PRODUCTION MANAGEMENT SYSTEMS

doc. Ing. Naqib Daneshjo, PhD.

Čapajevova 14, 040 11 Košice e-mail: daneshjo47@gmail.com

Abstract

Production management deals with decision-making related to production processes so that the resulting goods or service is produced according to specification, in the amount and by the schedule demanded and at minimum cost. Production management also deals with decisionmaking regarding the quality, quantity, cost, etc., of production. It applies management principles to production.

Key words: Production Management System (PMS), Importance of Production Management, basic tables,

INTRODUCTION

Production management means planning, organising, directing and controlling of production activities. Production management deals with converting raw materials into finished goods or products. Production management also deals with decision-making regarding the quality, quantity, cost, etc., of production. It applies management principles to production.

Production management is a part of business management. It is also called "Production Function." Production management is slowly being replaced by operations management.

The main objective of production management is to produce goods and services of the right quality, right quantity, at the right time and at minimum cost. It also tries to improve the efficiency. An efficient organization can face competition effectively. Production management ensures full or optimum utilization of available production capacity.

Production management, also called operations management, planning and control of industrial processes to ensure that they move smoothly at the required level. Techniques of production management are employed in service as well as in manufacturing industries. It is a responsibility similar in level and scope to other specialties such as marketing or human resource and financial management. In manufacturing operations, production management includes responsibility for product and process design, planning and control issues involving capacity and quality, and organization and supervision of the workforce. *Definition of production management.* It may be defined as:

- The performance of the management activities with regards to selecting, designing, operating, Controlling and updating production system.
- It is the processes of effectively planning, coordinating and controlling the production, that is the operations of that part of an enterprise, it means to say that production and operations Management is responsible for the actual transformation of raw materials into finished products.
- Production management is a function of Management, related to planning, coordinating and controlling the resources required for production to produce specified product by specified methods, by optimal utilization of resources.
- Production management is defined as management function which plans, organizes, coordinates, directs and controls the material supply and Processing activities of an enterprise, so that specified products are produced by specified methods to meet an approved sales program. These activities are being carried out in such a manner that Labour, Plant and Capital available are used to the best advantage of the organization



Figure 1 Production Management – Basic Tables

PRODUCTION AND OPERATIONS MANAGEMENT

The Subject of Production Management is studied under different Headings-such as Production Planning and control, Production and Inventory control, production and operations control and many more. What ever may be the title of the subject, the contents of the subject are more or less one and the same. Before we discuss about production management, let us discuss about product, production and management. This will give us a rough idea about production Management and with what a production manager has to deal with.

Product is the combination of various surfaces and processes (or operations). This is because the production Manager is solely responsible for producing the product. He has to think of the various surfaces by which the product is made of, so that he can plan for processes by which a particular surface can be made and plan for required capacity of the facility by which the surface is produced. While planning he has to see that the required surface is produced by the best and cheapest method (optimally), so as to make the product to face competition in the market.

Management can be explained as an art or science, (in fact it is a combination of art and science) of getting things done by the people, by planning, coordinating, organizing, directing and controlling the activities to meet specified goals, with in the frame work of agreed policies. The above explanation put emphasis on getting things done, Planning, Organizing, Coordinating, and controlling and specific objectives and agreed policies. Today's manager needs scientific base as well as personal tactics to manage the people under him to achieve the desired goals. Above discussion about product, production and management will help us to understand what exactly the Production Management or Production, and Operations Management is.

IMPORTANCE OF PRODUCTION MANAGEMENT

The importance of production management in a business is that it will spearhead the process which will ultimately bring in profit to the business. There are several responsibilities and tasks that a production management team is responsible for and it is a very stressful job because a product manager needs to make sure they are constantly making profit from the manufactured services that they are selling. It is also stated that it is very important for the management to form good relations with the various teams within the organization as well. The importance of production management to the business firm:

1. Accomplishment of firm's objectives:

Production management helps the business firm to achieve all its objectives. It produces products, which satisfy the customers' needs and wants. So, the firm will increase its sales. This will help it to achieve its objectives.

2. Reputation, Goodwill and Image:

Production management helps the firm to satisfy its customers. This increases the firms reputation, goodwill and image. A good image helps the firm to expand and grow.

3. Helps to introduce new products:

Production management helps to introduce new products in the market. It conducts Research and development (R&D). This helps the firm to develop newer and better quality products. These products are successful in the market because they give full satisfaction to the customers.

4. Supports other functional areas:

Production management supports other functional areas in an organisation, such as marketing, finance, and personnel. The marketing department will find it easier to sell good-quality products, and the finance department will get more funds due to increase in sales. It will also get more loans and share capital for expansion and modernisation. The personnel department will be able to manage the human resources effectively due to the better performance of the production department.

5. Helps to face competition:

Production management helps the firm to face competition in the market. This is because production management produces products of right quantity, right quality, right price and at the right time. These products are delivered to the customers as per their requirements.

6. Optimum utilisation of resources:

Production management facilitates optimum utilisation of resources such as manpower, machines, etc. So, the firm can meet its capacity utilisation objective. This will bring higher returns to the organisation.

7. Minimises cost of production:

Production management helps to minimise the cost of production. It tries to maximise the output and minimise the inputs. This helps the firm to achieve its cost reduction and efficiency objective.

8. Expansion of the firm:

The Production management helps the firm to expand and grow. This is because it tries to improve quality and reduce costs. This helps the firm to earn higher profits. These profits help the firm to expand and grow.

The importance of production management to customers and society:

1. Higher standard of living:

Production management conducts continuous research and development (R&D). So they produce new and better varieties of products. People use these products and enjoy a higher standard of living.

2. Generates employment:

Production activities create many different job opportunities in the country, either directly or indirectly. Direct employment is generated in the production area, and indirect employment is generated in the supporting areas such as marketing, finance, customer support, etc.

3. Improves quality and reduces cost:

Production management improves the quality of the products because of research and development. Because of large-scale production, there are economies of large scale. This brings down the cost of production. So, consumer prices also reduce.

4. Spread effect:

Because of production, other sectors also expand. Companies making spare parts will expand. The service sector such as banking, transport, communication, insurance, BPO, etc. also expand. This spread effect offers more job opportunities and boosts economy.

5. Creates utility:

Production creates Form Utility. Consumers can get form utility in the shape, size and designs of the product. Production also creates time utility, because goods are available whenever consumers need it.

6. Boosts economy:

Production management ensures optimum utilisation of resources and effective production of goods and services. This leads to speedy economic growth and well-being of the nation.

Production/operations management is the process, which combines and transforms various resources used in the production/operations subsystem of the organization into value added product/services in a controlled manner as per the policies of the organization. Therefore, it is that part of an organization, which is concerned with the transformation of a range of inputs into the required (products/services) having the requisite quality level. The set of interrelated management activities, which are involved in manufacturing certain products, is called as production management. If the same concept is extended to services management, then the corresponding set of management activities is called as operations management.

Production management refers to operations and control of industrial processes in order to certify that there is smooth movement to the necessary level. Production management is applicable in a number of fields. Financial management and manufacturing operations are some of the two processes where you can apply production management theory.

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