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Understanding the impact of culture on performance measurement system: evidence from Bangladesh.

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Abstract

While it is important to understand performance measurement (PM) in developing nations, only little research is focussed in this area. The overall aim of this research is to understand the relationships between PM and organizational culture in the context of Bangladesh. Case study approach was adopted to achieve the overall aim. The findings suggest that adopting authoritative management style at these organisations enabled successful implementation of PMS, which is fuelled by highly motivated employees with performance related reward system. However, lack of expertise, trained workforce and holistic implementation are acting as significant barriers and preventing them from full potential benefits.

Keywords

Performance measurement, Organisational culture, Senior management commitment, Reward system

Introduction

Today's business environment is changing rapidly; under such circumstances, organisations need to identify their existing positions. They have to clarify their goals and operate more effectively and efficiently. Organisations can achieve these objectives with the assistance of Performance Measurement Systems (PMS).

Several authors suggest that business performance improves if formalized, balanced and integrated performance measures are used (Hoque and James, 2000; Davis and Albright, 2004). Others argue that business performance does not change because of the use of PMS (Neely et al., 2004; Itner et al., 2003). On the other hand, Braam and Nijssen (2004) argue that the impact of Performance Measurement (PM) is contingent upon the way it is used. Bititci et al. (2006) state that organizational culture influences PMS implementation and use.

Organizational culture has been overlooked in recent research on PMS, even though numerous authors have argued that it does have an influence (Bititci et al., 2012, 2004; Bourne, 2005; Bourne, et al., 2002; Neely, 2005; Nudurupati & Bititci, 2005; Nudurupati et al., 2010; Ukko et al., 2007; Zakaria, 2015). Only a limited amount of research has been done to understand the effect of different organisational cultural factors on PMS (Bititci et al., 2006). This paper will contribute to the PMS literature by exploring the relationship between PMS and different organisational cultural factors. To date, there has been relatively little research on performance management and organisational culture, particularly in developing countries (Hopper et al., 2009; Ezzamel & Xiao, 2011; Waweru et al., 2005). Most PMS research has been based on evidence drawn from western countries; few studies have considered PMS in South Asia, especially Bangladesh (Khan et al., 2011). This research focuses on PMS in Bangladeshi companies; it has the objective of reviewing the literature on PM and organisational culture, to explore and identify the different organisational cultural factors that affect PM over its life cycle in Bangladesh. To address the later objective, 7 case studies from Bangladesh have been undertaken. This paper will enrich the literature on PM by addressing an under-researched area.

The next section will review the available literature on PMS and organizational culture, followed by describing the research methodology adopted. This will be followed by data analysis and discussion. Finally, the research contribution will be discussed.

Literature review

Performance measurement

Armstrong (2003) states that performance management (PM) is a strategic and integrated process that involves PMSs and processes which are about managing both people and resources. Performance management also includes performance indicators, performance appraisal, value for money and quality assurance (Holloway, 1999; Rouse, 1999).

One of the key elements of the performance management process is performance measurement. Performance measurement can be defined as the process of quantifying the efficiency and effectiveness of action (Deshmukh et al., 2007). Neely et al. (1995), describe performance measurement as the measurement of progress against objectives with the results reported to decision makers in order to improve performance.

Rockart (1979) and De Waal (2002) stated that in order to design an effective PMS, the company has to use a balanced set of key financial and nonfinancial CSFs and KPIs. This should enable the management to focus on the important issues that drive business performance and to monitor the achievement of strategic goals more closely. As a result, the key issue is translating an organisational unit's vision and mission into a set of objectives, from which the unit identifies its CSFs, which in turn are translated into a series of

quantitative KPIs to provide managers with the information they could utilise for decision making process. Geanuracos and Meiklejohn (1993) argued that performance measurement techniques are increasingly used as tools for decision making and not only for record keeping or reporting. They highlighted that having an effective performance measurement technique based mainly on utilising nonfinancial measures stimulates involvement in continuous improvement.

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. Design stage includes identifying the key objectives to be measured and designing the measures themselves (Bourne et al., 2000). Lots of frameworks have been developed in order to design performance measurement system such as - Balanced Scorecard (BSC) (Kaplan & Norton, 1992), EFQM Business Excellence Model (EFQM, 1999), Performance Prism (PP) (Neely & Adams, 2001) etc. 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. Using and updating PMS stage involves two purposes (Bourne et al., 2000). The first purpose is to measure the success of the implementation of the strategy as the measures are derived from strategy (Kaplan and Norton, 1996; Vitale and Mavrinac, 1995). The second purpose is to use the information and feedback from the measures to challenge the assumptions and test the validity of the strategy (Eccles and Pyburn, 1992; Kaplan and Norton, 1996; Feurer and Chaharbaghi, 1995).

