

# ROLE OF PRODUCTION MANAGEMENT AND ITS FUNCTIONALITIES

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**Abstract:** The study of this paper is about the production management and its importance. It is the trend followed by every manufacturing industries and companies. The path to success is shown in this study. The study also gives us the glance on human resources and how they are used in production management. It also tells us about the job availability and individual improvement by being the part of production management. Ideas are viewed and are explored on production management. Production management provides solution to solve various issues that occur in production.

**Keywords:** Production Management, Job

## INTRODUCTION

Over two centuries operations and productive management has been recognized as an important factor in a countries economic growth. It also helps the individuals with various economic benefits. By breaking the jobs down to subtasks and recognizing the labor to the specialized tasks in which they are skilled and can give their best efficiently. Every Individual will gain his own identity and due to this there is a vast increase in job availability and the company progress will be increased by showing progress in production and sales. i.e. profits. Earlier these organizations were mostly in the form of one man shops having insignificant problems of managing the productions. But with development and enlargement of production organizations within the form of factories additional sophisticated issues like location and lay out, inventory control, quality control, routing and scheduling of the production process etc. came into existence that needed additional careful analysis and study of the total development. This resulted within the development of production management within the space of manufactory management. Production Management deals with the decision making process. It is ascertained that one cannot demarcate the start and finish

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points of Production Management in an organization. The reason is that it's interconnected with several alternative purposeful areas of business, viz., marketing, finance, industrial relation policies etc. Alternately, Production Management is not independent of marketing, financial and management due to which it is very difficult to formulate some single appropriate definition of Production Management. Production Management could be a set of general principles for production economies, facility style, job design, schedule style, quality control, inventory control, time-and-motion study and price and monetary fund management.

## **REVIEW OF LITERATURE**

There is always a difference between Manufacturing and Production. Process of converting raw material into finished products by various processes, machines and energy is called Manufacturing. It is a narrow term. Production is process of converting inputs into outputs. It is a broader term. Manufacturing, Production comes under Business. Production management is a part of Business management. Production management is also called as operation management. Planning, controlling and maintaining is important in individual process that is what the Production Management does. It helps the manufacturing companies to run smoothly. Its responsibility is similar in level and scope to other specialties such as marketing or human resource and financial management. Production management plays one of the important role. The reputation of the company proceeds on products that the company is going to sell and the products should be molded perfectly only by considering Production management. It has many responsibilities to satisfy customers and products without compromise. Manufacturing operation, production design, planning and control issues involving capacity and quality of organization and supervision of the workforce. For the success of product or company the Management should be responsible while choosing 6M's - - Men, Machine, Markets, Method, Material and Money. Production management deals with converting raw materials into finished goods or products to satisfy the wants of the people.

6M's-

Men – Capable to do work – preventive maintenance – Manpower

Material – Quality, Quantity

Market – To sell the products

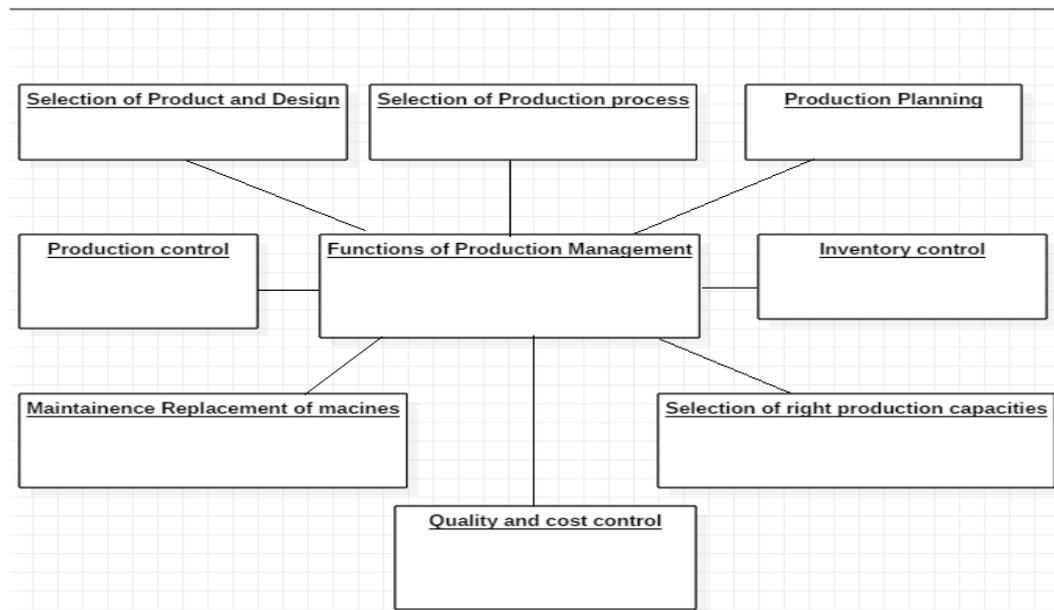
Machine – Right Technology, Inventory and machines

Method – Right method and means to implement

## Money – Capital, wage

Production system are activities of a corporation wherever resources flowing inside an outlined system are combined and remodeled in a very controlled manner to feature a worth in accordance to the policies mentioned by the management.

The functions of Production Management are shown in the following figure.



