

IMPORTANCE OF PRODUCTION MANAGEMENT IN BUSINESSES IN THE BUSINESS EFFICIENCY OPTIMIZATION

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ABSTRACT

The purpose of the study is to examine the importance of production management in enterprise efficiency optimization. In the production activities of the companies, the internal and external conditions affect their functioning. The differentiation of the requirements of the customers regarding the products necessitated the efficient and efficient management of the production activities in the enterprises. Businesses, whether it will be goods or services, they necessarily produce something. It is the responsibility of the production management to consider the resources, power resources and other components required in a production process, not only in economic but also in ecological practices, considering efficiency. Production management should focus on the efficiency of the process for the continuity of the profitability of the business. A series of actions need to be organized to increase the efficiency of a production process. In order to maximize production efficiency, the Company's strategic objectives and coordination in the realization of the operational objectives of the individual departments take an important place. In this respect, production management is considered as one of the business functions that can affect the operational efficiency. As a result of the research, it was determined that the success of the management in production management is one of the units that affect the productivity of the business and the profitability and productivity is decreased in case of failure in the success of the enterprise and also suggestions are made according to these results.

Keywords: Production, Production Management, Productivity, Productivity of the Business.

INTRODUCTION

The efficiency of the production activities is important for the enterprises because it is one of the factors supporting the competitiveness of the business (Palamutçuoğlu, 2014). Until the middle of the 19th century, people were engaged in agriculture, craft and trade. Because of this, the concept of productivity is defined in relation to agricultural activities first. Economic life has undergone major changes after the industrial revolution; economic activities have increased and concentrated, and the definition of the concept of productivity has also reflected these developments in the production process (Özgüler, 2005, p. 2). Since the enterprises are the units that produce and offer goods and / or services, the production / manufacturing and production management (planning and control) departments are primarily important business units.

The importance of production management has long been known. The effect on productivity has been investigated by various studies (Marshall, 2009). Bloom and et al. (2009) suggest that management's effect on performance can be measured. Studies have been performed on the impact of management on productivity (Syverson, 2011; Bloom and Van Reenen, 2010; Alvarez and Arias, 2003; Li et al., 2002) and management's performance (Byma and Tauer, 2007). The failure of the production management will make the business inefficient in an increasingly competitive environment and lead to bankruptcy (Bloom et al., 2011). For the

continuity of existence of the enterprise depends on its competitive advantage. The efficiency of production activities is possible with a good production management.

The concept of efficiency refers to the relationship between the output produced by a production or service unit and the input used to produce this output.

Concepts about Production Management

Management is a divergent process of planning, organizing, commissioning and controlling activities (Kobu, 2013). The main feature of production management is to analyze the data and make integration applications in production activities. The manager is the person who has the responsibility to make the business efficient with the problem solving oriented approach in certain situations that require action (Palamutçuoğlu, 2014). Management involves directing a job, other people's efforts and activities towards common goals, in other words, "managing affairs with other people". The management not only includes the production of goods and services, but also all activities associated with production. When the word "production" is mentioned, factories, machines, equipment, assembly come to mind. Production is to convert a set of inputs into a predetermined set (Mucuk, 2008, p.188). In general, a particular input is to convert the raw material or product into the desired mold after a conversion or conversion. In this context, production, production system and production management which are related with production management are explained below.

Production

Production is the way of assembling together the factors of production to meet the needs of the people by bringing together the goods and services in a suitable environment. In brief, it is the presentation way of goods and service (Palamutçuoğlu, 2014). Production can be defined as the activity that is done to provide the requirements of the human when the nature cannot certainly cover them (Mucuk, 2008, p. 188). Production is called as a raw material or semi-finished and an industrial product, a whole production process (Arlı and Ersoy, 2000, p. 7). In the aspects of business, production is the activities that are aimed at creating a benefit that results in a new physical asset or service (Kobu, 2013, p. 31). Production is important not only for businesses, but also for non-profit organizations; because the goods or services they produce create the reason for the existence of these organizations. (Mucuk, 2008, p. 188).

Production System

In general, the system is defined as a whole consisting of elements that have relations between them and are brought together to realize a certain purpose (Palamutçuoğlu, 2014). The production process is the transformation of the elements entering the system into a service or a service that creates a benefit (added value). Four of the factors that characterize a production process are especially important. (Kobu, 2013, p. 33):

- **Efficiency:** It is usually measured as output produced per unit input. This definition of efficiency is different from the technical efficiency concept in engineering. Operators use this definition for productivity at the same time.

- **Effectiveness:** It is defined as the degree of accomplishing the objectives of the production system and is used synonymously with performance. It is possible for a production system to be efficient but less efficient. However, generally efficient systems are anticipated to be effective at the same time.

