Performance Measurement Systems in Developing Countries: Ethiopian Manufacturing Organizations focused Study

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Abstract - The Propose of this article is to investigate manufacturing companies' performance measures and measurement systems in developing countries. The review research followed a systematic reviewing strategy and process, which has been used for performance measurement researches. The performance measures and measurement systems are evaluated using a performance measurement system design framework. The literature review research has asserted that regardless of its increased advancement and enormous advantages, manufacturing companies in developing countries are not benefitting from the field of performance measurement system. Still, traditional financial and productivity performance measures are dominant. It has also been asserted that the number of company performance related researches is limited in developing countries, which has been identified as one reason for poor knowledge dissemination and poor implementation of PM systems. For information-starved regions, this review research is believed to have greater value and can provide additional information about company performance related researchers and practitioners.

Index Terms - Developing Countries, Ethiopia, performance measurement, Performance Measurement Systems, Performance Measures

1. Introduction

Generally, firm competitiveness is not an option this time; rather it is an issue of survival. Irrespective of their nature or characteristics; small or big, private or public owned, profit or non-profit making, all types of organizations do compete for survival [1]. The era of information technology impose huge burden on firms to compete globally. Modern and conventional manufacturing companies are, therefore, operating while struggling against the challenges necessitated by globalization or collapsed otherwise [2]. The combined effect resulted from rapid advances in production, communication, information, and transportation technologies, together with free-market ideology, is among the reasons intensifying the competitiveness pressure over the companies [3]. To be successful and competent, firms should be efficient and effective in their business and operational activities among others.

Performance for a firm, on the other hand, is a measure of competitiveness, and competitiveness cannot be achieved without managing performance [4]. Having known this, the interest and attention of practitioners and academicians in organizational performance is increasing from time to time [5], [6].

This time, business PM is considered to be the radar screen of managers and academic scholars [7]. According to Bernard and Gianni, there is at least one report or article every five working hours being produced about business PM and more than 12 million internet search sites are found to be dedicated on the topic. As many emerging research areas, research progress on the topic is very rapid and it becomes the issue of variety of different disciples and functions including accounting, industrial engineering, economics, human resource management, marketing, operation management, physiology and sociology [8], [7]. Andy Neely asserted why PM is becoming so topical in his article and justified it by seven reasons including the changing nature of work, increasing competition and the power of information technology [9].

Nonetheless, this is not true in developing countries as evidenced in this review research. Many of the

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researches on the field of performance are being generated from developed countries mainly from Europe. Therefore, the purpose of this research is focused on the assertion of the characteristics of the PM system in developing countries while taking consideration of a PM system evaluation approach, [10] PM system design framework. The research also asserted the need for PM and performance improvement researches increment from this meager current coverage and future research direction based on the reviewed literatures gap identified.

2. RESEARCH METHODOLOGY AND REPORT ORGANIZATION

2.1 Research Methodology

The review research followed a systematic review strategy and process, which has been used for PM researches. It is as outlined by [11] and well applied by [12] who expanded it incorporating the work of [13] and [14]. The broad three stages are:

- 1. Planning the review;
- 2. Conducting the review; and
- 3. Reporting and dissemination

In the first stage, because of the multidisciplinary nature of the field of business performance management, the source of literatures reviewed were selected from varies academic disciplines including operation management, strategy management, economics, industrial engineering and organizational behavior. The types of literatures reviewed consist of professional journals and scientific literatures including students' performance related PhD dissertations and MSc thesis reports available in Addis Ababa University electronic database system. Following the selection of literatures to be reviewed, a thorough revision of the selected literatures has been carried out. As this review research focuses on the PM system research practices in developing countries while mainly considering Ethiopian case, a comparing PM system design has been opted. Accordingly, the PM system investigation criteria developed by Andy Neely, Mike Gregory and Ken Platts have been adopted for the investigation of PM systems in developing countries at literature level. Finally, the report is prepared for dissemination.

