

A Review of Performance Management Systems in Manufacturing Industries

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Abstract - This paper presents the sincere efforts put forth in reviewing the possible approaches present in the manufacturing organisations to understand the outcomes of Performance Management Systems (PMS) in Manufacturing Industries. An attempt is also being made to bring out some of the important standards on the basis of which the effectiveness of implementing PMS can be judged. In the due process, the very need for PMS has also been examined and then the changes organisations are bringing out to their existing practices for the continued sustenance of PMS is highlighted.

Key Words: Performance Management Systems, Implementation of PMS, employee engagement performance-appraisal, evaluation.

1. INTRODUCTION

This Review is conducted to build a framework to facilitate an understanding of the state of art work done in Performance Management. In the due process, attention is also given for designing and execution of an effective Performance Management System. Much of the Concentration in this work is mainly focused on Research-based outcomes and current solicitations that have become increasingly helpful in building an organisation's human capital successfully. The Performance Management system has always been a continuous and a recurring process in any organisation irrespective of its size. It is quite common that, many essential phases involved in the construction of a superior Performance Management System is often cut short in industries, owing to the practical constraints involved in implementing them effectively and also due to the lack of awareness on the effects of cutting short of these essential phases.

In the current literature review, an attempt of studying the advantages and limitations of performance management systems are studied. Also, the step by step procedure to be followed before the implementation of a successful Performance management system and the ending of a performance management system is studied.

2. Performance measurement definitions

Performance Measurement is a topic that is often discussed but rarely defined before proceeding further, deep into the literature review an outline of different generally practised definitions defined by different researchers for Performance Measurement, would be beneficial. Researchers have defined Performance Management in a way much more convenient to their research work but more or less these definitions possess the same meaning and remain unaltered.

"Performance measurement system may be defined as the process of measuring the efficiency of success rate of an action in any organisation."

"A performance measurement may be defined as a standard used to measure the efficiency and/or success rate of any action happened/ing inside the organisation."

"A performance measurement system may be defined as a set of standards that are being used to measure both the efficiency and success rate of actions articulated in an organisation." (Neely et. al.1995).

3. Characteristics of an ideal performance management system

- Strategic similarity.** An ideal performance management system followed in any unit of an organisation should be possessing similarities with the strategies followed by an organisation.
- Attention in detail.** Attention on Performance management system should be kept ready in all the four dimensions such as the evaluation of employees including managers, evaluation of major job responsibilities, evaluation of performance span starting from the review period and finally the feedback system that involves both positive aspects as well as those that demand improvement.
- Practicality.** Implementation of Performance management systems becomes successful and effective only when they are less expensive, consume lesser time and are simpler to use. The benefits of using a performance management system should outweigh the implementation and maintenance cost of the system.

- d. **Effectiveness of the PM system.** The performance management system should comprise of relevant evaluations and the evaluations should be considered at a specific period of time. These evaluations must be done regularly at a fixed time interval. The PM system should allow provisions for evaluator's skill development. The collective data obtained by such a system should be used in making/taking effective decisions.
- e. **System Specificity.** A good PM system should be precise, in other words, the system should facilitate the employees the complete guidance on what are their targets in the organisation and how should they be met.
- f. **Differentiation of effective and ineffective performance.** The Performance Management System should be helpful in decision making by providing information on effective performance and ineffective performance at different levels. A system which does not give this information effectively becomes impractical in any organisation leading to employee dissatisfaction and damaged relationships
- g. **Reliability.** A virtuous PM system should always facilitate error-free Performance measurement
- h. **The validity of results.** While evaluation is in the process the PM system shall consider all relevant data without excluding any important aspects and also it should consider only those data that are within the limits of the employee. At the same time, it shall not incorporate irrelevant data and make the output a mess of all the inputs.
- i. **Inclusiveness of Employees.** Very often there exists a resistance from the employees for the reforms that are being introduced, irrespective of whether the implementation is in a small organisation or a large organisation. Under such circumstances, Employees consider themselves as being excluded from the process and think that the chances of downsizing the employees are more. But training them their performance evaluation and motivation (positive/negative) becomes a critical factor when the organisation will have to meet the changing demands of society. Thus employees should be made a part of this process and in doing so an employee's meeting must be organised and the details should be clearly addressed.
- j. **The openness of the system.** The intention of using a PM system is aiming at betterment or improvement of an organisation. For the growth of any organisation transparency in its processes becomes a vital force. The performance should be frequently and constantly evaluated while the feedbacks are provided instantly. The communications in appraisal meetings should be two way rather than just being the one that is delivered by the supervisor for his employees. communications made during the process should be honest, factual, simple and clear to understand
- k. **Decisions Correctability.** A well-accepted PM system should have a provision for rectifying the defects made by

