

Role of Organizational Structures in Supply Chain and Operational Management

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Abstract

To determine the value of having effective organization structures in operation activities in an organization. It is important to understand the context of the application organization structures in operation management. Basically, the role of organizational structures is to enable strategic change and improve business performance in several dimensions. Efficient and effective organization structures helps in rapid delivery of top-quality communication, meeting the mission and vision of organizations, product development, supplier development, supports organizations in meeting high standards in customer care, and it provides the means to compress design and development times in order have the competitive advantage in the market. Good organization structures helps to launch new products more frequently, to explore and enter new markets faster, and to seek new distribution channels. All of these dimensions can give companies a powerful competitive edge. Failure to have effective, well organized structures in operation management the company cannot realize business objectives in today's competitive, often global environment. To determine the role played by organizational structures like coordination, specialization, control and so on .It is important to first understand the context of the organization structures applications, history and roles. The first part of this chapter provides a review of the evolution of the role and application of organization structures, leading to its role in today's competitive markets. The second chapter will tackle the roles of organization structures and advantages of effective management in organization's operations.

Keywords: Operation Management, Organizational structures, Formalization, Lean production

INTRODUCTION

Operations management is an area of management concerned with overseeing, designing, and controlling the process of production and redesigning business operations in the production of goods or services. It involves the responsibility of ensuring that business operations are efficient in terms of using as few resources as needed, and effective in terms of meeting customer requirements. It is concerned with managing the process that converts inputs (in the forms of materials, labor, and energy) into outputs (in the form of goods and/or services). The relationship of operations management to senior management in commercial contexts can be compared to the relationship of line officers to highest-level senior officers in military science. The highest-level officers shape the strategy and revise it over time, while the line officers make tactical decisions in support of carrying out the strategy. In business as in military affairs, the boundaries between levels are not always distinct; tactical information dynamically informs strategy, and individual people often move between roles over time (Hill, 2005).

According to the U.S. Department of Education, operations management is the field concerned with managing and directing the physical and/or technical functions of a firm or organization, particularly those relating to development, production, and manufacturing. Operations management programs typically include instruction in principles of general management, manufacturing and production systems, plant management, equipment maintenance management, production control, industrial labor relations and skilled trades supervision, strategic manufacturing policy, systems analysis, productivity analysis and cost control, and materials planning. Management, including operations management, is like engineering in that it blends art with applied science. People skills, creativity, rational analysis, and knowledge of technology are all required for success of an organization.

Contingent approach emphasizes that there is no ideal structure .Structures are determined by many factors which include age and size, technical systems, power and environment. Age and size is emphasized on the fact that the older or larger an organization is the more standardized will be its behavior, policies and procedures. This makes changes difficult in older, larger organizations. Moreover, technical systems suggests that the more a technical system controls the workforce the more standardized will be the operating system and bureaucratic the organizational structure.Conversely,information and computer technologies may transform a bureaucratic to a flexible structure and lead to changes in the nature of managerial work, job design and working practices(Lysons,2006)

Power also contributes in determining a structure of an organization. This may be defined as the capacity of an individual or group to influence decisions or effect organizational outcomes. Power identified may include reward power which is based on individual or group perceptions that another individual or group has the ability to provide varying amounts and types of rewards. Legitimate power is based on the values held by an

individual or the formation of particular values as a result of socialization. Coercive power is based on individual or group perceptions that another individual or group has the ability to administer penalties, for example, human resource department. Expert power is based on individual or group perceptions that another person or group has greater knowledge or expertise than them and is thus worth following. Reference power is based on the desire of an individual or group to identify with or be like another person or group (Lysons, 2006). Purchasing plays a leading role in supporting operations in its job of making the organization's products. The links between purchasing and operations have to be very close thus the former normally communicates to operations management in the organizational structure. A major link between operations and purchasing is through their strategies which must be closely aligned and may be developed jointly. These links must be maintained at a tactical level. For instance, an operations production plan might show production levels over the next year, and this specifies the materials needed and their arrival schedule to be organized by procurement. Purchasing and operations must clearly work together at all levels and this encourages many firms to relocate their purchasing staff to physically work in operations facilities to respond quickly to needs (Momczka, 2010).

Organization structures have to be organized in such a way that they check quality in operation management. This should be emphasized using techniques like TQM. Firms are also outsourcing more of their components and service's needs, so purchasing must work closely with operations in the fields of quality control. Moreover, designing of new products or changes to existing ones is central function in most organizations. This is known as engineering in manufacturing industry. This calls for operations and the organization to work hand in hand to enhance product development and supplier development and management. In addition the role of finance and accounting in supporting the operation management cannot be under rated. Purchasing and accounting function need to communicate effectively and share essential information. This could be facilitated by use of EDI and EFT. This will allow prompt payment to suppliers hence effective running of an organization. This will only be facilitated by the role played by the organization structure especially the management function (Slack 2011).