2.2 Report organization

Following abstract, introduction and research methodology, this paper has been organized into performance measurement literature review sections (III and IV) while focusing on PM evolution and system

design and evaluation. Existing Ethiopian manufacturing performance measures and PM system evaluation and analysis part has subsequently been presented in section V. As the limited number of PM related researches is identified to be one of the major gap for proper design, implementation and evaluation of a PM system, the possible rational justifications for the need of number of PM researches increment in developing countries has also been presented in section VI. Finally conclusion and recommendations has been forwarded.

3. PM AND ITS EVOLUTION

PM has its roots in its early accounting system as reported by Johnson and as substantiated by Medici accounts which was recognized as an excellent example of how a pre-industrial organization could maintain a good account of external transactions and stock without recourse to higher-level techniques, such as cost accounting [15]. For long period, financial PMs were considered to be sole useful measuring tool for organizations' performance. However, critics on traditional financial PMs were increasing from time to time. As cited by Andy Neely, several authors suggested and researched out that the traditional financial PM systems are inappropriate for many reasons [9]:

- 1. Encourage short-termism, such as the delay of capital investment [16], [17];
- 2. Lack strategic focus and do not provide data on quality, responsiveness and flexibility [18];
- Encourage local optimization, for instance, manufacturing inventory to keep people and machines busy [19];
- 4. Encourage managers to minimize the variances from standard rather than seek to improve continually [20], [21];
- Fail to provide information on what their customers want and what their competitors are doing [22], [23]

PM is considered a subject that has been high on the agenda for over two decades [24]. It is a multidisciplinary field and the research on the topic increased from time to time. Andy Neely reasoned out why performance becomes a management vernacular and so topical to academicians and practitioners as: [9]

- 1. The changing nature of work;
- 2. Increasing competition;
- 3. Specific improvement initiatives;
- 4. National and international awards:

- 5. Changing organizational roles;
- 6. Changing external demands; and
- 7. The power of information technology.

Although its advent has not concretely stated, it was, however evolved in response to the shortcoming of companies' single measurement, financial measurement. Since its advent, performance as a concept has also evolved a number of stages to reach at the current level. Different authors have traced its evolution in several ways. According to the study conducted by Srimai, Radford and Wright, the evolution took place in four major ways; from operations to strategic, measurement to management, static to dynamic and economic-profit to stakeholder focus [25]. The literature review by [26] also identified that the strategic PM system field evolution in literature is progressive in that in the mid 1900's it was on the design of strategic PM system, while in the late 1990's and early 2000s, authors were interested in the implementation of strategic PM systems. Currently, academicians and practitioners are highly focused on how organizations are measured with measures and how they extract value from the data they collect.

Consequently, following the conception and understanding of PM and improvement, a number of performance paradigms, models and frame works were developed for the last two to three decades as compiled and summarized by varies authors including [27], [28], [29], [30].

Though different authors gave definitions for performance related terminologies the most popular literally cited definition is Neely's definition [31]. [32] defined PM, performance measure and PM system as: "PM can be defined as the process of quantifying the efficiency and effectiveness of action."

"A performance measure can be defined as a metric used to quantify the efficiency and/or effectiveness of action."

"A PM system can be defined as the set of metrics used to quantify both the efficiency and effectiveness of actions."