PM and culture

According to Hofstede & Hofstede (2010), culture is the collective programming of the mind that distinguishes the members of one group or category from others. Culture is learned and derived from the social environment. Every culture has its own elements, i.e. symbols, heroes, rituals, norms, beliefs, attitudes, self-perceptions, behaviours, stereotypes and values. There are various national cultural frameworks such as Kluckhohn and Strodtbeck (1961), Hofstede (1991), Hall and Hall (1960), Hampden-Turner and Trompenaars (1993), Schwartz (1994) and House et al (2004). In the business management literature, Hofstede's framework is the most commonly used tool. Hofstede's cultural dimensions theory is a framework for cross-cultural communication. It describes the effects of a society's culture on a member's values and how these relate to behaviour, using a structure derived from factor analysis. The theory proposed six dimensions: power distance (strength of social hierarchy), individualism versus collectivism, femininity versus masculinity, uncertainty avoidance, restraint & indulgence and short versus long term orientation.

According to Schein (1985), organizational culture is the contextual structure composed of a series of presumptions for firms. This contextual structure might be invented or developed by a certain group to cope with the problems encountered during the processes of outside adaptation and realization of internal integration. This context, achieved over time, is the sum of a series of original perception, thinking and feeling styles believed to be valid and true solutions to problems and with this characteristic, handed onto new members. Chatman (1994), Waterman (1993) and Hofstede (1991) agree with Schein's definition. According to them, organizational culture is a concept denoting a series of beliefs, values and behaviours giving shape to an organization's self-identity and differentiating it from others.

In the PM literature, several authors have argued that organisational culture affects PMS implementation success. Nudurupati (2003) explained how PM can affect the way management behaves. According to Bourne et al. (2002), a "paternalistic culture" can lead to a successful PMS implementation. Franco and Bourne (2003) state an appropriate organisational culture is a prerequisite to success.

Several researchers recognize that culture guides and shapes behaviours and attitudes of all employees (Burnes et al., 2003; Handy, 1985; Hofstede, 2002; O'Reilly and Chatman, 1996;

Schein, 1985). There is a bi-directional interplay between organizational culture, management style and PMS (Bititci et al., 2004, 2006), but more research is needed to understand this relationship (Bititci et al., 2012; Scott et al., 2003; Wang and Ahmed, 2003).

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 (Ukko et al. 2007).

Nudurupati et al, (2010) state that IT has only a very limited influence on PMS design. 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. According to Bititci et 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 PM. 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 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 (Nudurupati and Bititci 2005; Chan 2004). Properly trained managers can positively influence PM development and outcomes (Cavaluzzo and Ittner 2004, p. 249). Training allows users to understand PM 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).

PM 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 & 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.

PM in developing countries

Recent literature review of performance measurement in developing countries (Khan, 2016) identifies only little research on PM (Khan et al., 2011; Khan et al., 2010a; Khan et al., 2010b; Khan & Halabi, 2009; Hoque & Alam, 2004).

It is very important to understand the status of PM 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; Waweru et al., 2005). According to Duh et al. (2008), this issue was even more noticeable because management accounting education and practice was less developed in the developing countries. In addition, development and progress on PM 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 PM systems and who want to build relationships with firms in developing countries or to replicate success stories in developed countries (Khan, 2011).

Several researchers have identified various internal factors which influence the use of PM in developing countries. These factors are; corporate culture (Hoque & Alam, 2004); business strategy (Tsamenyi et al., 2011; Jusoh et al., 2006, 2008b; Jusoh & Parnell, 2008; Amir et al., 2010; Avci et al., 2011); technical knowledge and management commitment (Akbar et al., 2012). Several researchers found that technological innovation and the use of IT stimulated the use of PM in developing countries (Bevanda et al., 2011; Smith et al., 2008). They suggested that use of contemporary management accounting techniques are influenced by several technological innovations like computer aided design, computer aided manufacturing, and computer aided inspection and testing. According to Kamhawi (2011) and Ong & Teh (2008), application of IT plays an important role in PM. Hence, technological innovation and the use of IT are influential factors for the use of PM in developing countries (Khan, 2011).

Only little research related to PM and organizational culture has been done in developing countries.

The following theoretical framework (see Figure 1) was developed from the literature. The research instrument was developed with the guidance of this framework.

