

Implications of Business Process Management for Product Performance

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Abstract

An organisation is a group of interrelated and interdependent processes and the improvement of these processes is the prime aim of process management in TQM. Deming reveals that the treatment of organisational problems is generally consistent with process management. Effective process management develops a sense of ownership in employees, satisfaction, reduction in variations, quality improvement and ultimately performance optimisation. Hence, quality processes are of great significance in delivering quality products and satisfying customer needs. One of the crucial factors in successful implementation of TQM is Business process management. MSMEs play critical role in the economic development of a country. Quality management of these MSMEs is would be critical for their stability. The aim of the paper is to examine the level of Business process management against perceived quality at MSMEs of Ballari, Karnataka. The universe comprised executive and non executive workforce of the firm. Sampling was carried out using convenient sampling technique with sample size of 50 in line with the Cochran formula. Data was collected using observation and informal interview methods. Descriptive statistics and Chi-square test was used to analyse the data. The research envisaged that all the factors of Business process management are associated with perceived quality at the MSMEs. The study revealed that, performance linkage to benefits and negative motivation at the MSMEs has significant influence on product performance.

Keywords: Business process management, Factors of Business process management, product performance, etc.

I. Introduction

An organisation is a group of interrelated and interdependent processes and the improvement of these processes is the prime aim of process management in TQM. Deming reveals that the treatment of organisational problems is generally consistent with process management. Effective process management develops a sense of ownership in employees, satisfaction, reduction in variations, quality improvement and ultimately performance optimisation. Hence, quality processes are of great significance in delivering quality products and satisfying customer needs (Deming 1986). Crosby (1979) also expounded that all activities carried out within an organisation can be broken down into fundamental processes and are connected together in a quality chain. This approach helps an organisation to realise its goals (Yong and Milkinson 2001). Ultimately a process can be defined as the transformation of set of inputs, which includes actions, methods and operations into outputs that meet customer needs and expectations (Okland 1993). The process comprises critical tasks which are linked together. Identifying these critical tasks and placing the right people to take responsibility for them which leads to the start of getting the process team organisation up and running (Okland, 1993). Therefore organisational members should always bear in mind that all their work is a process, which can have an effect on their adjacent works, and ultimately the company's output. Any TQM company is required to have good process management and this will involve R&D design, Management of process quality for all work units, systematic quality improvement and quality assessment (Yong and Milkinson 2001).

The study on quality management system of the firm would help the MSMEs of the region to know the findings and adopt necessary changes or practices in their quality management system.

Based on the emphasised significance of Business process management in incepting TQM in the previous studies, the following practices were considered in the design of the questionnaire in order to examine the level of Business process management at the MSMEs under study.

Table showing Business process management (PM) items used in the study

A	Maintenance of production equipment: Production equipment is maintained well according to the maintenance plan.
B	Quality control procedure: Company strictly identifies and analyzes significant variations in process and output, determines root causes, makes corrections and verifies result.
C	Inventory Management: Keeps the amounts of inventories as low as possible.
D	Quality Inspection: Conducts incoming, in-process, and final inspection effectively.
E	Standardization of Processes: Company has site-wide standardized and documented operating procedures.
F	Process Benchmarking: Company systematically conducts extensive benchmarking of other companies business processes.

Product performance

Organizational excellence is determined by measuring the holistic performance of an entity. But, when it comes to its measurement, performance has gradually gained more objectivity sense. Therefore new methods of reporting performance is gaining significance these days. Quality Performance is one such performance measure targeting quality in any processing systems of the organization. Therefore, major quality performance factor product performance is used in the study.

Problem Statement

Quality and quality management are quite necessary elements any organization shall have to practice. As per the current and previous studies on quality management, among quality management practices, Business process management has been playing crucial role in influencing quality and other practices quality management in the organization. What would be in case of MSMEs? And how it would be in MSMES? Especially at non metros, are the inquisitive corners need to be pondered. Therefore, the current study tries to explore and describe the nature of Business process management and its influence in terms of product performance under the study.

Hypotheses

H0: There is no association of Business process management on product performance.

H1: There is an association of Business process management on product performance.

II. Methodology

Type of the Study: Descriptive-Survey research

Population: MSMEs of Ballari

Sample Size: 50 as per Cochran formula

Sampling Technique: Convenient Sampling

Data Collection Instrument: Visit observation, interaction, informal interview, etc.

Data analysis and Hypothesis Testing: Descriptive and Inferential statistics, Chi-square Test and Freedman test

III. Results

As per central limit theorem, distribution of data is normal. In order to test research hypothesis, Chi-square - test was used.

Table-1 Chi-square Test for association of Business process management with product performance

Association	P-Value	X^2	Accept/Reject Ho
Business process management and product performance	0.00	26.7	Reject
Sub Components of Business process management			
Maintenance of production equipment	0.00	20.5	Reject
Quality control procedure	0.00	27.4	Reject
Inventory Management	0.00	16.7	Reject
Quality Inspection	0.00	20.3	Reject
Standardization of Processes	0.00	22.1	Reject
Process Benchmarking	0.00	24.3	Reject

The table indicates that, p value is less than 0.05. Therefore we reject null hypothesis that is it is found that there is an association of Business process management with product performance at the firms.

The following table ranks the factors of Business process management as per Friedman’s Test

Table-2 Ranking of factors of Business process management

Factors of Business Process Management	Priorities
Maintenance of production equipment	5 th
Quality control procedure	1 st
Inventory Management	3 rd
Quality Inspection	6 th
Standardization of Processes	4 th
Process Benchmarking	2 nd

Table indicates that diversified training and interdisciplinary interaction at the MSMEs has significant influence on product performance at the firms.

