

# Operations management assignment

[Business](#), [Management](#)



INTRODUCTION: Operations management is an area of business concerned with the production of goods and services, and involves the responsibility of ensuring that business operations are efficient in terms of using as little resource as needed, and effective in terms of meeting customer requirements. [1] It is concerned with managing the process that converts inputs (in the forms of materials, labour and energy) into outputs (in the form of goods and services).

Operations traditionally refers to the production of goods and services separately, although the distinction between these two main types of operations is increasingly difficult to make as manufacturers tend to merge product and service offerings. More generally, Operations Management aims to increase the content of value-added activities in any given process. Fundamentally, these value-adding creative activities should be aligned with market opportunity for optimal enterprise performance. 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 labour relations and skilled trades supervision, strategic manufacturing policy, systems analysis, productivity analysis and cost control, and materials planning.

Operations management focuses on carefully managing the processes to produce and distribute products and services. Usually, small businesses don't talk about "operations management", but they carry out the activities that management schools typically associate with the phrase "operations management." Major, overall activities often include product creation, development, production and distribution. (These activities are also associated with Product and Service Management. However product management is usually in regard to one or more closely related product — that is, a product line.

Operations management is in regard to all operations within the organization. ) Related activities include managing purchases, inventory control, quality control, storage, logistics and evaluations. A great deal of focus is on efficiency and effectiveness of processes. Therefore, operations management often includes substantial measurement and analysis of internal processes. Operations management is the systematic direction and control of the processes that transform inputs into finished goods and services. [2] The operations function comprises a significant percentage of the employees and physical assets in most organizations.

Operations managers are concerned with each step in providing a service or product. They determine what equipment, labour, tools, facilities, materials, energy, and information should go into an operating system and how these inputs can best be obtained and used to satisfy the requirements of the market place. Managers are also responsible for critical activities such as quality management and control, capacity planning, materials management,

purchasing, and scheduling. The importance of operations management has increased dramatically in recent years.

Significant foreign competition, shorter product and service life-cycles, better-educated and quality-conscious consumers, and the capabilities of new technology have placed increasing pressures on the operations function to improve productivity while providing a broader array of high-quality products and services. With the globalization of markets, firms are recognizing that the operations function can be used to strengthen their position in the market place. Managers in operations management play a strategic and tactical role in satisfying customer needs and making their firms strong international competitors.

Operations Management deals with the design and management of products, processes, services and supply chains. It considers the acquisition, development, and utilization of resources that firms need to deliver the goods and services their clients want. The purvey of OM ranges from strategic to tactical and operational levels. Representative strategic issues include determining the size and location of manufacturing plants, deciding the structure of service or telecommunications networks, and designing technology supply chains.

Tactical issues include plant layout and structure, project management methods, and equipment selection and replacement. Operational issues include production scheduling and control, inventory management, quality control and inspection, traffic and materials handling, and equipment maintenance policies. An important element of any business system is

management, whether an individual or a team performs it. In our society, we no longer think of company management in terms of one person acting as the entrepreneur, but rather as a team effort.

Each member possesses specialized knowledge and understanding of one functional area of the business system and is by temperament and training able to work cooperatively with other members of the team toward a common goal. [3] Whatever the system or organization, the functions of management are always the same: (1) designing, (2) planning, (3) organizing, (4) directing, and (5) controlling. Management establishes the goals and objectives of the firm or organization and plans how to attain them. It is management that organizes the system and directs it so that its goals can be reached.

Finally, management must be able to analyze the working of the system in order to control it and to correct any variations from the planned procedures in order to reach the predetermined goals. These functions interact with one another and managers must be skilled in these coordinating processes and functions if they are to accomplish their goals through the efforts of other people. The concepts of managerial functions has some hidden difficulties when one attempts to apply them to a specific managerial job. First, one cannot tell which functions are most important and how much time must be allocated to each.

All functions are important parts of a manager's job, but the significance attached to each one may vary at different times, such as at different stages of a product life cycle. Furthermore, the significance of each function varies

at different management levels in the same organization. Operations management, for example, is more focused on directing and controlling than on planning or organizing. All organizations have operations. Operation management, or technical management, is comprised of department managers and persons with professional technical competence.