Organisational cultural factors affecting PM	Sources of evidence
Management/Leadership style	Bititci et al., 2004; Bititci et al, 2006; Dunphy and Stacey, 1990; Chan, 2004
Senior management commitment	Bititci et al, 2002; Bourne, 2005; Bititci et al, 2006; Bourne et al, 2002; Chan, 2004; Emerson, 2002; Kennerley and Neely, 2002; Lewin, 1947
Reward system	Burney et al., 2009; Chan, 2004; Johanson et al., 2006; McShane and Travaglione, 2003; PA Consulting Group, 1998; Rowland and Hall, 2010; Rynes et al., 2005; Toynbee and Walker, 2008; Ukko et.al, 2007
Employees' education level /knowledgeable workforce	Nudurupati et al., 2016; Ukko et.al, 2007
Training	Cavaluzzo and Ittner, 2004; Emerson, 2002; Nudurupati and Bititci, 2005
Resistance to change	Bititci et al., 2002; Bititci et al, 2006; Dunphy and Stace, 1990; Lewin, 1947; Meekings, 1995
Employee involvement & empowerment	Morrell and Wilkinson, 2002; Nudurupati and Bititci, 2005; Chan, 2004 ; Cox et al., 2007, 2006; Kaplan and Norton, 2001; Kleingeld et al., 2004; Pun et al., 2001
IT	Bititci et al. 2000; Bourne et al. 2000; Nudurupati and Bititci, 2005; Marchand & Raymond, 2008; Nudurupati and Bititci, 2005; Nudurupati et al, 2010; Garnett, 2001; Prahalad& Krishnan, 2002

Figure 1: organizational cultural factors.

Method

A multiple case study approach was adopted for three reasons. Firstly, this research was exploratory in nature; its purpose was to find the factors influencing PM in Bangladesh. Secondly, the case study approach generates richness and a depth of understanding that could be used as a basis for applying and evaluating the research problem in its real-life context (Yin, 2014). The practitioner insights were collected from the case studies to explore and identify a framework for factors influencing performance measures. Thirdly, 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 was compared between multinational and local companies. Moreover, seven cases were selected as more than two cases strengthen the validity of findings (Miles et al 1984, Yin 2014). The researchers used both purposive and snowball sampling. In order to select the cases, purposive sampling (Guest et al, 2006) was used as the researchers had access to those companies. Snowball sampling was used to identify individuals to be interviewed in every case. For every case, there was a contact person who assisted in the selection of the individuals for that particular company.

The researchers 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 interviews were conducted in three multinational and four local medium and large manufacturing companies in Bangladesh. The Interview protocol was prepared based on the framework developed from the literature (see Table 1). 27 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. Cross-case analysis (in accordance with Yin (2014)) was used for data analysis.

The researcher attempted to minimise threats to the reliability and validity of interview data by asking follow up questions (McKinnon, 1988), by immediately transcribing audio-tapes and field notes (Ryan et al., 2002; pp. 155-156), 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 four different departments in every case (Miles & Huberman, 1994; p.29; McKinnon, 1988). The validity and reliability of data analysis was maintained by reading every sentence of responses, moving back and forth between interview data, relevant literature and by seeking consistency among interviewees.

	Case	No. Of employees	Sector	Ownership
Multinational	A	350	Fast moving consumer goods manufacturer	Wholly owned by parent company in UK
	B	410	Industrial gas manufacturer	Wholly owned by parent company in Germany
	C	400	Pharmaceuticals	Wholly owned by parent company in Switzerland
Local	D	800	Knit composite manufacturing	Family owned
	E	35000	Textile manufacturing	Family owned
	F	220	Pharmaceuticals	Family owned
	G	2600	Knit composite manufacturing	Family owned

Figure 2: Overview of the cases

Findings& Discussion

All three multinational companies (cases A, B and C) 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. Company C also use their own framework which includes three dimensions – financial, innovation and social dimensions. All of these 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. On the other hand, local companies (cases D, E, F and G) use both financial and non-financial measures, but do not use