an employee by making a wrong judgement. Also, it should have provisions for employees making an appeal challenging the decisions created by the use of PM system.

- l. **Process Standardisation:** The term process standardisation is used to denote that the activity of employee performance evaluation is constantly and regularly done. To make this evaluation process effective the managers and their subordinates will have to be trained regularly to meet the changes in the changing system.
- m. **Organisational Ethics.** A good PM system is found to comply with the organisation's ethical standards. That is the supervisor performs his/her duty by suppressing his/her personal self-interest in evaluations being made. Additionally, supervisor/s evaluates only the performance dimensions about which he/she has sufficient information. During the process privacy of the employee is respected to the maximum.

4. Role of Performance Management System (PMS)

In the recent management systems, the right meaning of Performance management has been understood in the correct sense and has been implemented effectively in many organisations to meet the desired outreach of the organisation. It not only helps the organisations to accomplish the set goals within a stipulated period of time in the possible easiest way but, also helps in building a healthier and motivated interpersonal relationship between the management and the employees.

Performance management systems play the following pivotal role in an organisation

- It helps in understanding the easiest possible methods of reaching the set goals
- Helps the managers in assessing an employee's performance
- Helps in understanding the instrumental roles of a manager
- Removal of frustration towards the assigned task and ease out the complexity through its existence.

However, there is no definite format for the classification of the Performance Management System. Thus it can vary from an informal simple talk on the go towards improving the productivity of a manufacturing unit to the most systematically structured formats like the employee performance assessment through the performance-appraisal.

For the effective working of any organisation Performance management (PM) becomes a critical aspect (Cardy, 2004) as it plays a pivotal role in accomplishing the tasks outlined. PM is often referred to as "Achilles Heel" of human capital management (Pulakos, 2009) thus making it the top priority of top managers (Lawler, 2008). In almost all organisations that practise PM, a very few employees believe that with the performance growth of the organisation their individual performance also improves and assist them in improving

their standards of living. This is the root cause for ranking PM at the least ranks amongst other important topics in surveys conducted on employee satisfaction (Pulakos, 2009).

Present day organisations are facing new challenges which have made them concentrate much on their employee performances through upgrading PMS (Buchner, 2007). Different researchers have similar opinions on improving the performance of an organisation but, Jamie A. Gruman et.al (2011), in their paper, argue that one of the key methods of improving the PM process is only by promoting employee engagement.

5. Advantages of Performance Management System

From the research review done on PM, we significantly observed and have noted the following aspects.