This level is oriented downward to basic operations, such as producing goods and moving them out the door. A manufacturing company may conduct operation in a mill or factory. The driving force in operations management must be an overriding goal of continually improving service to customers, where “customer” means the next process as well as the final, external user. [4] Since there is an operations element in every function of the enterprise, all people in all jobs in every department of the organization should work together for the improvement of their own operations management elements.

It is important to note that the technical expert often seeks recognition from peers and colleagues rather than from managers at the administrative level. The input of a system depends on its specific objective. What raw materials will yield the desired output? If one were to visually illustrate a system, the input would be shown as the components vital to it. A television repairperson needs a diagram of a TV set in order to repair it, or an auditor might need a flowchart of a company’s accounting system to check for possible diversion of funds.

If a system is designed to maintain a state, the input is information or feedback concerning the essential variable that must be maintained. If the

purpose of a system is to make a decision, the input is relevant information about the problem. In a production system, the input consists of raw material, labour, and other manufacturing costs that are combined in the final product. After input is established the input, it is necessary to transform it into a desirable output. In business, the transformation operation is extremely important. Manufacturing, marketing, and distribution must be studied and known in detail.

However, there are some areas in which little are known. In a business system, for example, one must consider the way people act and react. Often behaviour is placed in this gray area because so little is known about what motivates it. Also, for some people in an organization it may not matter how something works, while others may be vitally interested. A manager may not care how a report gets to him or her, but an accountant would be concerned with all the steps in gathering data, preparing the report, and communicating it to the manager.

Thus, in studying any transformation operation, it is important to know the reliability of the process and who is interested in it. This system will vary depending on the output. In one sense, output is the quality and quantity of the services and goods produced. In another sense, output may be thought of as the payments made for all the factors of production used. In the first sense, the entire system of the firm is designed to produce something that is desired in a market. Consumers want and seek out goods and services that will make their lives happier, more comfortable, healthier, longer, and so on.

In order to produce those goods and services, the firm needs inputs. What may be output for one business may be input for another. In the second sense, output is converted into revenue for the firm that is used to compensate the owners for the risks they have taken, management for its role in producing the revenue, and employees for their role in producing the good or service; it is also used to pay interest for the use of borrowed capital and wages for labour. Rent must be paid for the use of land; goods and materials used in production must be paid for; and taxes must be paid to the government.

The output is the result of the system and is closely related to its objective. Output will accomplish or help to accomplish the specific objective if the system has been designed correctly. All systems should include feedback. When an input is received in the system and undergoes a transformation operation, the result or output is then monitored and transmitted for comparison with a standard. If there is variation between the output and the standard, suitable action can be taken to correct the variation.

A business organization with many systems that range from very simple to very complex requires a much more complicated feedback network. Information must be communicated from person to person and from one part of the organization to another. In fact, the original data may be transformed many times before it reaches its final destination. Each of these transformations is subject to feedback. Feedback can be defined as knowledge of results. Three basic types of feedback are needed: informational feedback, corrective feedback, and reinforcing feedback. 5]



The flow of information in an organization should be two-way—from managers to workers as well as vice versa. In contrast to informational feedback, corrective feedback is evaluative and judgmental. An effective manager will not only point out mistakes but also get the individual worker headed in the right direction by means of corrective feedback. Positive consequences or reinforcements are one key to desired performance. In other words, reinforcing feedback is a prime means of achieving growth in job performance. Management is universal.

When more than one person is concerned with a goal, there is need for a process by which this goal can be attained. Management is active in every part of business and at every level. Its functions are performed in every department and in every function of the business. The practice of operations management is a continuous process of problem solving and decision making. The functions of management are based on the ability to make decisions and then to carry out all the implications of those decisions. Plan, direct, or coordinate the operations of companies or public and private sector organizations.

Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Includes owners and managers who head small business establishments whose duties are primarily managerial. One may generally consider that there are three distinct areas inherent in any

business: marketing, finance, and operations; all other business disciplines fit somewhere under one or more of these areas. 6] For example, finance could include investing, real estate, insurance or banking. While management is considered an academic discipline unto itself it is actually a part of all three areas: financial management, marketing management, and operations management. Operations management is the area concerned with the efficiency and effectiveness of the operation in support and development of the firm's strategic goals. Other areas of concern to operations management include the design and operations of systems to provide goods and services.