Dimensions for cross-cases analysis	Multinational companies			Local companies			
	Case A	Case B	Case C	Case D	Case E	Case F	Case G
Resources	<ul style="list-style-type: none"> Integrated IT system with ERP software, My learning for online training Senior management committed to PM. 	<ul style="list-style-type: none"> Integrated IT Company B internal for training through their web. Senior management committed to PM 	<ul style="list-style-type: none"> Integrated IT with ERP software, Senior management committed to PM. 	<ul style="list-style-type: none"> Some departments are integrated with ERP software, not the whole company Senior management committed to PM. 	<ul style="list-style-type: none"> 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 PM 	<ul style="list-style-type: none"> Different IT systems and no integrated system to collate information Tally software for accounting purpose MS Excel for reporting purpose. Senior management committed to PM. 	<ul style="list-style-type: none"> Different IT systems and no integrated system to collate information MS Excel for reporting purpose. Senior management committed to PM.
Design	Using balanced scorecard with three dimensions – economic, environmental and social dimensions. KPI's designed & 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 & generated from parent company in Germany. Line managers set the targets with the individual employees.	Using their own framework with following dimensions – financial, innovation, social, people, ethics & environment dimensions. KPI's designed & generated from parent company in Switzerland. Line managers set the targets with the individual employees.	Using both financial & non-financial measures. However, there is no integrated PM framework. Senior management decide the measures, while senior management & departmental managers set the individual targets.	Using both financial & non-financial measures. However there is no integrated PM framework. CEO decides the measures, while CEO & departmental managers set the individual targets,	Using both financial & non-financial measures. However there is no integrated PM framework. Managing director & departmental managers decide the measures and also set the individual targets.	Using both financial & non-financial measures. However there is no integrated PM framework. Technical director & production manager decides the measures, and set the individual targets.
Implementation	PM implemented in a holistic way in the entire organisation.	PM implemented in a holistic way in the entire organisation.	PM implemented in a holistic way in the entire organisation.	PM implemented in production department.	PM implemented in production department.	PM implemented in production & sales department.	PM implemented in production department.
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 & 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	Monthly meetings with departmental managers and management committee. Performance measures are reported and assessed on daily basis through informal meetings. Individual's KPIs are reviewed once a year.	Performance results are provided on the walls of the shop floor for employees. Reports are produced at the end of every week for senior management. Senior management use these reports to assess current performance and decide future targets.	Performance results are provided on the walls of the shop floor for employees. Reports are produced everyday for the CEO, who assesses the performance and decides future targets. There is a meeting with production manager & his employees every day.	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 on a monthly basis. MD & commercial manager assess the performance and decide future targets.	Performance results are provided on the walls of shop floor for employees. Production manager prepares the performance report every week for technical director and MD. Technical director and production manager reviews any new measures and decides future targets. There is a meeting with production manager & his employees every day.
Cultural aspects	<ul style="list-style-type: none"> Senior management adopt authoritative management style in design phase, while they adopt participative style in implementation & use phase of PM. Although employees at Bangladesh office are not involved in design phase, they 	<ul style="list-style-type: none"> Senior management adopt authoritative management style in design phase, while they adopt participative style in implementation & use phase of PM. Although employees at BD office are not involved in design, they are committed in 	<ul style="list-style-type: none"> Senior management adopt authoritative management style in design phase, while they adopt participative style in implementation & use phase of PM. Although employees at BD office are not involved 	<ul style="list-style-type: none"> Senior management adopt authoritative management style in all stages of PM. Although employees at lower levels are not involved in design and implementation phases, they are 	<ul style="list-style-type: none"> Senior management adopt authoritative management style in all stages of PM Lack of the commitment from Chairman restricting people from using PM. Absence of corporate 	<ul style="list-style-type: none"> Senior management adopt authoritative management style in all stages of PM. Although employees at lower levels are not involved in design and implementation 	<ul style="list-style-type: none"> Senior management adopt authoritative management style in all stages of PM. Although employees at lower levels are not involved in design and implementation phases, they are

	<p>are committed in using PM.</p> <ul style="list-style-type: none"> • The pay increment and promotions are based on individuals' performance. • Company runs bonus scheme, which is based on both individual & 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 PM is limited. 	<p>implementing & using PM.</p> <ul style="list-style-type: none"> • The pay increment & 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 PM is limited. 	<p>in design, they are committed in implementing & using PM.</p> <ul style="list-style-type: none"> • The pay increment and promotions are 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 on PM is limited. 	<p>committed in using PM.</p> <ul style="list-style-type: none"> • Company does not have any formal reward policies. Employees get increment & 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 PM & IT. 	<p>culture restricting use of PM.</p> <ul style="list-style-type: none"> • 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 PM & IT. 	<p>phases, they are committed in using PM.</p> <ul style="list-style-type: none"> • 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 PM & IT. 	<p>committed in using PM.</p> <ul style="list-style-type: none"> • Most of the employees of the company are non-graduates who have limited or no knowledge on PM & IT.
Impact on business	<ul style="list-style-type: none"> • 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 & 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. • PM improved their decision making. For example, they use monthly PM results to make necessary changes on the shop floor • 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. 	<ul style="list-style-type: none"> • The full potential benefits of PM 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 & 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. 	<ul style="list-style-type: none"> • The full potential benefits of PM 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)& 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 PM. 	<ul style="list-style-type: none"> • The full potential benefits of PM were not realized as it is implemented only in two departments. • They are able to see how production& 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. 	<ul style="list-style-type: none"> • The full potential benefits of PM 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.