- **Capacity:** It indicates the level of production that the production system can perform. It is expressed in terms of percentage or quantity produced per unit of time. There are; maximum, real and effective capacity measures defined according to different criteria. New machinery taken to a factory can increase capacity. But if the investment and operating

costs are high, the operational efficiency decreases. Efficiency and capacity are therefore different.

- **Flexibility:** It is defined as the ability of a production system to respond to sudden demand changes or to move easily to new production. There is no measure of flexibility factor that has gained importance in recent years.

Production Management

The word management is mostly used to describe both an activity and the organizations that fulfill this activity (Gözübüyük, 2001, p. 1). Management is to work through others. It is a process that involves a whole group of people towards directing them to identified targets, co-ordinating their cooperation, or organizing, coordinating or coordinating action of people gathered together in an organization to conduct pre-determined tasks (Pehlivan, 2002, p. 39).

Production management, the material, machinery and manpower resources in the hands of the business in certain qualities of the desired quality (quality), the desired time and at the lowest cost to bring together in a way to bring production (Palamutçuoğlu, 2014, p. 15). Production management can be defined as the evaluation of the resources (material, machine, manpower) of the enterprise in a way that produces a certain amount of goods at the desired time and quality but at the lowest cost (Çalışkan, 2001, pp. 1-5).

In terms of the operator, the production function is transformed into an effort to organize the production efficiently in an industrial enterprise and to realize the operational objectives in an efficient way, in short, to "production management" (Mucuk, 2008, pp. 188-189). There are several analytical models that can be applied to one or more of the problems encountered in production management. These are; cost analysis, linear verifications, waiting line or queue model, simulation, network planning models, statistical analyzes and schematic graphical models (Palamutcuoglu, 2014, p. 14). Bloom et al. (2009) suggest that management's impact on performance can be measured. The criteria for the effect of management on productivity and profitability vary according to the theoretical models.

Duties of Production Management

The tasks assigned to the production management department in an enterprise consist of the details of the functions. Therefore, tasks are determined depending on various factors, especially the organizational structure. However, it is possible to classify typical tasks undertaken by managers responsible for production management. Product design, Demand estimation, Technology selection, Site selection, Workplace arrangement, Logistics management, Capacity planning, Repair and maintenance planning, Inventory control, Business analysis (Work study), Production planning and control Project management, Quality management, Wage management (Palamutcuoglu, 2014, p. 25).

Purposes of Production Management

The main objectives of production management are acquired at three points. To meet the customer demands in terms of price, time, quantity and quality, to keep the stock amount as low as possible (Palamutçuoğlu, 2014, p. 15).

Covering of Customer Demands: Market research is the studies of "Examination of any problem that occurs in the marketing, its analyzing, solvig and interpretation with various methods". Data obtained through market research are used in capacity selection, product design, process design and production planning (Özden and Ercan, 2009, pp. 53-55). Customers have a growing demand for the product. The production management should

analyze the demands and rapidly change the production models to establish quality standards to meet the demands.

Stock Management: In order to manage the inventories effectively, the establishment of a system to monitor the stocks that have been received but not yet received, a reliable demand estimation indicating the possible forecasting error, providing information on the availability of raw materials and materials and the variability in the lead times, stocking, ordering estimation of the cost of inventories and selecting a correct stock model (Asal, 2001, pp. 38).

Benefiting from Business resources: In increasing competition, to be able to respond quickly; production timing, low costs, high productivity and production planning is one of the most important steps in production management. Efforts to determine the future degree and limits of production efficiency are realized through production planning (Şeşen and Yeltekin, 2007, pp.1-2). This process includes the planning of production. According to Kobu (2013) production planning can be defined as the function that determines the levels and limits of future manufacturing and service activities. The type, qualifications, price, quantity and time of the product requested by the consumer is collected and analyzed. The information requested by the consumer is converted to the quality, design specifications of the products and the changes that are made to be made with the reasons of changing the consumer demands on the existing product, new inventions, competition and similar reasons are determined. It is determined how to use the facilities available to provide machinery and equipment that will enable the production volume to be realized with the general characteristics. After the production vehicles and facilities are determined, the order in which the machinery and equipment are to be placed in accordance with the workflow principles is determined. With changing production conditions and technology in the order of business there are sometimes place changing and additions applied (Kobu, 2013, p. 12)

Control Function in Production Management: One of the production management functions is to control (Kobu, 2013, p. 13) Distribution: Utilizing from the programs; work orders (job orders) consisting of date, quantity, loom, worker and other detailed information are prepared. These are allowed to reach the worker at a certain time, through the chief of the workplace, the foreman and similar channels. Tracking and Control: In machine failures, absenteeism, inefficient operation, and sudden and important orders such as the compression of the difficult reasons to be interrupted. It is the duty of follow-up and control to determine these immediately and to take necessary measures by informing the concerned people. Following and control combine these with their findings and send to the relevant units.