To put it succinctly, operations management is the planning, scheduling, and control of the activities that transform inputs (raw materials and labour) into outputs (finished goods and services). A set of recognized and well-developed concepts, tools, and techniques belong within the framework considered operations management. While the term operations management conjures up views of manufacturing environments, many of these concepts have been applied in service settings, with some of them actually developed specifically for service organizations.

Operations management is also an academic field of study that focuses on the effective planning, scheduling, use, and control of a manufacturing or service firm and their operations. The field is a synthesis of concepts derived from design engineering, industrial engineering, management information systems, quality management, production management, inventory management, accounting, and other functions. The field of operations

management has been gaining increased recognition over the last two decades.

One major reason for this is public awareness of the success of Japanese manufacturers and the perception that the quality of many Japanese products is superior to that of American manufacturers. As a result, many businesses have come to realize that the operations function is just as important to their firm as finance and marketing. In concert with this, firms now realize that in order to effectively compete in a global market they must have an operations strategy to support the mission of the firm and its overall corporate strategy.

Until the end of the 18th century, agriculture was the predominant industry in every country. The advent of the steam engine and Eli Whitney's concept of standardized parts paved the way for the Industrial Revolution with its large manufacturing facilities powered by steam or water. [7] A number of countries (the United States included) evolved from an agricultural economy to an industrial economy. But for a time, manufacturing was more of an art than a science. This changed with the introduction of Frederick W. Taylor's systematic approach to scientific management at the beginning of the twentieth century.

The introduction of Taylor's method of scientific management and Henry Ford's moving assembly line brought the world into an age where management was predominantly centered around the production of goods. In the late 1950s and early 1960s scholars moved from writing about industrial engineering and operations research into writing about production

management. Production management had itself become a professional field as well as an academic discipline. As the U. S. economy evolved into a service economy and operations techniques began to be incorporated into services the term production/operations management came into use.

Today, services are such a pervasive part of our life that the term operations management is used almost exclusively. The origins of operations management can be traced back through cultural changes of the 18th, 19th, and 20th centuries, including the Industrial Revolution, the development of interchangeable manufacture, the Waltham-Lowell system, the American system of manufacturing, scientific management, the development of assembly line practice and mass production, and the Toyota Production System. Combined, these ideas allowed for the standardization and continuous improvement of production processes.

Key features of these early production systems were the departure from skilled craftsmen to a more thorough division of labour and the transfer of knowledge from within the minds of skilled, experienced workers into the equipment, documentation, and systems. There are scores of people who can be viewed as thought leaders whose life's work laid the foundations for operations management (only some of which have name recognition among the general population). A very cursory list would include (in approximate chronological order) Adam Smith, Jean-Baptist Vaquette de Gribeauval, Louis de Tousard, Honore Blanc, Eli Whitney, John H.

Hall, Simeon North, Frederick Winslow Taylor, Henry Gantt, Henry Ford, Sakichi Toyoda, Alfred Sloan, Frank and Lillian Gilbreth, Tex Thornton and his

Whiz Kids team, and W. Edwards Deming and the developers of the Toyota Production System (Taiichi Ohno, Shigeo Shingo, Eiji Toyoda, Kiichiro Toyoda, and others). Whereas some influences place primary importance on the equipment and too often viewed people as recalcitrant impediments to systems (e. g. , Taylor and Ford), over time the need to view production operations as sociotechnical systems, duly considering both humans and machines, was increasingly appreciated and addressed.

Operations research as a sub discipline gained prominence during World War II, when mathematicians applied analytical tools to optimize operational questions, initially with a military context, and later also within general operations. Historically, the body of knowledge stemming from industrial engineering formed the basis of the first MBA programs, and is central to operations management as used across diverse business sectors, industry, consulting and non-profit organizations.

At the strategic level (long term), operations managers are responsible for or associated with making decisions about product development (what shall we make? ), process and layout decisions (how shall we make it? ), site location (where will we make it? ), and capacity (how much do we need? ). [8] At the tactical level (intermediate term), operations management addresses the issues relevant to efficiently scheduling material and labour within the constraints of the firm's strategy and making aggregate planning decisions.