- a. **Increased Motivation to perform better:** The motivation to perform still better was increased with the positive feedback system. Through the feedback system, the employees gain the knowledge of what he/she is doing and try to improvise the efforts being put. A review of one's success in the past boosts the present performance and routes to improvised accomplishments.
 - b. **Increase in employee Self-esteem:** Appreciating the employees through the feedback on one's performance accomplishes the basic need of being valued at work and gives a feeling to the employee that he/she is also a part of the organisation thus it improves the self-esteem of the employee.
 - c. **Managers know your subordinates!** By practising the feedback system, supervisors and various managers who are in charge for the employee appraisal will get an insight into their subordinates who is appraised. The competency of manager's lies in developing a productive and cordial relationship with their colleagues, thus gaining insight of an employee's performance and personality contributes towards developing productive bondage with the employee and knowing individual employee's involvement towards the set goals and targets of the organisation.
 - d. **Definition of Job.** The employees of an organisation will get clarity in understanding what is expected from them along with how to successfully contribute to the set goals and targets of an organisation
 - e. **Enhanced insight and Self-development.** As the employees progress with an organisation they develop an insight into their work in connection with set target and goals of the organisation, individual strengths and weaknesses. This will help in building confidence and defining their career paths down the line.
 - f. **Appropriate and fair Personnel actions.** PM systems are found very much helpful for rewarding and taking disciplinary actions on every performance of the employee in an organisation. In actual practice, the performance management systems create transparency in all the actions taken against or in favour of an employee.
- In general, the Performance management system creates a platform for assessing employees and leads towards developing strong interpersonal relationships.
- g. **Clarity of Organisational goals:** the attainable goals and targets to be reached are well set and defined. The employees form an integral link with the organisation, in the process of accomplishing the set targets and goals, contributions of each and every employee towards the success of an organisation play a significant role. Thus the contributions of individual employees are made very simpler and much clear.
 - h. **Employee competency:** with the implementation of transparent feedback system linked with rewards and penalty, the desire of each and every employee to be in the good books of the organisation increases, thus there arises a healthy completion in between the employees of the same cadre and results in improved production at shorter intervals of time. This lays a foundation for the development and improvement of employees through proper development plans.
 - i. **Employee/employer protection under lawsuits:** Quite often the data available with organisations by practising a proper performance management system would help the employee/employer to build documents in accordance with the regulations set by the statutory bodies (e.g., equal employment rule). In the absence of a performance management system, performance evaluations are made arbitrarily which may lead to the increased chances of facing a large number of lawsuits by an employer.
 - j. **Distinguishing good performers from poor performers:** Performance management systems help managers in identifying good performers and poor performers within a shorter period of time. PM system also gives an indication to the supervisor on the needs of his immediate subordinates and pressurise him/her to give a timely solution to the encountered problem/s. This action taken by supervisor/s stops the problem from spreading wide in the organisation and prevents the remedial actions from becoming too costlier.
 - k. **Clarity in Supervisor's performance views:** Performance management system facilitates managers to share their opinions and viewpoints in connection with employee performance. This also creates accountability of a manager's discussions on employee performance expectation and provision of employee feedback. Employee assessment and monitoring employee performance forms a key competency of the manager. This competency of the manager facilitates his subordinates with valid information on the performance viewpoint/s of their supervisor/s.
 - l. **Enabling Organisational change:** Any organisation to survive successfully in the market, it becomes inevitable for it to be flexible in its policies and regulations in lieu with the on-going trends, ever-changing customer mindsets and market competencies. A change happening externally to the organisation demands a change internally in the organisation. Thus this internal change

changes the organisation culture to suit the external change. Once new organisational directives are established, Performance management systems may be used for bringing the organisational culture in line with the goals and organisational objectives. Thus internal changes made in the organisation matches the external changes outside the organisation. Facilitating continuously the demands of the customers require knowledgeable employees with motives of improvising the quality of the product as per the needs of the customer. To meet the ever-changing customer demands Employees should be trained in accordance with the requirement and should be motivated suitably to drive the organisational change.

6. Limitations of performance management systems

- a. **Unstable employee retention.** The process of assessing an employee's performance if it is not systematically defined or if the employee is not satisfied with the process of assessing him/her, or if he/she finds it to be unfair, he/she may leave the organisation or he/she may reduce his/her capability of working until he/she finds another job in another organisation.
- b. **Use of False or Deceptive data.** Use of a substandard performance management system may have many options for incorporating false or deceptive employee performance data.
- c. **Lowered employee Self-esteem.** If the feedback of any employee is inaccurate or is being provided inappropriately, employee antipathy is created.
- d. **Wastage of valuable resources.** Performance management systems having designed poorly or Implementation of a poor Performance management system results in money laundering and wastage of time
- e. **Damaged Relationships.** A poor Performance Management system gives unacceptable results, the results annoy the perseverance of employees as a result of which the individual relationship between employees gets damaged permanently.
- f. **Decreased performing Motives.** Many times employees are underpaid for their work and thus a difference of opinion exists between individuals. These differences in opinion often create decreased performance motives.
- g. **Occupational burnouts and dissatisfaction.** With the use of a substandard performance management system, the outcomes are much unacceptable and the system is often seen as an unfair instrument. This is the main reason for occupational burnouts and increased employee dissatisfaction.
- h. **Increased litigation risks.** Employees who have been unfairly appraised may challenge the appraisal and may sue the employers which result in facing expensive lawsuits by the organisation.