4. PM System Design And Evaluation

Now, the importance of PM is not arguable. Rather it is how to measure and what to measure are the basic questions to be answered. Because for a PM to be successful, the designed set of metrics should provide companies with necessary and useful information that helps to plan, control, and improve activities so that the

company meets its goals and strategies. The information that has to be conveyed through a PM system should, in turn, be accurate, relevant, provided at the right time and easily accessible for the persons who need it. So far, several authors have discussed the design of numerous performance measures and identified important requirements that performance measures should fulfill [24]. According to [33], some of the requirements are system parts of a management system such that the PM system will continuously be assessed. The RADAR logic (Result, Approach, Deployment, Assessment and Review logic) at the heart of EFQM (European Foundation for Quality Management) is under this category. As cited by Neely, et al., Maskell suggested seven principles of PM design [34]. According to Maskell, a PM system should fulfill the seven PM system design principles such as nonfinancial measures inclusion, simplicity to use, provision of fast feedback, having dynamic nature and stimulating of continuous improvement. [33] developed a frame work that they call "Generic PM system design approach" which assesses the performance of a PM business system and measures performance simultaneously. They included three elements: 'direction,' 'processes' and 'measures' that are assumed to assess the company's PM system hierarchically. While the company's performance can be assessed considering the 'ongoing,' 'periodic' and 'overall' levels based on their review frequency. Franco and Bourne empirically assessed the various factors which should be taken into consideration while designing a performance measures and measurements. They identified nine factors that would have greater impact on the way organizations manage through measures [26]. Stefan Tangen has also suggested a PM system should first be viewed from system class perspectives while each class has defined requirements to be fulfilled so that a company PM system might fall in any of the three classes: the basic "third class," "second class" and advanced, "first class" levels [24]. Neely, et al, also developed a PM system design framework so that a company's PM system can be examined at three levels (figure 1) [10].

- 1. The individual performance measures;
- The set of performance measures the PM system as an entity; and
- 3. The relationship between the PM system and the environment within which it operates.

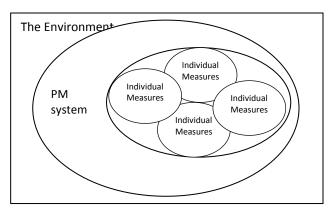


Figure 1. A framework for PM system design [10] According to [10], at the level of the individual measure, "PM system" can be analyzed by asking questions such as:

- "What performance measures are used?"
- > "What are they used for?"
- ➤ "How much do they cost?" and
- "What benefit do they provide?"

At the subsequent higher level, the system can be analyzed by exploring issues such as:

- "Have all the appropriate elements (internal, external, financial, nonfinancial) been covered?"
- ➤ "Have measures which relate to the rate of improvement been introduced?"
- "Have measures which relate to both the longand short-term objectives of the business been introduced?"
- ➤ "Have the measures been integrated, both vertically and horizontally?"
- "Do any of the measures conflict with one another?"

At the highest level, the system can be analyzed by assessing whether the measures "reinforce the firm's strategies," "match the organization's culture," "are consistent with the existing recognition and reward structure," and "focus on customer satisfaction and focus on what competition is doing or not"

In literature, there are also various Authors including [6, 35, 36], who recommended criteria which are to be considered in performance measures and PM systems design and assessment process.

5. EVALUATING THE EXISTING PM SYSTEMS IN ETHIOPIA

It has been asserted in this review that organizational PM and improvement system investigation and design