Operations managers have a hand in deciding employee levels (how many workers do we need and when do we need them? ), inventory levels (when should we have materials delivered and should we use a chase strategy or a

level strategy? ), and capacity (how many shifts do we need? Do we need to work overtime or subcontract some work? ). At the operational level, operations management is concerned with lower-level (daily/weekly/monthly) planning and control.

Operations managers and their subordinates must make decisions regarding scheduling (what should we process and when should we process it? ), sequencing (in what order should we process the orders? ), loading (what order to we put on what machine? ), and work assignments (to whom do we assign individual machines or processes? ). Today's operations manager must have knowledge of advanced operations technology and technical knowledge relevant to his/her industry, as well as interpersonal skills and knowledge of other functional areas within the firm.

Operations managers must also have the ability to communicate effectively, to motivate other people, manage projects, and work on multidisciplinary teams. Sunil Chopra, William Lovejoy, and Candace Yano describe the scope of operations management as encompassing these multi-disciplinary areas:

- Supply Chains—management of all aspects of providing goods to a consumer from extraction of raw materials to end-of-life disposal.
- Operations Management/Marketing Interface—determining what customers' value prior to product development.
- Operations Management/Finance Interface—Capital equipment and inventories comprise a sizable portion of many firms' assets.
- Service Operations—coping with inherent service characteristics such as simultaneous delivery/consumption, performance measurements, etc.
- Operations Strategy—Consistent and aligned with firm's other functional

strategies. • Process Design and Improvements—managing the innovation process. Mark Davis, Nicolas Aquilano and Richard Chase (1999) have suggested that the major issues for operations management today are: • reducing the development and manufacturing time for new goods and services • achieving and sustaining high quality while controlling cost • integrating new technologies and control systems into existing processes • obtaining, training, and keeping qualified workers and managers • working effectively with other functions of the business to accomplish the goals of the firm • integrating production and service activities at multiple sites in decentralized organizations • working effectively with suppliers at being user-friendly for customers • working effectively with new partners formed by strategic alliances As one can see, all these are critical issues to any firm. No longer is operations management considered subservient to marketing and finance; rather, it is a legitimate functional area within most organizations.

Also, operations management can no longer focus on isolated tasks and processes but must be one of the architects of the firm's overall business model. The two main objectives of operations management are to increase operational efficiency and to reduce operational costs (Cohen, M. A. and H. L. Lee. 1985). Although trans-national companies generate revenue in billions of pounds, they still need to cut down their operational costs, to reduce the overall cost of production and distribution (Cohen, M. A. and H. L. Lee. 1988). This enables the company to offer the products marginally cheaper than those of their competitors. However, the increased competition is not the only factor that forces these companies to consider cost reduction measures.

These companies often undertake mega projects, such as deep-sea oil exploration or setting up of oilrigs that require major investment. If the men and material do not reach the project site on time, the project could be delayed, resulting in cost overruns of millions of pounds per day. By employing the OM, these companies ensure that they do not have to face such operational problems, during the course of the project. Operations management concepts and theories are derived from the general management theories, like planning, coordinating, organising and controlling. The general management theories are employed to improve the efficiency of the personnel and that of the organization.

On the other hand, OM theories are applied to make available all the necessary inputs required to complete a project, within the specified time and budget (Cohen, M. A. and H. L. Lee. 1989). To understand the difference better, let us take the example of Shell Group. The core business of the Shell Group is generated from oil exploration. There are many other companies registered with the same name in different countries. The company follows a unique business strategy, referred to as vertical integration. According to this strategy, the output of a particular Shell company becomes the input for another one. Businesses of the Shell group can be categorized into three core areas namely, oil exploration and drilling, refining and marketing and distribution.

All the three core businesses are interlinked and the company cannot afford to overlook the demands of any particular business. The problems faced by one core area are most likely to affect the other businesses as well. For



example, if there is a drop in crude oil production at one of the rigs, it will certainly affect production at the refineries that source crude oil from the rig. Similarly, if there is a problem at the refinery, the rigs will have to monitor their crude oil production accordingly, which could amount to a loss of millions of pounds. This is where operations management steps in and helps to prevent and overcome such problems.