Figure 3: Cross-case analysis

integrated frameworks such as BSC. They add new measures as required. While they understand the benefits and importance of integrated PM frameworks, none of the local companies have actually implemented integrated PM. Most of the participants in these organisations, however, state that integrated PM is something they intend to implement. Company D has said that they already hired consultants who are developing integrated PM 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 F and G 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 F said, "we are following the footsteps of multinationals and are developing KPIs to achieve our objectives". Although company E is benefitting from using non-financial measures, they are unable to move towards an integrated PM as their chairman is unsupportive.

For all three multinational companies, senior management are committed to making PM successful throughout its lifecycle. For companies A, B and C, 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. All of these companies implemented PM 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 PM. 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 and C has daily meetings with managers and their 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. Company C has monthly meetings with departmental managers and the management committee to review performance measures. For all these three 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 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 PM holistically. Companies D, E and G only use PM in their production department. Company F uses PM 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 D uses an ERP system that is linked with most of the departments, but not with the whole organisation. Case E have computerised machines which allows them to efficiently produce information, but senior management is not committed to PM. Senior management of cases D, F and G understand that an integrated IT system throughout the company is very important for successful PM. Hence, they are investing in the implementation of an integrated IT system throughout the company along with the implementation of integrated PM. At present, all local cases lack educated staff who do not have enough knowledge of PM and IT. So, these companies require lots of investment to train staff to understand PM and use of IT. Company D produce performance reports each week for senior management only. Senior management then decide future targets. In company E, in the production department, every morning there is a meeting of the manager

&staff. Reports are produced everyday 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 G, 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.

Cultural aspects: In the multinational companies senior management used authoritative styles to design PM. But they adopted participative styles in implementation and use phase of PM to overcome employees' fears of PM. This increases the chances of success with PM and is in line with the work of Bititci et al. (2002). It is evident from the literature that on the one hand PM 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 used PM 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 PM 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. All three 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, companies B and C 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 PM is limited. They provide both training to employees to understand PM.

Senior management of all four local companies adopted authoritative management style throughout the lifecycle of PM. 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 PM is non-existent here. They don't have any system to reward people based on their performance. In company D, F & G, if, by chance, anyone's good performance comes to the attention of the senior management, he/she are given increments or promotion. Company E provide 10% salary increment to all employees irrespective of their performance. Inevitably, 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 PM. These companies have to invest a lot to train these staff.

Senior management of three local cases (D, F and G) decided to move towards integrated PM 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.

Impact: As the three multinational companies are using integrated PM in a holistic way with the integrated IT system, they enjoy the full benefits of PM. 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 PM holistically, they can only identify the weaknesses of specific departments, not the whole organization. Company D is using PM 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 E improved a lot in their factory working environment and wastage disposal. By using PM results company F improved their decision making. As for example, they increased their sales by enhancing distribution infrastructure. Company G reduced their accident rate in factory. All of these companies would achieve more improved performance by using PM 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 PM require capturing, collecting, analysing and reporting PM information. Company E have computerised machines which enable them to capture, collect and analyse most of the information automatically. However, Company D, F and G 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 PM. 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 D, F and G 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. 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 PM in place. All of these local companies are happy with the improvement of the departments where they are using PM. So all of them (except company E, due to a lack of commitment from their chairman) are moving towards integrated PM and integrated IT systems.

Employees of both local and multinational companies have lack of knowledge in PM which is a barrier of success of PM. However, from literature it is evident that employees' don't have much knowledge of PM in the developing countries as management education and practice is less developed there (Duh et al., 2008). All of these companies trying to overcome this problem by providing regular training on PM.

Conclusion

This research identifies how different organizational cultural factors influences PM in Bangladeshi companies. Case studies have been conducted in three multinational companies and four local companies in Bangladesh. The multinational companies are successfully using integrated PM 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 PM holistically or apply an integrated PM framework. They include measures when they are required. They use an authoritative style in the whole process of PM. In these cases, non linkage of rewards with performance, lack of integrated IT support and lack of educated workforce are barriers to PM success. However, as the senior management of all these companies are committed

to making PM successful, they are trying to overcome these deficiencies. They are moving towards the implementation of integrated PM holistically throughout the company. They are also hiring educated staff, providing training to the existing workforce and implementing integrated IT support.

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).

This paper contributes to the PM literature by identifying the different organizational cultural factors that affect successful implementation and use of PM in a developing country; it adds value by researching a neglected area.

The limitation of this research is that it covers only manufacturing companies in Bangladesh. Future research can be done on multiple industries.

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