On the other hand, marketing and sales are vital in supporting the operation management in an organization. Marketing and sales are more concerned with moving products out to customers. Moreover, they are still connected, as many ideas for new products and materials come from marketing when they return comments from customers. Furthermore, marketing develops sales forecasts that convert into production plans and material requirements.

Legal function in the organization structure plays a vital role to enable proper legislation especially when signing contracts or purchase order with the suppliers. The details of such agreements have to be written by lawyers and this needs close coordination between the purchasing and legal functions. Legal function also plays vital role in patent ownership, intellectual property, terms in new product development, risk assessment, product liability claims, and anti-competitive practices escape clauses in long term contracts and so on.

Organization structures have to support fully environment management, health and safety. Purchasing has a responsibility to ensure that the materials they buy meet all health and safety regulations and increasingly that they do not cause environmental damage. This also ensures that suppliers in their own operations are using safe methods and are complying with relevant laws (Crosby, 1996)

Critical analysis of organization structure on Supply Chain

A research on organizational structures best practices by the Mintzberg (1979) has estimated that most companies and organizations can realize the best performance in their operations if well managed and aligned to the objectives of that organization. Mintzberg analysis had emphasized that different environment lead to different strategies. Different strategies require different structures. After a study of almost one hundred large American companies he concluded that changes in corporate strategy precede and lead to changes in organizational structure. This is to mean that structure follows strategy. This is under critique because structure could constrain strategy and once an organization has been locked into a particular environment-strategy – structure relationship; it might have difficulty pursuing activities outside its normal scope of operations (Lysons, 2006). An organization cannot change strategy until it implements changes in structure. According to the above study, one it is clear that structures play a vital role in operation management. Considering the importance of effective organizational structures, firms that do not embrace the great role played by structures exhibit lack of control, coordination, poor decision making and effective communication. This might cost the performance and competitiveness of the organization. It is therefore very crucial for any organization to understand the roles played by effective organization structures for the prosperity of any organization.

Role of organizations structures

Mintzberg has defined organizational structures as the sum total of the ways in which the enterprise divides its labour into distinct tasks and achieves coordination among them (Lysons, 2006).

Specialization

Traditionally, specialization was the division of organizational activities into functions, occupations, jobs and tasks. By means of vertical integration, enterprises also aimed at self-sufficiency both in the supply of materials

and the in house manufacture of products. There was an emphasis specialization which related to core competences or competitive advantage that satisfy three criteria: potential access to a wide variety of markets, significant contribution to the perceived benefit of the end product as well as core competence should be difficult for a competitor to imitate. Concentration on core competences has led to the outsourcing of both core and non-core activities. These will include transfer of non-core manufacturing activities to specialist contract manufactures that, by leveraging their fixed costs over multiple customers, can produce more for less, transfer of noncore service activities such as catering or training to specialist providers, removal from corporate balance sheets of manufacturing assets such as tools and equipment, reduced payroll by eliminating non-core employees, ability to combine the power of several highly specialized contributions into single ,flexible, value adding entity (Krajewski,2010)

Coordination

Coordination is an aspect of ensuring that people and resources grouped into discrete functions worked together to accomplish organizational goals. Today, coordination is synonymous with integration. Essentially, integration is conflict resolution. On the assumption that separate organizational elements and interests will inevitably conflict over scarce resources, objectives, status and similar factors, there must be integrating mechanisms to ensure unity of effort. Here such integration is not achieved, the result will be waste, conflict and low productivity, or sub optimization. Integration can be both intra and interorganizational (Slack, 2010)

Integration also involves formalization or the extent to which work behavior is constrained by rules, regulations, policies and procedures. Formalisation is greatest when the individual discretion is given to employees is low .The extent to which an organization is formalized indicates how top decision makers view their subordinates (Juran,2001)

Control

Control involves powerbase and control mechanism which involves centralization and formalization. Centralization involves decision making either carried out by a centralized authority or requires the approval of the centralized authority before it is implemented. Power on the other hand is the capacity of an individual or group to influence decisions or effect organizational outcomes (Lysons, 2006)