The OM enables better coordination between core businesses, by employing scientific methods and techniques to predict future requirement, both qualitative and quantitative (Cooper, M. C. , and L. M. Ellram. 1993). OM enables the company to successfully meet targeted deadlines of their mega projects, like deep sea drilling, installation of oilrigs and setting up mega refineries. OM in the real sense involves the timely delivery of inputs required for a project and careful planning. In OM, planning involves the setting of goals and objectives, analyzing available alternatives, selecting the best available alternative, selecting an appropriate execution plan and developing contingency plans (Vollman, T. E. , W. L. Berry, and D. C. Whybark. 1992).

Another important aspect of OM is coordination. It strives to achieve better coordination between the various entities related to the project. These include the suppliers, project managers, site engineers, technicians and others (Schwarz, L. B. 1981). Projects undertaken by trans-national companies, such as the Shell Corporation, are often quite complex. The company needs to develop synergies between all the related entities. OM requires all the related entities to share critical information with each other,

on a regular basis. This enables the development of new contingency plans, in case there are any proposed changes to the original plan of action.

The basic management concept of organizing is used extensively in OM. It involves the procurement of all the necessary inputs, at the right place and at the right time. In organizing, the focus is on following a pre-determined plan. This may require the project managers to confirm to some basic requirements of the quality and quantity of inputs required for the project (Houlihan, J. B. 1985). Organizing also involves the application of contingency plans that may be required due to the development of unforeseen problems, common to all mega projects. Unforeseen problems in the case of oil companies are usually the result of bad weather conditions, drilling complications and on-deck accidents.

Contingency plans may not deliver the same results as planned earlier, but they do help in reducing incurred additional costs, due to project delay. In many mega projects, OM involves the setting up of effective control measures in the initial stages. This helps to assess the performance of the installed systems and components. The main aim is to ensure that the project has been executed as planned and has the capacity to deliver the predicted results. Apart from the major problems, mega projects also have to deal with various minor issues that surface on a daily basis. It is not possible to predict such problems and the company has to depend on the skills and experience of the operations manager.

He is held responsible for the successful completion of the project. In the case of minor problems, operations managers often rely on their innovative

skills, intelligence and common sense. Operations management has acquired great significance in the recent years due to an increase in the number of trans-national companies, whose operations are spread across the continents. It helps in developing the synergies between the various operations that are separated by time and space. OM has made it possible for trans-national companies, like Shell Corporation, to source crude oil from an oilrig in Europe and deliver the oil to a refinery located in Asia Pacific. OM is not limited to Oil Companies only.

OM has enabled many companies to set up production and manufacturing at cost effective locations and source the required inputs from locations where procurement costs are low. The companies do not have to face a raw material shortage, as OM helps in defining an appropriate logistics plan to ensure a consistent supply of raw material. The key elements of the plans include inventory management, using scientific techniques, warehousing, transportation and distribution (Lee, H. L. , and C. Billington. 1993).

Operations management involves the use of scientific methods and systems, like the Last in First out or LIFO, First in First out or FIFO, Just in Time and Re-order quantity or ROQ (Masters, J. M. 1993). These techniques help in saving time, money and reducing possible spoilage.

OM also stresses on the development of an efficient transportation system. This enables the transfer of raw materials to production sites on time. OM employs warehousing automation systems and software that enable the easy movement of goods, in and out of the warehouse. The main purpose of all these initiatives is to facilitate the transfer of goods, from the point of

procurement to the point of production, at the least possible cost. Although operations management depends a lot on the human factor, it does not aim at improving the efficiency of personnel associated with a project. The core objective of OM is to ensure the availability of all the necessary inputs.

The cost of procuring goods and services is also considered under OM, but this is usually taken care of by the cost management team or strategy employed by the company. OM is no longer limited to corporate organizations and is increasingly being employed by other organizations as well. One such organization is the postal department, who is using it to offer better services to customers. The US army has also started employing OM to ensure easy and quick movement of men and material. OM is employed for effective distribution of relief material to victims of natural calamities, like floods and earthquakes. The increased use of OM is a proof of the effectiveness of OM concepts and theories in reducing operational costs and increasing the efficiency of business processes.