IV. Discussion

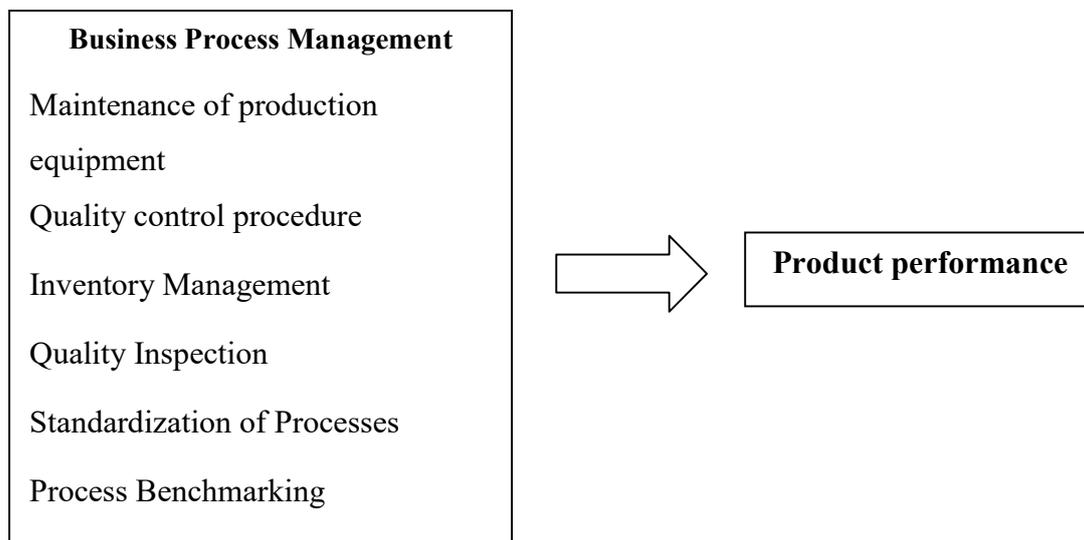


Fig: Model representing the association of Business process management and Product performance

Significance of Business process management on product performance

An organisation is a group of interrelated and interdependent processes and the improvement of these processes is the prime aim of process management in TQM. Deming reveals that the treatment of organisational problems is generally consistent with process management. Effective process management develops a sense of ownership in employees, satisfaction, reduction in variations, quality improvement and ultimately performance optimisation. Hence, quality processes are of great significance in delivering quality products and satisfying customer needs. This study is also showing significant relationship with product performance at the MSMEs. All the identified factors of Business process management are found critical with product performance. However, quality control procedure, process benchmarking, inventory management and standardization of processes at the MSMEs has significant influence on the product performance.

Significance of Quality control procedure on Product performance

The study identified that strict identification and analysis of significant variations in process and output, determines root causes, making corrections and verifying result has significant influence on the product performance at the firms.

Significance of Process benchmarking on Product performance

The study found out that systematic conduct of extensive benchmarking of other business processes encouraging interdisciplinary interactions and knowledge sharing has significant influence on the product performance at the firms.

Significance of Inventory management on Product performance

The study found out that keeping the amounts of inventories as low as possible systematic conduct of extensive benchmarking of other business processes has significant influence on the product performance at the firms.

Significance of Standardization of processes on Product performance

The study found out that firm having site-wide standardized and documented operating procedures has significant influence on the product performance at the firms.

V. Conclusion

An organisation is a group of interrelated and interdependent processes and the improvement of these processes is the prime aim of process management in TQM. Deming reveals that the treatment of organisational problems is generally consistent with process management. Effective process management develops a sense of ownership in employees, satisfaction, reduction in variations, quality improvement and ultimately performance optimisation. Hence, quality processes are of great significance in delivering quality products and satisfying customer needs. This study is also showing significant relationship with product performance at the MSMEs. All the identified factors of Business process management are found critical with product performance. However, quality control procedure, process benchmarking, inventory management and standardization of processes at the MSMEs has significant influence on the product performance.

References

1. Mohamed Zairi (1997) Business process management: a boundaryless approach to modern competitiveness. Business Process Management Journal Article publication date: 1 April 1997, ISSN: 1463-7154.
2. D.J. Elzinga; T. Horak; Chung-Yee Lee; C. Bruner (1995). Business process management: survey and methodology. IEEE Transactions on Engineering Management, Volume: 42, Issue: 2, May 1995.
3. Richard Yu-Yuan Hung (2011) Business process management as competitive advantage: a review and empirical study. Pages 21-40 | Published online: 11 Feb 2011.
4. Colin Armistead, Simon Machin (1997) Implications of business process management for operations management International Journal of Operations & Production Management, ISSN: 0144-3577, Article publication date: 1 September 1997.
5. Rok Škrinjar, Peter Trkman, Michael Rosemann, Jan vom Brocke (2013) Increasing process orientation with business process management: Critical practices, First Online: 11 April 2014, February 2013, Pages 48-60.
6. Markus Kohlbacher (2010) The effects of process orientation: a literature review.
7. Business Process Management Journal, ISSN: 1463-7154, Article publication date: 9 February 2010.

8. Markus Kohlbacher , Stefan Gruenwald(2011) Process orientation: conceptualization and measurement Business Process Management Journal,ISSN: 1463-7154,Article publication date: 19 April 2011.
9. Jan vom,Brocke , Theresa Schmiedel , Jan Recker , Peter Trkman , Willem Mertens , Stijn Viaene (2014) Ten principles of good business process management.Business Process Management Journal,ISSN: 1463-7154, Article publication date: 1 July 2014.
10. ColinArmistead, Jean-PhilipPritchard, and SimonMachin (1999) “Strategic Business Process Management for Organisational Effectiveness” Bussiness Process Management Journal,Volume 05 No 01 pp 10-32.