Russell (2009) observed that organizational structure is the framework that helps employees achieve their goals and does their jobs. An efficient company structure benefits the organization in several ways including making it easier to delegate responsibility and effect change throughout the organization. To benefit from a strong framework it is important to understand the advantages of an organizational structure. Clark (2008) identified that good organizational structure in operational management will make a company present a unified front to customers, vendors and investors. When a common marketing message is used throughout the organization it helps the organization to better understand its marketing goals and then work together to achieve them .When multiple departments are involved in a single endeavor a unified marketing message can be essential to project success. Singo (1989) working at Toyota company in Japan observed that efficient structures also help in succession process. A strong organizational structure is better able to prepare qualified employees for management. When the company operates under a strong structure, a comprehensive management training plan is easier to create and execute to help maintain a strong managerial core. Departments can work together on a developmental plan to help encourage the training of management candidates within any department. Structures in operational management also help in focus on strategy. Using a strong organizational structure allows a company to better its focus on a single set of goals instead of each group working towards its own agenda. This is the result of the flow of communication an organization structure offers as well as the establishment of responsibility and respect for the company's hierarchy that comes from a strong structure. It helps the company to use resources widely in the pursuit of company goals as opposed to doubling efforts or experimenting with options perhaps not in the company's best interests. Training is also vital in operational management. A good organizational structure makes employees training easier to administer and also allows it to remain flexible based on the changes within the organization. When an organization structure regulates the flow of information, then changes within that information are easier to monitor and better adaptable for a company wide training program (Barnes, 2008).

Summary

The activities in an operations system can be classified as input, transformation process and output. The input activity involves two categories of resources. Transforming resources are the elements that act on, or carry out, the transformation process on other elements. These include such elements as labour, equipment/plant and energy. The nature and mix of these resources will differ between operations. The transformed resources are the elements which give the operations system its purpose or goal. The operations system is concerned with converting the transformed resources from inputs into outputs in the form of goods and services. There are three main types of transformed resource of materials which can be transformed either physically (e.g. manufacturing), by location (e.g. transportation), by ownership (e.g. retail) or by storage (e.g. warehousing), information which can be transformed by property (e.g. accountants), by possession (e.g. market research), by storage (e.g.

libraries), or by location (e.g. telecommunications) and customers they can be transformed either physically (hairdresser), by storage (e.g. hotels), by location (e.g. airlines), by physiological state (e.g. hospitals), or by psychological state (e.g. entertainment). Two types of transforming resources are facilities (e.g. building and equipment) and staff (all the people involved in the operations process). The sub-systems of a firm related to specific business disciplines are termed the functional areas of a business. The three main functional areas in a business are the operations, marketing and finance functions. The marketing function works to find and create demand for the company's goods and services by understanding customer needs and developing new markets. The need for marketing and operations to work closely together is particularly important as the marketing function will provide the forecast of demand from which operations can plan sufficient capacity in order to deliver goods and services on time. The finance function is responsible for the obtaining and controlling of funds and covering decisions such as investment in equipment and price-volume decisions. Other functions which play a supporting role in the organization include the personnel function which will play a role on the recruitment and labour relations, the research and development function which generates and investigates the potential of new ideas and the information technology department which supplies and co-ordinates the computer-based information needs of the organization. The relationship between functions can be seen as a number of sub-systems within the system called the 'organization'. Thus each function (e.g. marketing) can be treated using the same input/process/output transformation model as the operations function. In other words each function within the organization can be treated as performing an operations activity, as they are transforming inputs into outputs. This implies every part of the organization is involved in the operations activity (to an external or internal customer). When an operation is cited as a function in itself however it is referring to the part of the organization which provides goods and services for external customers. The operations function itself is involved in all parts of the firm and thus has a major impact on the competitive position of the organization. The traditional view of the operations sub-system is that it is one function within a linear sequence of processes and is thus 'buffered' from the actions of the marketplace. Thus both physical stocks and allocation of responsibility within functions outside of operations are used to protect the operations system from the external environment. For example, the R&D function will carry responsibility for the development of new product ideas which are then 'passed on' to the operations function and the purchasing function will take responsibility for the sourcing of materials and bought-in services. Physical buffers include stocks of materials before and after the operations function to ensure stability of supply and ability to meet fluctuating demand respectively. The idea behind this model is that the operations function can concentrate solely on transforming inputs of raw materials into goods and services without the need to consider the external environment outside of the organizational system. The disadvantage of this model includes the slowness of response to changes in the environment as they are transmitted through various connected functions and the inability of operations to develop in response to the needs of customers. In fact, the operations function is critical in meeting customer needs and is deeply involved in the performance of the organization. For example, the parameters under which a product/service can be marketed are directly consequent on inputs from the operations functions such as flexibility affecting the product range available. Thus, the role of effective organizational structures is crucial in the prosperity of an organization, competitive advantage and meeting both the mission and vision of that organization.

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