- i. **Use of unjustified amount of Managerial resources.** Poorly implemented performance management systems provide lesser benefits as against that of a well-implemented performance management system. This often poses hindrances by posing obligations on organisational competency and drains the organisational resources.
- j. **Variations in ratings and Standards.** The standards and individual employee ratings vary across and may sometimes be unfair.
- k. **Replacement of standards with Biases.** Organisational standards are replaced by Personal values, biases and relationships.
- l. **Employee confusions on derived ratings.** poor communications often create chaos amongst employees and may not understand how the individual ratings are being generated or how they are being rewarded on the basis of ratings.

7. Performance Management (PM) in Manufacturing Industries

The definitions of PM defined in the previous lines are very precise, but there always exists a difference between what is defined and what is actually practised. The same is found even in the present review. This review is mainly limited to employee performance and Performance Management in Industries. Most often performance measurement is identified with the use of multi-dimensional performance measures. This multi-dimensional bunch of measurement involves both the measurement of non-financial and financial measures in combination with measures of internal and external parameters along with those measurements that quantify the achievements and the measures used to predict the future.

Some of the identifications from the literature review showcase that PM cannot be achieved by isolation. PM becomes pertinent only with respect to a locational framework, with reference to this framework, efficacy and the effectiveness of the actions taken can be adjudicated. To put it in a better and shortest form, one can develop performance measures only out of the strategies in hand.

Many researchers have the opinion that the PM is an integral part of management planning and control system of the organisation for which the PM is being evaluated. Thus performance measurement on this basis influences a lot on the environment in which it is operative. Initial stages of PM seek attention on the decisions of the measurement process, how the measurement should be made, how the attainment of the set target/s will have to be checked, do all these actions that affect an individual or a group are existent inside the organisation or outside the organisation. On analysing all the above questions, one will definitely attain an idea of PM and factors on which PM is dependant.

In many manufacturing organisations, performance measurement is being widely used to evaluate the influence

of actions on stakeholders and is considered as the process of quantifying the efficiency and effectiveness of actions carried out during performance evaluation of the organisation on the customer. This process of performance evaluation of an organisation does not have a significant effect as that found in the cases involving the performance measurement of the employee or local community gratifications.

At this point, though investigations made by Neely et al. [9] and the definitions made stand still valid, the performance management concept investigated in this paper extensively concentrates on the parameters used for measuring the performance of the planning and managing activities of manufacturing industries. With the identification of the meaning of performance measurement, the authors review the literature to present in detail the development of Performance Management Concept.

8. The concept of Performance Management

The performance management system is not only limited to the evaluation of the performance of an organisation (Cardy, 2004), instead, it also involves the practices policies and the common design features that incorporate employee performance. To achieve the set objectives of an organisation rather than through a single HR activity, patterns of HR activities are essential (Delery & Doty, 1996). Armstrong (2000) in his observations states that the performance management process provides an opportunity to integrate all HR strategies followed in an organisation. By combining all such HR practices one can create a situation where one activity compliments and supports the other. Thus, completing the HR architecture required for complete enhanced performance of an organisation (Pfeffer, 1998). Verweire and Van Den Berghe (2004), suggest that performance management becomes much more valid only by aligning the various components of the system. By combining all the HR activities an expected outcome can be attained (Mac Duffie, 1995). Even though performance measurement becomes the prime objective of PM, increased performance is often considered distal. Kuvaas (2007) in his research has observed developmental goal setting and feedback with relationship and self-reported performance was mediated by intrinsic motivation. Also, the reasoning variables were indicative of the employee's response to employee feedback. (Kinicki, Prussia, Wu, and McKee-Ryan 2004). PM often motivates the employees and commits them to the objectives of the management (VerWeire and Van Den Berghe 2004), Achieving in accordance with the earlier set targets of the organisation becomes thus very essential. One of the vital variables which every researcher concentrates after setting the goals of the organisation is the commitment of the employees and employee engagement (Macey, Schneider, Barbera, & Young, 2009). Employee engagement being a relatively novel concept (Macey & Schneider, 2008) may totally produce much more traditional outputs from the employees, with respect to employee satisfaction and job satisfaction. (Macey et al., 2009). Methods and systems favouring employee engagement thus provide an important but experimental result in the PM literature Survey.

