth PMS implementation process.

Due to the nature of high-power distance and uncertainty avoidance aspects, unlike western countries, people do not challenge management decisions. Hence, resistance is non-existence in all of these organizations (both locals and multinationals).

8.4 Theoretical implications

The main reason for this research is to fill the gap of literature of management accounting in developing country, namely Bangladesh. Most of the research in PMS

and the contingency were done in western countries which were conducted by the western researchers. This research identifies some contingency factors those affect the implementation and use of contemporary management accounting practices in Bangladesh. These contingency factors are – management style/leadership style, senior management commitment, training, reward, integrated IT system, holistic PMS, non-resistance to change, educated employees and communication.

This research exhibits review of PMS. This review contributes to empirical work of PMS by identifying research gap in this field which provides future research directions to the researchers.

This research exhibits review of contingency theory. This review contributes to the contingency theory literature by identifying research gap in this field which provides future research directions to the researchers.

This study contributes towards the understanding of PMS implementation and use in developing countries, namely Bangladesh. This in turn contributes towards the calls from several researchers by providing factors affecting PMS implementation and use in developing countries (Hoque, 2014; Khan, 2011; Sawalqa et al., 2011).

Researchers suggested to use case study approach to investigate practical implementation of PMS in order to achieve in-depth insights (Hoque, 2014; Said, 2014; Simpson and Aboagye – Otchere, 2014).This study responds towards the suggestions of the researchers by using case study approach to investigate PMS implementation.

8.5 Managerial implications

Due to the globalisation and internationalisation, many multinational and foreign companies are locating in developing countries like Bangladesh. It is important for the

investors to understand about management practices used in these countries before they invest their money. Researchers suggested that more research required in developing countries to meet the demand of increased complicated and interconnected business world. Researchers also suggested that it is important to know the situations of these countries in order to face the growing internalisation in business. Hence, more research required in the developing and emerging countries. This research contributes to the management accounting literature by identifying internal contingency factors that affect successful implementation and use of PMS in a developing country. At a general level, manufacturing companies in other developing countries can be benefitted from the findings of this research.

There is gap between theory and practice. Only limited research has been conducted which focused on the developments in management accounting in developing countries, specially applying contingency theory. Hence, researchers suggested that it is necessary to conduct research in these emerging and developing countries. This study contributes towards the empirical literature of management accounting in developing countries by providing the internal contingency factor those affect the implementation and use of PMS in developing countries.

The findings of this study provide considerable knowledge to managers regarding the way contingency factors influence PMS and vice versa in manufacturing organisations in developing countries. This research provides guidance for business practitioners on how contingency factors influence the implementation of PMS in order to enhance business performance. This will help them to effectively design, implement and use performance measures in order to achieve better performance. As a result, individuals will be able to take improved decisions to achieve their organisational goals.

This study aids manufacturing companies in Bangladesh by identifying factors which they require to consider while adopting new management accounting practices. Moreover, this study deepens the understanding of current PMS application in Bangladeshi manufacturing companies which will be helpful for the current and potential investors (both Bangladeshi and foreign) who will plan to manage or start business in Bangladesh. Hence, managers of manufacturing companies and investors (both Bangladeshi and foreign) can find this study very helpful and important.

8.6 Future research

This research investigated some internal contingency factors. More research should be done to identify the impact of other internal factors on PMS in developing countries.

This research investigated only firm-specific contingency factors. Future research should consider the impact of both external and firm-specific contingency factors on PMS in developing countries.

The context of this research is Bangladesh. Hence, findings of this research are related only with the manufacturing industry of Bangladesh. Similar research should be done in other industries of Bangladesh.

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Appendix 1

Previously published work related to this thesis

Shaheen, F., Nudurupati, S. S. and Petty, D. (2016), "*Understanding the impact of culture on performance measurement system: Evidence from Bangladesh*", Performance Measurement Association Conference, 26-29 June, Edinburgh, Scotland, UK.

https://e-space.mmu.ac.uk/625237/

Appendix 2

Research protocol (Questions) for Performance Measurement:

Orientation

Introduction of the research by investigator:

- Inform them who we are
- Briefly describe the research
- Request consent to record the interview

Interviewee orientation

- What is your role in the organization?
- What is the process of appraisal of staff in your organisation?
- How do you communicate in the organization?

Performance Management System

1. What is the purpose of PMS?
2. Do you feel that the PMS has fulfilled your expectations? If not, could you please explain why?
3. What are the opinions of you managers and subordinates about the PMS?
4. What were the barriers in implementation and use of PMS?
5. Would you describe your organisation as more formal or more flexible?
6. Would you describe your organisation as hierarchical or flat?
7. Would you describe your organisation's attitude as Uncreative or innovative?
8. How many performance measures do you currently use?
9. How do you categorise your performance measures?
10. What is the purpose of PMS?
11. Who were involved in the Design of PM?
12. Do departments work together when developing the measures?
13. Did top management assist in design of PMS?
14. Who did the final approval of the Performance measures?
15. What role does top management play in the PMS implementation?
16. Did you and your staff receive training to understand performance measurement process?
17. How did middle management and staff respond to the PMS implementation?
18. Who manages your performance results (Collecting, storing & analysing data)?
19. Which software or system do you use to input your data?
20. Are you using the same system in the whole Organisation?
21. Is the data accurate? Is it up-to-date and real-time?

22. How is performance results communicated to people? Is there a reporting mechanism, i.e. daily, weekly?
23. What role do non-managerial staff play in the PMS implementation?
24. How do you measure individual's performance?
25. How do the results influence staff promotions or rewards?
26. Do you provide monetary reward based on individual's performance?
27. Do you think that monetary reward increase individual's performance?
28. How do departments share the measurement results?
29. What process is used to review performance results?
30. Has the PMS improved your work environment?

Closing

- Are you facing any problem with large scale data/big data?
- Do you think developing knowledge workforce will improve the implementation and use of PMS?
- What changes would you make to the way the business is managed, if given the opportunity?