focused researches are few in developing countries' literatures. Not only research results but also data related to developing country's state of performance measures are too meager [37]. However, the term performance is a buzzword and various practitioners or academics use it for the areas they want to manage or study The term performance is, for instance, widely applicable for the measurement of national competitiveness at macro level in which case Gross Domestic Product is the principal Some researchers also focus on metric [38, 39]. Industry or at sector level at which the aggregate performance of a group of similar organizations are assessed. The recent assessment study by [40] can be pointed out here. They tried to assess the performance of Ethiopian manufacturing industries collectively using four individual traditional productivity and financial measures; namely, value added production, labor productivity, labor cost per value added and the per capita ratio for PM of manufacturing industries at national level using the aggregate data from Central Statistic Agency. There are also a few researches focusing on organizational PM and improvement systems. As this review research focuses primarily on company PM and improvement systems, the review has been conducted in reference to the requirements that an organizational PM system should fulfill. The available researches were, therefore, investigated based on PM system investigation framework proposed by [10], Figure 1. (Neely, et al., 2005) approach has been selected for investigation purpose because it enables to investigate business performance at different levels; namely, at performance measures level, PM system level and the environment level where the PM system interacts, links or is aligned with the other organizational valuable systems or constructs. Many of the available company performance related researches including [41], [42], [43], [44], [45] and [40] use the term PM, analysis and improvement for their research theme. There are efforts by the authors to measure, propose alternative performance analyze and improvement approaches for companies based on company surveys and case studies. Their principal objective is to measure performance using the existing traditional productivity and financial measures and identification of derivers for performance improvement. Based on the measurement result, performance determinants are identified and improvement methodology or model has been developed. [42] used individual measures such as throughput time, work-inprocess (WIP) inventory, resource utilization and flexibility for measuring and analysis of a shoe manufacturing company performance. An important developing countries performance measures assessment study has been conducted by [37]. They asserted that, despite the many advantages of PM, Ethiopian manufacturing firms have not used it widely. Rather the traditional productivity and finance measures are the dominant business PM systems. They also concluded that the existing PM systems, which are put in place in developing countries, are facing much more challenges than what the developed countries are. They finally proposed the adoption and implementation of PM systems to developing countries, as a solution, so that they can manage their supply chain for better competitiveness. [46] learned that, though they include some none financial measures, the existing performance measures are not integrated to one another individually and to the systems and strategies of the firms as well. Companies measure their performance regardless of meeting performance criteria such as proposed by [10] by which better performance management can be practiced for better competitiveness. A number of researchers including [46], [37] and [45] have identified the main individual performance measures (Table 1), which are currently used for measuring organizational performance in Ethiopian manufacturing Companies.

5.1 Individual measures

As mentioned by various authors including [37, 46, 45], the frequently used individual measures in Ethiopian manufacturing companies are, to some extent, identified. The purpose of the measures is also apparently known and the measures are implemented to assess and monitor the traditional financial and productivity performance of the firms including profitability, productivity and measures for monitoring of companies operational activities. However, no author yet asserted how much the number of measures optimally required

Table 1. Performance measures in practice (Ethiopian Manufacturing firms)

Perspectives	Finance	Customer	Internal Process
Measures	Cost of goods sold	Number of customer Orders completed	Machine utilization
	Gross profit margin	Order accuracy /fill-rate	Employees absenteeism
	Total sales revenue	On-time delivery	In-stock rates / stock-outs
	Sales growth	Backlog in the delivery schedule	Number of worker injuries
	Return on total Investment		Amount of material
			inventory
			Level/rate/ incidence of
			production defects
			Labor productivity
			Backlog in the delivery
			schedule
			Number of units produced
			Amount of finished goods
			inventory
			damages
			Compliance

Source: compiled by Authors from literatures reviewed

and their associated cost is; and how much the

measures benefit the firm. One requirement for PM system is to have limited number of measures [24]. Too much performance measures does mean there is too long time required to collect data and analyze which is usually expensive and managers become confused and tired of analyzing and selecting the few useful information from the many trivial

5.2 PM system

Although dominated by traditional productivity and financial measures, the performance measures put in place shallowly covers the different perspectives including customer, internal process and financial perspectives (Table-1). In the limited literatures, there are efforts in identification of measures, which are currently put in practice. Nonetheless, there are gaps to how categorically classify the measures so that it can be ensured whether the measures systematically addressed the coverage of balanced set of measures from varies business perspectives or not. If companies would have followed a PM system design framework or approach, the compiled measures (Table-1) had comprised measures from different perspectives. PM systems are designed for implementation to ensure whether the activities run by the organization are performed to accomplish and meet the objectives and strategies of the firm or not. This in turn quests the design of the PM systems in such a way that they satisfy the short and long-term objectives, include appropriate internal and external elements, financial and non-financial elements, seamless integration of the measures to one another, and absence of conflict among measures used in the company. According to [10], these requirements are important at system level. However, the current literature lacks the evaluation of the PM system in a systematic approach ensuring these requirements. The absence of measures for company learning and growth perspective in the compiled and systematically categorized set of measures (Table-1), for instance, can substantiate that companies are not using proper approaches for PM system design, implementation and improvement.