(Sparrow, 2008). Banks and May (1999) in their research have found that by focusing on employee engagement may yield a better performance beyond that of the achievable limits in the PM process. However, Performance assessment through employee engagement does suit only to jobs that are stable and follow routine procedural processes but, modern works which are less static cannot be evaluated through the continuous employee engagement (Singh, 2008). In this perspective, the modern day job is quite often subjected to a lot many variations (Fletcher & Perry, 2001). Fletcher and Perry (2001) in their work quote that the modern day work culture demands dynamic and multidimensional performance which is attained through emotional intelligence (Goleman, 1998) and by differentiating it as a task and its related performance (Borman & Motowildo, 1993). To achieve continuous goals and meet the demands of an organisation, the management and control system approach that improves the performance of an organisation is found much more essential (Pulakos, 2009). Managing performance of employees by supervisors becomes a difficult task when the number of knowledge workers increases when the supervisor lacks a direct experience, when the workplace is subjected to decentralisation and when the workforce has a larger span of control. Under such circumstances, the expected outputs of knowledge-based economies that are controlled by supervisors yield performance that is not the actuals (Buchner, 2007; Fletcher & Perry, 2001). Pulakos, Mueller-Hanson, and O'Leary (2008) have identified that the task of managing and setting objectives for employees where the economies are driven by knowledge and service, intensive jobs as these are quite often subjected to large variations and are very much subtle in nature.

Miller (1977) in his work states that to improve the productivity of an organisation one should focus on "facilitating" performance rather than concentrating on "managing" performance. The modern day PM process is much more result oriented rather than personality, behaviour and competency oriented (Fletcher & Perry, 2001; Pulakos, 2009). In such a situation there is a lack of employee motivation and creates an unhealthy working environment. (Jamie A. Gruman, 2011).

9. Performance Management through feedback

All the times it so happens that the performance of an employee is greatly dependant on his demands and his opinion towards the organisation and the management. Managers play a bonding relationship between the management and employees of any organisation thus, it becomes his utmost important duty to understand the grievances of his staff and find the optimal solutions to tackle the same with the consent of organisational heads. To improve the employee morale the managers will have to be in constant and continuous touch with his staff. Having feedbacks from his employees at regular intervals and also having effective interactions with them would help him in improving the employee morale and thus employee performance. This will also minimise the intervention of

bureaucrats in minor organisational issues and help them to concentrate on the chief goals of the organisation.

The manager should always pay his attention to simplicity and should have a relaxed attitude towards the implementation of PMS. He should involve himself in giving frequent but unstructured feedback to his employees on their performances and job-related activities. Review meetings will have to be conducted very often, to understand the performance of the employees and the manager as a whole to stand back from day-to-day pressures. The manager should always have a focus on the future, concentrate on the opportunities in hand, complete the present task and learn a lesson from yesterday's events and pay less attention to the lost opportunities in the past.

Models of performance management and engagement management

Numerous Performance Management Models were designed by different researchers to assist them in assessing the employees on the basis of predictable variations and provide feedback to the employee to improve his performance. The generally focused variables in employee performance management are the goals or achievable targets set, performance agreements, facilitations provided against performance, performance monitoring, feedback, performance appraisal, and improved performance reports (e.g., Armstrong, 2000; Pulakos, 2009). Also, there are few models which include variables apart from that required to evaluate the performance of employees and help the management to assess the norms of the organisation, technology followed by the organisation and the business strategies followed. J.A. Gruman et. al. (2011) has framed a model to portray the PM process that involves employee engagement. Fig.1 illustrates the employee engagement model. The model primarily concentrates on improving the employee engagement which is a prerequisite for high performance.