Productivity Notion

The concept of efficiency refers to the ratio of manpower used in production, raw materials, tools and machinery, energy, water, soil, fertilizer, and the product obtained from sources such as fertility (Özgüler, 2005, p. 2). Productivity is the most commonly used measure in the performance evaluation of production systems. Productivity is first mentioned in the comparison of business departments, industry sectors or country economies (Kobu, 2013, p. 55). The concept of efficiency is a criterion that expresses the effective functioning of the system in such a way as to increase the amount of output without any increase in inputs. Thus, productivity has a function that increases the welfare level of an enterprise or nation by creating additional income (Metin, 2001, p. 135).

Productivity, resources in the production of goods and services that meet the needs and requirements of its users - labor, capital, land, material, energy, time, information, etc. - Effective and impressive use. As an activity criterion, high efficiency indicates that production inputs are fully used and waste is minimized.

Importance of Productivity in terms of Businesses

Productivity is one of the most crucial criteria of a country's level of development. It is used as a concept to determine the resources consumed against the production in the country. The concept of productivity, which has gained a new definition by changing socio-economic conditions and natural balances, is to protect the natural life and environment as well as economic and organizational capabilities, to provide a good life and working conditions for the employees, and to use the conditions and resources in the most rational way (Erginel, Özsever and Gençoğlu, 2009, p. 46).

The negativity in production management leads to inefficiency and poor quality of products. Only the decision-making unit; is a reflection of inefficient management (Alvarez et al., 2004; Greene, 2005; Wang and Ho, 2010). Bloom and Van Reenen (2006) and Bloom and Van Reenen (2010) concluded that the largest and most detailed survey of several thousand medium-sized production companies was data gathered from firms from various countries, as a link or transmission mechanism between aggregated management, firm performance and final performance. It has been determined that good management and elements of this management have common values regardless of country.

Business economists are united around the idea that productivity projections for the national economy are the starting point for determining the growth rate of the national economy and the market potential of individual enterprises. We can say that the efficiency measurements made by the existing methods provide the following benefits to the enterprises. (Köksal, 2001, p. 47).

- Indicates the degree of success at the end of a certain period.
- Productivity shows the level of technology usage of the enterprise as it is proportional to the use of technology.
- In an economy based on free competition, future long term profitability ratios can be determined and future planning can be made
- Efficiency measurements can be used as an effective control mechanism for business managers.

CONCLUSION

The study examined the importance of production management in enterprise efficiency optimization in enterprises. Production management can be defined as the management of the transformation process that converts the inputs of land, labor, capital and management to the production of desired goods and services. It also deals with the design and operation of production, transportation, supply or service systems. At the same time, the management of resources is the distribution of goods and services to customers. In order to maintain the existence of the business in the market, production management should be used in accordance with the efficiency principle.

Production activities are one of the most important activities for an enterprise. It was stated that the failure of the production management would make the business inefficient in an increasingly competitive environment and lead to bankruptcy (Bloom et al., 2011). It is concluded that the continuity of the production is dependent on the competitive advantage and the efficiency of the production activities is possible with a good production management. It is the responsibility of the production management to consider the resources, power resources and other components needed in the production process, not only economic

but also ecological practices, considering efficiency. Production management should focus on the efficiency of the process for the continuity of the profitability of the business.

The negativity in production management leads to inefficiency and poor quality of products. In order to maximize production efficiency, the Company's strategic objectives and coordination in the realization of the operational objectives of the individual departments take an important place. As a result of the research, it is determined that the success in management is one of the units that affect the productivity of the enterprise and the profitability and productivity decreases in case of failure in the success of the enterprise.

Management can be considered as an input similar to traditional inputs such as capital. Management ability is the key factor in the management of production, labor and capital. In this aspect, the management of production is not only systematic, but also a field of talent that can be considered good or bad.

A good production management process can make the production more efficient without creating a new cost by evaluating inputs in the most appropriate way (Bloom and Van Reenen, 2010). Indigenising of better management practices is reflected in firms as productivity gains. Well management means that traditional inputs, namely management, have an input-enhancing factor that changes quality. It means that good management can get more output using the same input quantities. The main feature of production management is to analyze the data and make integration applications in production activities. These applications can be used effectively as production management applications that can affect the productivity of the enterprise.

Black and Lynch (2001) finalized that one-way use of a single model could not be sufficient in production efficiency in the studies that examined the effect of workplace practices on productivity. It was stated that a vocal understanding, which takes into account the opinions of the employees, is effective on productivity. Thus, any deviations or irregularities in the production process can be detected, so that it can be converted and corrected to the required output with a feedback mechanism. A transformation process can be initiated in the production environment by using input, labor, energy, capital, knowledge and technology. Production management is responsible for this process. The success of production management will have a direct impact on the success of the enterprise. A serial of actions need to be organized to increase the efficiency of a production process. In an industrial enterprise, efficient use of production management can be proposed to organize production in an efficient way and to realize the operational objectives efficiently.

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