TEST Engineering & Management

January - February 2020
ISSN: 0193 - 4120 Page No. 2531 - 2534

Demonstration of Industrial Management Methods

Dr. Monika Gupta, Rajnish Shukla, Dr. Vishal Soni
Dept. of Management
Chandigarh Business School of Administration, Chandigarh Group of Colleges, Chandigarh
cgcpapers@gmail.com

Article Info
Volume 82
Page Number: 2531 - 2534
Publication Issue:
January-February 2020

Article History
Article Received: *14 March 2019*
Revised: *27 May 2019*
Accepted: *16 October 2019*
Publication: *18 January 2020*

Abstract
In recent years, many companies are adopting various method of Industrial Management to maintain competitiveness in the industrial market, process technologies, attitude of supplier, management changes, competitive behaviour, whereinmethod comprises of significant factors such as proper scheduling, planning, quality assurance, resources deployment and monitoring consisting of equipment, tools, components, machines, and materials. The method has proved to be beneficial for the implementation and advancements of "Enterprise Resource Planning" (ERP) by organizing proper maintenance strategies. Risk management is a characterized part of Industrial management which deals with the successful delivery of Information Technology (IT) projects, wherein the process provides an optimum solution to overcome the problems of late delivery of IT projects. Nowadays, various strategies has been developed for management of SRM (Supplier Relationship Management) system and Knowledge management using e-learning.

Keywords: *project management, risk management, supplier relations, Information technology, e- learning.*

1. INTRODUCTION:

Till date, industrial markets has encountered some influential changes which forces to develop new industrial strategies, wherein enterprises aim at ensuring maximum output with the minimum cost of production by maintain the quality of the product and reaching in short time-to-market. Many basic theories were adopted in the methods of Industrial management, wherein Douglas McGregor Theory X and Theory Y and Herzberg's Two Factor theory of motivation are the two popular theories. Whereas, Douglas McGregor Theory X deals with the average employees who does not like to work, avoids responsibilities and forced to warn with the punishment by the mangers. Theory X encourages the use of tight control and supervision. And Douglas McGregor Theory Y deals with the average employees who likes to work, exercise self-direction and self-control when committed to a goal, seek responsibilities and are capable of making right decisions are right time. Theory Y signifies that the manager should create and encourage the employees by providing opportunities to take initiative and self-direction.The two factor theory of Herzberg comprises of couple of factors i.e. Job Satisfaction and dissatisfaction, wherein Job Dissatisfaction deals with relations with the co-workers, policy, rules, wages and quality of supervisor which are influenced by hygiene factors. And Job satisfaction deals with work, development, achievement, recognition, responsibility and identification which are influenced by Satisfier factors. Whereas, principles of Herzberg's theory illustrates that, enhancing the satisfier factors may leads to increase in job satisfaction and

TEST Engineering & Management

January - February 2020
ISSN: 0193 - 4120 Page No. 2531 - 2534

developing hygiene factors decreases work dissatisfaction.

Along with the increasing competitiveness in the industrial market, some developed techniques and processes of Industrial management came into existence, which can be introduced in different sectors of industries as per the requirement. Industrial management is further classified into Project and Financial management, management of human resource, management of Information systems and entrepreneurship. Wherein there exists 4 major components of managing Quality i.e. Quality Assurance, continual improvement, and Quality Control. These involves procedure, tools and techniques to confirm that the outputs and benefits satisfies the customer's requirement. Quality Management assessment tools are Poka-yoke (mistake proof) technique, Kaizan, (5S), Quality management standards of 6-sigma, Ishikawa diagram – Pareto Analysis. The "ISO 27001:2005 Information security Management System ISO 9001:2000 Quality management system standard, the ISO 14001:2004 Environmental Management System Standards". Financial and Project management deals with factors regarding the management of Capital of working and structure, importance of "Securities and Exchange board of India" (SEBI), Involvement of capital and money market, techniques of capital budgeting, levelling of resource, analysis of cost benefits, analysis of project network, "PERT" and "CPM". Human Resource management comprises of Human resource planning along with its objectives and processes which includes various strategies for selection, training and planning of career. An Entrepreneurship management deals with the strategies of Concept of Business opportunities and business idea generation, Generation of business idea, strategies to prepare business proposal and plansand financial source along with the Types of business/ownership (Public Ltd. And Private Ltd. Companies, companies in Govt. sector, etc.), woman entrepreneurship, Industrial relations. Management Information system relates to the strategies of Information system and its classification, Functional Business system such as sales and marketing, Human Resources, accounting, manufacturing, etc.