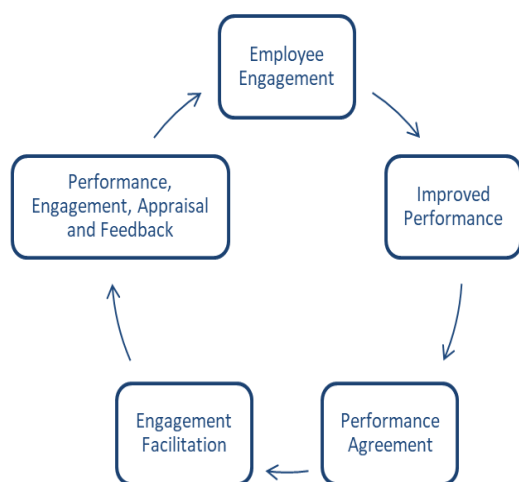


Fig. 1 Employee Engagement Management Model

In this model, through all the basic elements are retained the same the model is designed such that it makes an attempt to go beyond the traditional elements and cover a holistic

approach of the organisation and broadly states the performance constituents. To start with, the model outlines the performance agreement in relation to the accomplishment expectations of the employees. The uniqueness of this model is that all the parameters, its goals and associated performance indicators (PI) have to be negotiated to nurture employee engagement. While the negotiation is in process, the psychological contract will be reviewed to enable the engagement.

J.A. Gruman et. al. claim that this model is built incorporating a novel feature that involves psychological capital development which is held responsible for promoting employee engagement. As compared to focussing entirely on performance appraisals rating accuracy, the focus on employee engagement, his performance appraisal and feedback to the employee without any bias acted as the key motivators for the employee engagement. The model depicts employee engagement at all the stages indicating improved performance.

Proceeding further J.A. Gruman et. al. uphold the state for achieving higher results the performance management process should always facilitate its employees with necessary resources. Buchner (2007) in his observations has found that the motivational key structures of PM processes and models are seldom explicit. Owing to the varying needs of the employees that are based on the appraisal and the feedback system, the engagement facilitation activities will also change throughout the process.

Origin of Performance Management System's in large industries

The main intention of PMS frameworks/ Models is to help the management in analysing and improving the operational efficiency of a business, measure its performance through the quality decision making the process. All the PMS frameworks/models are subjected to some empirical testing and theoretical developments at some of the other stage. The Economic Value Added Model (EVA model) and the Activity Based Costing (ABC model) of the 1980s, took its origin because of the existent deficiencies present in the traditional Accounting system. Later in the year 1988, a novel model called as Strategic Measurement Analysis and Reporting Technique (SMART model), brought about a vital change to the performance measurement literature by paying much attention to linking strategy to operations by the use of external and internal performance measures and moulding the organisation into an integrated system. This SMART model was succeeded by the Supportive Performance Measures Model (SPA model). In this model, new concepts such as the balanced measures and use of non-financial indicators were introduced to the existing SMART model.

During the early 1990s, a completely new approach took its origin. This model was popularly called as Customer Value Analysis or the (CVA) model. This model emphasised much on shifting the performance measurement exclusively on the commercial viewpoint of the organisation. There are many other models such as the Business Excellence Model (BEM Model) which emphasised on one main approach to achieve

excellence. During the 1990s, a lot many PMS models and frameworks like (RDF, BSC, SPC, IPMS, CBS and IPMF) were introduced with the main intention of either offering integrated solutions to performance management or possessing just a specific methodology/ies for fixing the issues of PM.

Amongst these many models/frameworks, the Balanced Score Card model was much successful as it comprehended many financial and non-financial features to evaluate complex performance measures. The BSC model has received widespread appreciation in the past and has been implemented successfully in quite many industries. The most recently developed models/ frameworks differ from the earlier ones from the fact that the novel model/frameworks have the features of linking the strategies to operations. These models/frameworks offer balanced measurements to both financial and non-financial activities and generate measurable relations incorporating PI by highlighting PM as a process of reasoning.

Models that evolved post-2000 showcased much more improvements in understanding the PM process. The Dynamic Performance Measurement System abbreviated as

DPMS model has become the most popular amongst all other models. Its ability to integrate the practice of Information technology and a quantitative model that can manage the cause-effect Performance indicators relations has fetched it, its popularity.

The Performance Prism model abbreviated as PP characterises the integration of an architectural design framework. Capability Economic Value of Intangible and Tangible Assets Model abbreviated as CEVITA and the Unused Capacity Decomposition Framework abbreviated as the UCDF have extended the PMM boundaries by concentrating more on the increasing value of intangible assets and evaluating the significance of managing vacant capacities. With the increasing importance of dealing the fixed cost capacities, UCDF gains much more importance and the primary investigations on the works carried out so far reveal a clear distinction between the integrated PMM frameworks and the PMM models for solving specific issues in PMM and other appropriate models for PMM system design. Table 1 gives the classification of the models based on specific criteria.