5.3 The environment level

At the highest level, the PM system should reinforce the firm's strategies and match the organization culture. It is also expected PM system is to be consistent with the existing recognition and reward system so that the time and cost required to implement the PM system can be reduced. It is also imperative the inclusiveness of the

measures to take account of the various and important stakeholders' interest including, the company's own requirement, customers, employees, regulatory bodies and competitors. While analyzing the PM system at the highest level, considering these requirements is vital to ensure absence of any misalignment and 'productivity paradox'. In the existing limited number of literatures in developing countries' PM researches, apart from listing and identification of the measures, these requirements are not duly considered. So further study may require to ensure whether there exists alignment of all the measures with the strategies and objectiveness of firms, culture and reward systems of the companies in developing countries. Evaluation should also ensure whether there exists current evaluation and designing procedures or not, and the appropriateness of the designing, evaluating and improving of performance measures and measurement systems methodology or procedure (if any).

The ultimate objective of using PM and improvement system is, in fact, to achieve competitiveness through properly formulated organizational vision, missions and strategies. The measures and measurement systems should, therefore, be designed in accordance with this organizational reason for existence. As reviewed so far in this article, since long time back, many authors worried for what should be considered as PM criteria so that the organization can quantify its activities empirically and check whether its objectives and strategies are met with all the resources supplied in an efficient and effective manner. It is, thus, first formulation of the company's vision, mission and strategies should be ensured. The measurement output is whether to verify the pre-formulated strategies that are set forth to make the company competitive. However, literatures in developing countries neglect to verify the proper formulation of these organizational directions, or they assumed it could be addressed separately from PM system. Though, there are varies criteria, frameworks or methodologies so far developed, the investigation of the exiting performance measures systems should base on the whole principally: the organizations strategies, the activities to be accomplished and the measures in combination. Looking into these PM systems, which are put in practice, no one can be sure whether they are designed in reference to the various authors' criteria including [26], [33], [10], [24]. In addition to proper formulation of the companies visions, missions and

strategies, the performance measures should be designed and investigated whether they meet the appropriate criteria such as [10] framework for PM system design. Generally, in many of the current limited literatures in developing countries, some or all of the crucial points indicated below are true:

- Research outputs on business or organizational PM systems design are very minimal
- Limited results that ensure how the organization strategies and objectives are consistent with the missions, values and visions of the company
- ➤ Information about implementation and assessment of modern PM systems or approaches is limited and almost none.
- The PM systems currently in place are much dominated by the traditional productivity and financial measures
- There are Efforts by researchers to show the importance of the non-financial performance measures
- The research outputs are mainly focusing on measuring of performance of companies and identification of performance improvement drivers with no or little attention given to PM and improvement system design
- The integration and consistency of measures at individual, system or organizational environment level has been given less emphasis
- There is also limited information on how to integrate PM and improvement systems as part of successful management process.
- The existing performance measures and measurement systems are not tailored to include financial and non-financial measures in a balanced way so that performance can be viewed from different perspectives including: customers', organization own requirement, regulatory bodies, competitors', continuous improvement, innovation and environmental perspectives; as well as from different performance dimensions such as quality, time, flexibility and price or cost measurements.

Not only they are limited in number but also the existing performance related researches are less informative about the design, evaluation and improvement of a PM system. This potentially hinders the practical understanding on how a PM system is introduced, how it is implemented efficiently and effectively, and disseminated at reasonable speed.