Recently, Knowledge management value chain has proved to be beneficial for the industries. This method of industrial management uses a key tool which is termed as e-learning.

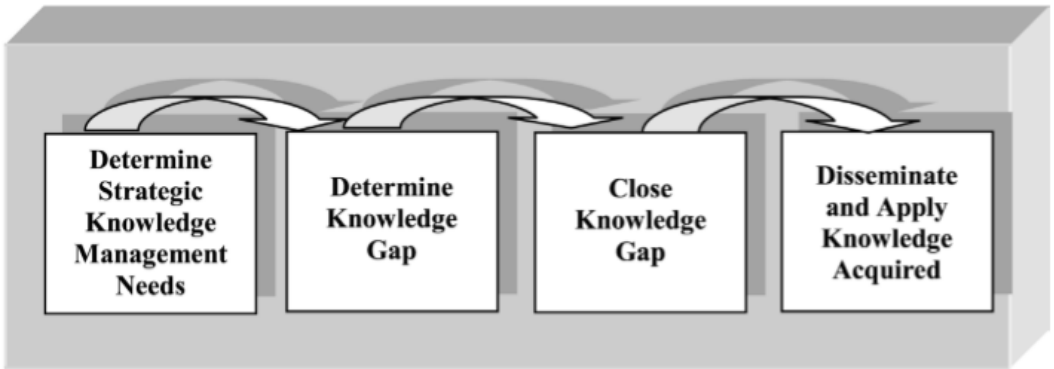

Fig 1 Knowledge management value chain

Fig 1 illustrates a "Knowledge management value chain", wherein the firm related to the management of knowledge based on the service given to the consumers, most of these changes with respect to continuous growth and development. So there was need to introduce a facility like e-learning were the knowledge can be exchanged through online media.

January - February 2020
ISSN: 0193 - 4120 Page No. 2531 - 2534

Yet another method of industrial management i.e. Supplier Relationship Management had played a vital role in framing a strategy of purchasing, supplier selection and development, and technique of collaboration with suppliers.

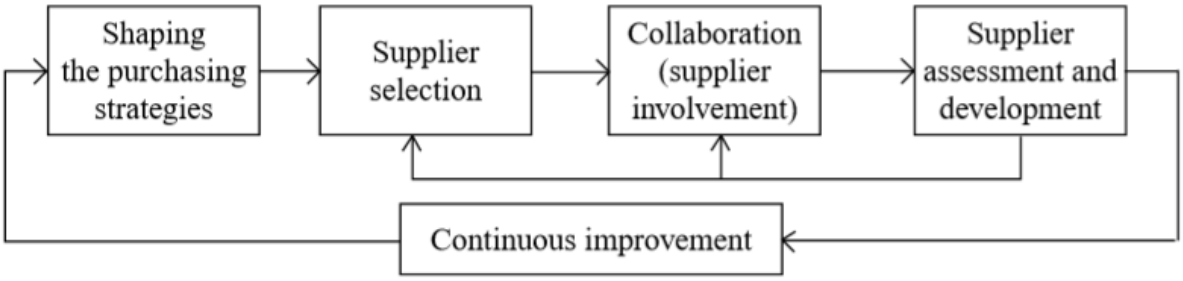

Fig 2 Supplier Relationship Management system

Figure 2 illustrates the framework of"SRM" system, suggesting techniques required for purchasing and coordination with the suppliers, selection of supplier, and their development. Along with this, system comprises of continuous improvement that enhances "SRM" system via improvement and long assessments.