Table 1 Developments in terms of Performance Management Frameworks/ Models/ Systems Analyzed

Integrated frameworks for PM		Models to face specific issues in PM		Other relevant models for PMM system design	
1988	Strategic Measurement Analysis and Reporting Technique.	1980	Economic Value Added Model.	1988	Activity-based Costing.
1989	Supportive Performance Measures.	1990	Performance Measurement Questionnaire.	1990	Customer Value Analysis.
1991	Results and Determinants Framework.	1995	Return on Quality.	1999	European Foundation for Quality Management Model.
1992	Balanced Scorecard.	1996	Cambridge Performance Measurement Framework.	2001	Manufacturing System Design Decomposition.
1994	Service Profit Chain.	1996	Consistent Performance Measurement System.		
1997	Integrated Performance Measurement System.	2001	Action Profit Linkage Model.		
1998	Comparative Business Scorecard.	2004	Performance Planning Value Chain.		
1998	Integrated Performance Measurement Framework.	2004	Capability Economic Value of Intangible and Tangible Assets Model.		
2000	Dynamic Performance Measurement System.	2006	Performance, Development and Growth Benchmarking System.		
2001	The Action-Profit Linkage Model	2007	Unused Capacity Decomposition Framework.		
2001	Performance Prism.				
2003	Dynamic Multi-dimensional Performance Framework				
2004	The Performance Planning Value Chain				
2006	Holistic Performance Management Framework				
2009	The Performance Management System Framework				
2010	Flexible Strategy Game-card				
2011	Sustainability Performance Measurement System				

10. Research agenda and discussions on the literature review.

The considerations prevailed across and the ideologies that arose during the literature review have become the candid standpoints for the current research agenda.

1. Efficacy of implemented PM systems.

In the recent days, academicians have potentially contributed towards filling the gap between the academia and the industries through the identification of key driving forces and the logic that has allowed effective management of enterprises through its performance measurements. They have also found the best possible ways for transforming data and information into value-making deeds by evaluating the performance of industry through their predefined objectives.

To bring about effectiveness in performance management systems within an organisation, primarily conditions favouring an effective and complete utilisation of the Performance management system has to be established. The main objective of such a system should be facilitating the enterprises with information technology tools for the extraction, collection and elaboration of the data that characterises one's business. This step becomes an important task for many manufacturing industries

In addition, the rationality existing behind Performance management systems will have to be modified so as to help the industries in recognising relationships existing between its basic business processes. Thereby they can effectively contribute towards fulfilling the gap. The gap formed is the result of inherent difficulties faced by companies in translating correct information obtained by the measurement processes to respective correct tasks. The exertion so created is entirely dependent on the unusual understanding of cause-effect relationships that every indicator is based upon.

2. Reliability and dissemination of PM research in manufacturing industries.

Adoption of Performance management systems within a manufacturing industry appears to be different as it is regarded by a lesser percentage of adoption. Unsuccessful utilisation of performance management systems within an organisation can be credited to the internal factors of the company and unsuitability of the performance management system to the organisation.

The primary aspect that bothers manufacturing industries is because of inadequate thinking by the management. Rather than thinking on the implementation costs involved in making the entire organisation performance oriented, thoughts of reaping benefits and the savings of the organisation acquire by making it a performance-oriented should be thought of. From the operator's perspective, the fear of problems caused by the performance management system and the loss of a job is always thought of. Therefore structural actions aimed at

creating a favourable environment for the implementation of Performance management systems will have to be exercised.

3. CONCLUSION

This review paper presents the literature review conducted by focusing on the state of art PM system research. The evolution of performance management system was done on the basis of citation analysis. Literature Review of the performance management system was done by concentrating on the PM Models and effective frameworks that came into existence in the last one and half decade. From this review, it is found that the conditions in favour of large companies are entirely different from that of small companies. Therefore the implementation of PM systems in small and medium-sized industries is always subjective to challenge.

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