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A STUDY IN PRODUCTION AND OPERATION MANAGEMENT

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Abstract

Production Management is a vast concept it involves a huge chain. Production starts with input and ends with output i.e., the finished product. production and operation management is used to improve product and service quality and quantity. right time, anddecrease Manufacturing Costs. The study and evaluate the Recent trends in operation and operation management techniques and application of an organization. I focus to examine what quality, means across the organization and discuss the differences between methods that do not apply production and operation Management concepts. this also explores the complex relationship between the organization and knowledge management.

Key Word – production, Operation, Management.

Introduction -

Production/operations management is the process that combines and transforms various resources used in the production/operations subsystem of the organization into value-added products/services in a controlled manner as per the organization's policies. Therefore, it is that part of an organization concerned with transforming a range of inputs into the required (products/services) with the requisite quality level. The set of interrelated management activities involved in manufacturing certain products is called production management. If the same concept is extended to services management, then the corresponding management activities are called operations management. For over two centuries, operations and production management has been recognized as important factor in a country's economic growth.

Literature Review -

"A Study on Production Development And Management" by Er.Anubhav S Sharma1, Miss Priti Rai2 in March 2019. The researcher's study of, production Management and launching to improve productivity represents the relationship between top-down and bottom-up approaches to achieving goals. According to researchers' management is not only an important key but also plays a vital role before the production and after it also.

A Review Paper on Modern Developments in Production and Operations Management by Er. Inderjit Singh Sodhi Assistant Professor, Amritsar College of Engineering and Technology, Amritsar, Punjab. Er. Raman Kumar Assistant Professor, Amritsar College

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of Engineering and Technology, Amritsar, Punjab. Er. Amandeep Singh Bhui Assistant Professor, Amritsar College of Engineering and Technology, Amritsar, Punjab. Er. Amandeep Singh Gabbi Assistant Professor, Amritsar College of Engineering and Technology, Amritsar, Punjab on 2, February- 2013. In this paper researcher studies of Historical Evolution of Production and Operations Management, the Scope of production and operation management, and Modern developments in production and operation management. According to researcher these trends helps in increasing the skills of workers, creating a global market for selling, good infrastructure creation, competition in the market, and new products for customers with reasonable rates.

Objectives -

- 1) The study of the Right quality. Right quantity, right time right Manufacturing Cost in the fabrication industry in Solapur city.
- 2) study of and Production management in optimizing manufacturing efficiency with current capacity in the fabrication industry in Solapur city.
- 3) study of operation management production management problems in the fabrication industry.

Research Methodology –

A research methodology is a systematic way to solve a problem. It is the science of studying how research has been carried out. The procedures by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. This study employs both analytical and descriptive types of methodology. The major part of this study is based on primary data. Reliability and normality were also tested to know the nature of the primary data collected. It is concluded with the limitations of the studies.

OPERATIONS MANAGEMENT –

The fabrication industry, has more than 70 fabrications company in Solapur city. The company has annual sales of over Rs. 1.0 billion. It has a strong reputation for offering its customers high product quality and excellent service. Effectiveness of process development. It improves productivity and represents the relationship between the top-down and bottom-upapproaches to achieving goals. Therefore, production development and management often include substance measurement and analysis of all the internal activity. This paper will help more organizations make the attempt. There are some fabrication problems, e.g., minimum worker, raw material etc.

Some activities of Operation Management -

1)PLANNING- Activities that establish a course of action and guide future decision-making is planning. The operations manager defines the objectives for the operations subsystem of the organization, and the policies, and procedures for achieving the objectives.

Vol. I No 48 Nov 2023 ISSN 2231-4687 (P) http://www.ijme.co.in { SJIF 2021: 6.394}

- 2) ORGANIZING- Activities that establish a structure of tasks and authority. Operation managers establish a structure of roles and the flow of information within the operations subsystem.
- **3) CONTROLLING** To ensure that the plans for the operations subsystems are accomplished, the operations manager must exercise control by measuring actual outputs and comparing them to planned operations management. Controlling costs, quality, and schedules are the important functions here.
- **4)BEHAVIOUR** Operation managers are concerned with how their efforts to plan, organize, and control affect human behaviour. They also want to know how the behaviour of subordinates can affect management's planning, organizing, and controlling actions. Their interest lies in decision-making behaviour.
- **5)MODELS** As operation managers plan, organise, and control the conversion process, they encounter many problems and must make many decisions. They can simplify their difficulties using models like aggregate planning models for examining how best to use existing capacity in short-term, break-even analysis to identify break-even volumes, linear programming and computer simulation for capacity utilisation, decision tree analysis for the long-term capacity problem of facility expansion, a simple median model for determining best locations of facilities etc.

Production & operations management functions-

- **1. Location of Facilities** The selection of location is a key decision as a large investment is made in building, land, and machinery.
- **2. Plant Layout & material handling -**Plant layout refers to the physical arrangement of facilities. Material handling refers to the moving of material from the storeroom to the machine & from one machine to the next during the process of manufacturing.
- **3. Product Design** Product design deals with the conversion of ideas about the product into reality.
- **4. Process Design** It is the decision-making on the overall process route for converting raw material into finished goods.
- **5. Production Planning & Controlling (P.P.C)** P.P. C can be defined as the process of planning the production in advance, setting the exact route of each item, fixing the starting & finishing dates for each item to give production orders to shops & to follow up on the progress of products according to the orders.
- **6. Quality Control** Quality control may be defined as a system that is used to maintain a desired level of quality in a product & service.
- **7. Material Handling-** Material management is that aspect of management function which is primarily concerned with the acquisition control & use of the needed material.

Vol. I No 48 Nov 2023 ISSN 2231-4687 (P) http://www.ijme.co.in { SJIF 2021: 6.394}

8. Maintenance Management- Maintenance deal with taking care of factory layout, and types of machinery. This is essential for equipment & machinery which are a very important part of the total production process.

Operation And Production Management Techniques –

- Computer Aided Design And Manufacturing.
- Shrinking Product Life Cycle.
- Supply Chain Management.
- Mass Customization.
- Employee Involvement.
- Green Manufacturing.

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