2. LITERATURE SURVEY:

The study of literature demonstrates the method of Industrial management has been enhanced to maintain competitiveness in the industrial market, attitude of supplier, process technologies, management changes, wherein method comprises of significant factors such as proper scheduling, planning, quality assurance, resources deployment and monitoring consisting of equipment, tools, components, machines, and materials. The method has proved to be beneficial for the implementation and advancements of "Enterprise Resource Planning" (ERP)by organizing proper maintenance strategies[1]. Risk management is a characterized part of Industrial management which deals providing the data of Information Technology (IT) projects, wherein the process provides an optimum solution to overcome the problems of late submission of IT projects. The most common risks are: expectations which seems to be unrealistic; personnel shortfalls; unreasonable budget and the schedule of project; requirements which are not complete; and low chances of opportunity because of late submission of software [2]. The study provides the information about the various strategies has been developed for management of SRM (Supplier Relationship Management) system [3]and Knowledge management using e-learning, wherein the employees can exchange their knowledge regarding the product manufacturing in their company along with their ever changing features [4]. Industry 4.0 comprises of new model of industrial management which is termed as Management of SMEs, whereas this is an enhancement of conventional"Enterprise Information System" such as "MES" and "ERP". Each and every resource has not been accomplished by SMEs for enforcing"Industry 4.0" and often limit themselves for acquiring and the IOT i.e. "Internet of things" and computing of cloud. The concepts of "Industry 4.0" have been implemented by SME for analysing the Industrial process and there exist lack of real applications in production planning.[5].

3. RESULTS AND CONCLUSION:

Industrial management process helps in gathering and sorting out the assets regarding the material, production, assembly and resources to accomplish the goals in effective manner without any wastage of time, money and efforts.

Industries can be able to use physical, human and financial resources with best optimum

January - February 2020
ISSN: 0193 - 4120 Page No. 2531 - 2534

combination in such a manner that the cost of manufacturing will be reduced.

New products with their ever changing features forces to develop the methods of industrial management to accomplish the goals. So, methods like SRM system and knowledge value chain through e-learning has proved to be more beneficial for the industrial growth in the market.

REFERENCES:

[1] K. Nikolopoulos, K. Metaxiotis, N. Lekatis, and V. Assimakopoulos, "Integrating industrial maintenance strategy into ERP," *Industrial Management and Data Systems*. 2003.

[2] D. Baccarini, G. Salm, and P. E. D. Love, "Management of risks in information technology projects," *Industrial Management and Data Systems*. 2004.

[3] J. Park, K. Shin, T. W. Chang, and J. Park, "An integrative framework for supplier relationship management," *Ind. Manag. Data Syst.*, 2010.

[4] R. H. Wild, K. A. Griggs, and T. Downing, "A framework for e-learning as a tool for knowledge management," *Ind. Manag. Data Syst.*, 2002.

[5] A. Moeuf, R. Pellerin, S. Lamouri, S. Tamayo-Giraldo, and R. Barbaray, "The industrial management of SMEs in the era of Industry 4.0," *Int. J. Prod. Res.*, 2018.

[6] D. Gannon and A. Boguszak, "DOUGLAS MCGREGOR'S THEORY X AND THEORY Y," *Cris - Bull. Cent. Res. Interdiscip. Study*, 2014.

[7] C. M. Stello, "Herzberg's Two-Factor Theory of Job Satisfaction: An Integrative Literature Review," *Herzberg's Two-Factor Theory Job Satisf.*, 2014.

[8] M. Marra, W. Ho, and J. S. Edwards, "Supply chain knowledge management: A literature review," *Expert Systems with Applications*. 2012.

[9] O. Management and T. Edition, *INDUSTRIAL HANDBOOK OF INDUSTRIAL Technology and Operations Management*. 2001.

[10] D. E. Guest, "HUMAN RESOURCE MANAGEMENT AND INDUSTRIAL RELATIONS1," *J. Manag. Stud.*, 1987.