## FUNCTIONS OF PRODUCTION MANAGEMENT

### Selection of Product and Design

Production Management first selects the right product to produce considering the customer requirements. The right product has to be selected in order to be successful. The product should give the customers maximum value at the lowest cost. A perfect design should be made for the survival of the product in market. The company's future depends on the product they sell so; the product should be selected and produced only after the detailed evaluation of alternative products. Products should always be the improved version of previous product. Production Management must use the techniques such as value engineering and value analysis. Value engineering is systematic methodologies to boost the merchandise by examination of operate. It is related to the new products. Whereas, value analysis is consumed with existing products. The current product is analyzed and evaluated by a team to reduce cost and to improve cost function. An important part of value analysis is Functional analysis. Where the product is broken down and reviewed as no. of assemblies. Value Engineering and Value analysis is a group of activity that involves brain storming

improvements and alternatives to improve the value of the product particular to the customer. The job availability in this field is good. VA Engineers and VE are hired by the company. Their work is to focus on optimizing the value of the product without compromising the quality. It contains all the aspects of the product development process within and needed to interface with multiple departments internally as well as with supplies and customers.

### **Selection of Production Process**

To produce the perfect product etc. they must decide about the type of technology, machines, material handling etc. Keeping manufacture concerns in mind throughout the entire design process is advisable. This will result in a design that is easier and less costly to produce. The process you choose will depend on many factors called the process selection drivers. Such as - design tolerance, waste produced by the process, process supervision, availability of material and cost of material, product dimensions and size. Time required for processing, cost for tooling, equipment and machinery and level of skill labor required. Manufacturing volumes, value of the product, past geometry, required tolerance and required material all are to be considered. Material we choose will effectively narrow your options down production analysts and production process officer one appointed to fill the task.

### **Capacity Selection of Right Production**

Production capacity should match the demand for the product less production or more production can create problems. To avoid such problems we should select right production capacity. Break even Analysis is generally used for capacity planning. Right production can deliver concrete data driving decisions that will grow the company.

- ✓ Customer forecasting
- ✓ product routing
- ✓ product capacity reporting
- ✓ Planned and Unplanned Maintenance reporting
- ✓ labor constraint requirement

Customer's provide contract to manufacture with a demand forecast for each product line. We should ensure that capacity planning system has thought of these forecast sheets for generating correct capacity calculation .It should also record daily, weekly or monthly sales volume. While customer forecasts generate the expected volume, the company needs to

calculate how long it takes to manufacture a product based on batch fix creating a production capacity report from forecast and routing for production line is quick and simple. The good report will allow the managers to review quickly and understand where and when there is open capacity or a potential job. The system should also plan and schedule downtime and provides reports for unplanned downtime. In deciding the requirement for production line enlargement or additional efficient maintenance up-time, this report plays a vital role. Labor constraint requirement should be factored into the capacity reporting features of the system the above following provide various jobs.

### **Production Planning**

Production Manager plays key role. He decides about routing and scheduling whereas, routing means choosing the path of work and the sequence of operations. The main objective is to find the best economic sequence of operations to be followed in the manufacturing process. It ensures the smooth follow of the work. The work is standardized preparation of route sheet, determine of scrap factor, lot size determine etc are used in the routing. Scheduling is the term used to decide when to start and when to complete a particular production activity. It sets the arrival time and service time with a certain route therefore it also checks transportation.

### **Production Control**

In this management, manager has to monitor and control the production. He should check the executed plans as well as not executed plans and should compare actual production with plans and finds out the deviation. Necessary steps should be taken to correct those disturbances or disruptions. Routing, scheduling, Discipline and follow up relates to control. While routing and scheduling relates production. Dispatch and follow up relates to control. All the activities such as handling materials, assemblies, sub-assemblies from their initial stage to find product stage in an organized and efficient manner. The objective is to achieve with respect to quantity, quality time and cost.

### **Quality and Control**

Quality and cost are given much importance in customer perceptible. It is important to control the cost and also to give the best quality possible. In today's world every customer expects good quality product at cheapest price. To satisfy the demand the production management should increase the quality of the products continuously without compromising. They should check the cost and try to minimize there are many ways to

reduce cost of quality. The natural cost tradeoff between how much an organization spends on prevention versus how much it spends on fixing failures. A traditional way to reduce the cost of quality is to reduce the number of defects. Another way to reduce the cost of quality is to make the process for handling prevention and failure more effectively. Support design to cost by generating design alternatives to achieve the product cost targets. Management should conduct cross functional workshops to develop cost reduction ideas. A team should be made to work with test and validation to plan and maintain timing to validate the cost-reduction ideas. Production Managers, cost controllers, VE and VA etc are jobs that can be linked to this description presenting cost reduction ideas and maintaining quality to internal and external stakeholders.

### **Inventory Control**

Production Manager must monitor the level of inventories. Inventories must be balanced. There should not be over stocking or under stocking. If it is overlooked then the effect gradually falls on product and the material will be spoiled, wasted or misused. If the inventory is under stocked the production delays, there will be disturbance created, deliveries will be affected and schedule will be failed and everything falls apart.

Production Manager, Inventory controller officer, Inventory manager, Store manager, Material executive, logistics, mechanical etc are jobs involved in this part. They must have the ability to adapt quick technology changes within automatic electronics is must. They should surely understand the electronic product designs and packaging. They should understand the basis on how parts are manufactured and should be familiar with the production process.

### **Maintenance and Replacement of Machines**

It is said in a theory from software project management that maintenance of software cost twice of its invention. So, it is very important to maintain correctly because fault may lead to increase of more capital. The system should have efficient process or system to inspect continuously on routine basis. Cleaning, Oiling maintenance and replacement of machines, equipments, spare parts etc are to be taken care. This prevents production halts and machine breakdown maintenance manager, service manager; Machine operators etc are few jobs available under wing to full this function. They have to inspect all the machines and make reports for the management that whether new machines are required or not.

## CONCLUSION

It has been proved that production management emerged as a true functional field of management. Being a part of Production management is chance to get identified . They should always be creative and innovative. Thinking out of box is what made production management successful. Production management gives us the right quality - right manufacturing - right cost - right product.

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