6. THE RATIONALE REQUIREMENT FOR THE NEED OF INCREASED NUMBER OF **PM**RESEARCHES IN DEVELOPING COUNTRIES

As the evaluation result shows, the contribution of performance related researches for proper design, implementation and evaluation of a performance measurement system, is believed to be so vital for developing countries manufacturing firms under the current situation. Therefore, to benefit the developing countries companies from enormous advantage of PM system, the number of performance related researches should be increased tailored to the characteristics of the developing economy. This can be true at least for the rationales including; the limited number of existing PM related researches; the characteristics of PM system, which is dynamic and culture dependent; visible growth difference between developed and developing economy, and the subsequent need of customized PM system requirement, and the current borderless characteristics of competition as discussed in detail below.

6.1 Number of existing PM researches generated from developing countries are limited

As cited by [47], most of the empirical studies (95 %) focused on institutional theory are contributed by developed countries. The contribution of developing countries to the world in this regard has been limited to 5% [48]. [48] and [49] additionally asserted that there are limited scientific and professional literature related performance management implementation in developing countries. In Africa, the availability and reliability of data for systematic research in general and performance measures in particular is very minimal [37], [50]. According to [43], there have been many studies aimed at isolating the characteristics, behavior and performance determinants of insurance companies in developed countries; however, there are few that focus on developing countries of Africa, and indeed none in Ethiopia.

It is evident from systematic investigation of articles published on a matured professional journal, international journal of productivity and performance management, which is dedicated on productivity and

performance topic researches, that the number of researches that are studied in developing countries is very limited. In the sample study, the recent six years (2009-2014) and 337 published articles were investigated and 176 were found to be performance related research articles. Regardless of their great number, 40% from the total number of world countries, [51], it was, however, only less than 12%, 21 articles were from developing countries. Even these least number of PM related researches by developing countries are concentrated in Asia mainly from India, which was the major contributor accounting more than 90% (which is 19 in number) of the articles published.

6.2 PM system is dynamic and culture dependent

There are suggestions by varies researchers [10],[24],[26] that the nature of performance measures is not static and they vary with culture, conditions and areas where they are implemented. This is directly related to the characteristic of a growing company. Sami asserted that an organization should never settle on a status quo [52]. [25] , in their review entitled "Evolutionary paths of PM, an overview of its recent development" asserted that concepts regarding work, people and the organization, which are embedded in management contexts, differ from time to time. Culture is a major source of differences in measurement and reporting methods and standards [48]. There are doubts by quite a few scholars that whether existing western management practices can and will work, for instance, in emerging markets [48],[53], [54]. Emerging markets are, nowadays, the characteristics of developing economies. Among the seven principles that Maskell offered in PM system design are that measures vary between locations and should change as circumstances do [10]. He also suggested that one measure is not suitable for all departments or sites. Hence, one can argue that the PM system has to be consistent with the organization's culture [32]. Designing a PM system while considering optimal set of standard criteria is, of course, a difficult task as the optimal PM system will also differ from case to case [55].

6.3 Visible growth difference and need of customized PM system

There are variations in business environment between developed and developing countries. Most developing countries' economy is factor-driven and they compete based on their factor endowment-mainly unskilled labor and natural resources. They are characterized by poor infrastructure and not well developed developmental institutions unlike the developed ones which work in innovative and highly sophisticated business environment [56]. Companies in developed economy work in high quality of business network and business operations and strategies, which lay foundation for better competitiveness and streamlined performance management system embedded in it. In line with this, variations in performance measures can be real though seemingly subtle. For example, due to institutional environment, countries do have differences in maintaining customer confidence. Similarly, effective and efficient infrastructure is a critical factor for companies' better competitiveness and performance growth. Therefore, it will be imperative to address these issues targeting the developing economy through extensive performance related researches and specific to their business environment. So far, such kinds of researches are limited in spite of their importance for the improvement of the companies in developed economies and the field, performance management, in general.

6.4 Competition is global

The era of technology and information has resulted in global integration. This competitive and changing environment, however, brings both challenges and opportunities for manufacturing companies developing countries. Globalization comes with enormous challenges such as liberalization of markets, intense competition, decline of domestic opportunities and revenues, economic volatility of the integrated markets, cyclical crises, and non-tariff barriers to trade, spread of pandemics, and new security issues. As a result, these days, companies in the world work in stiff worldwide competitive business environment. The marketplace is more competitive and global competition is a reality in most sectors [10]. Consequently, according to Gabriel and Mohamed review findings, many actors, especially in the least developed countries (LDCs), may not have the capabilities to handle these challenges [57]) which globalization brings with it. The PM and improvement system should also be viewed from competition perspective. even though this dimension is neglected or not boldly addressed even in popular PM models and frameworks including balanced score card by Kaplan and Norton, performance pyramid by Cross and Lynch and PM system audit and enhancing method by Medori and Steeple [58]. Paradoxically, force of global competition has equipotential impact seemingly in all production companies regardless of countries developmental stage, their geographical positioning and capability to withstand the challenge imposition. The resistance to this global impact by companies in developed countries is stronger than developing ones due to more competitive advantage. It is, therefore, important to explore and increase the understanding of measures, measurement the performance and improvement systems gearing to this specific need of the developing countries manufacturing companies through extensive researches from both academia practitioners.

7. CONCLUSION AND RECOMMENDATIONS

In this research, based on the available literatures, company level performance measures and PM systems design and implementation status has been investigated in developing countries: focusing Ethiopian condition. It has been asserted that performance measures and PM systems related researches are very few in developing countries as compared to the world literatures in which, this time, the topic is the hot issue. To investigate the performance measures and PM systems at literature level, a PM system design framework proposed by [10] has been adopted. The PM system design framework enables to evaluate a given PM system at three levels: namely at individual measures, at PM system level and at environment level. Based on the evaluation, in the current PM systems, the individual measures are dominated by traditional financial, internal process and to a lesser extent customer perspective measures. The cost and benefit of the measures are not taken into considerations before using the measures. Measures for learning and growth, for instance, are missing. Similarly, at PM system level, there are gaps identified on how to categorically classify the measures, so that one can ensure whether the system systematically include balanced set of measures from varies business perspectives or not. The measures are rather used in traditional approach instead of using balanced set of measures in which all appropriate elements for internal, external, financial and non-financial measures are The absence of measures for company covered. learning and growth perspective in the compiled and systematically categorized set of measures (Table-1), for instance, can substantiate that companies are not using

proper approaches for PM system design, implementation and improvement.

At the highest level, the companies in developing countries are not also using methodology to verify the alignment of the measures with the strategies and objectives of the firms, and whether they suit with their culture and reward systems or not as well.

Another finding of this research review is that the number of performance related researches are very few in developing countries. The researchers strongly argue that there should be increased number of performance related researches, which are geared to the developing business economy scenario and to benefit the companies from the huge advantages of the field of PM system for at least following rationales:

- 1. Number of existing PM researches generated from developing countries are limited,
- 2. PM system is dynamic and culture dependent
- Visible growth difference and need of customized PM system
- 4. Competition is global

Owing to many reasons, including lack of appropriate dissemination system, skilled work force, low capital investment and poor organizational capability, information-starved regions may not have implemented PM systems properly. Therefore, increased number of regional based researches can considerably:

- Increase the understanding level of academicians, managers, consultants and practitioners in general
- Increase knowledge dissemination among practitioners, academicians and users about the proper design, management and implementation of PM and improvement systems
- ➤ Increase the competitiveness of the firms since the companies could benefit from the full implementation of PM and improvement systems.
- Advocate the growth of the field of PM system as it can be implied from the increased understanding and application of PM system.
- Enhance researchers attitude and interest towards holistic approach in supporting the appropriate designing, implementation and assessment of performance measures and PM systems

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