Business ethics (also known as corporate ethics) is a form of applied ethics or professional ethics that examines ethical principles and moral or ethical problems that arise in a business environment. [9] It applies to all aspects of business conduct and is relevant to the conduct of individuals and business organizations as a whole. Applied ethics is a field of ethics that deals with ethical questions in many fields such as medical, technical, legal and business ethics. Business ethics can be both a normative and a descriptive discipline. As a corporate practice and a career specialization, the field is primarily normative. In academia descriptive approaches are also taken.

The range and quantity of business ethical issues reflects the degree to which business is perceived to be at odds with non-economic social values. Historically, interest in business ethics accelerated dramatically during the 1980s and 1990s, both within major corporations and within academia. For example, today most major corporate websites lay emphasis on commitment to promoting non-economic social values under a variety of headings (e. g. ethics codes, social responsibility charters). In some cases, corporations have redefined their core values in the light of business ethical considerations (e. g. BP's "beyond petroleum" environmental tilt). Ethics and ethical behaviour are the essential parts of healthy management.

From a management perspective, behaving ethically is an integral part of long – term career success. Wide access to information and more business opportunities than in the past makes ethics a need in modern business world. Every day, managers and employees need to make decisions that have moral implications. And those decisions impact their companies, company shareholders, and all the other stakeholders in interest. Conducting business in an ethical manner is incumbent upon everyone in an organization for legal and business reasons. And as a manager, it's important to understand your ethical obligations so that you can meet your company's expectations as well as model appropriate behaviour for others.

Ethics is a set of standards for judging right from wrong. At its most basic level, it means acting fairly and honestly in individual as well as group decision making. On a business level, it can refer, for example, to fair and honest competition, acting without deception or misrepresentation, and

working within the boundaries of the law. In the wake of corporate scandals over the past several years, most organizations have written or updated their Codes of Conduct and Ethics Rules. The first thing a manager should do is to read and understand those documents. That means understanding the actual words used in the documents along with the spirit and intent behind the words.

The second thing to do is to be sure that your staff also reads and understands the documents and can come to you with any questions. If you act consistently with Codes of Conduct and Ethics Rules, you provide a foundation of trust in your relationships with others. Part of your goal is to show others what it means to make ethical decisions. The other part of your goal is to encourage others to come forward if they suspect that someone is not acting ethically. As a result, your organization will be in a position to look at that behaviour and stop it before it is out of control or worse, crosses the line into illegal conduct. Everyday decisions involve ethical issues. Did you consider only legitimate business reasons for promoting some employees and not others?

Was your decision to discipline a particular employee fair and consistent with how you've treated others? Are you tolerating behaviour from some that you do not tolerate in others? These are just some examples of questions you can ask yourself to be sure you are acting responsibly and ethically. And don't forget that ethics rules will not always answer the issues you confront. Sometimes, for example, the line between ethical and legal conduct can get blurred. What if you found a document on the street that had sensitive

information about a competitor's product? Would you use it? It would be illegal if you stole such a document from the company's premises, but say you found it on the street.

Is it ethical to use it even though you assume that someone must have dropped it by accident? These are not easy questions but are important to consider. As part of a company's attempt to create an ethical work environment, it's important to offer an effective ethics training program. And the training should include more than just a review of your company's ethics rules. The broader topic of ethics in a global economy is very important in today's world of international business. Perhaps some kinds of behaviour that we find acceptable in the U. S. are not acceptable in another culture, or vice versa. That doesn't mean that some conduct should be tolerated in one place and not another.

Rather, your company should set standards to which everyone can and should adhere. Remember, as a leader in your organization, how you behave and communicate is the basis on which others will judge you. If you act ethically and require the same of others, you represent your company well and position yourself as someone your employees can respect. There is no better way to attract and retain good employees than to have the respect of those you interact with every day. Operations management can best be described as the design, operation and improvement of the systems that produce and deliver a firm's goods and services (Chase, Jacobs & Aquilano, 2005).

Within the realm of operations management, the decision-making process can be defined into three broad areas. Strategic or long-term decisions, intermediate or tactical decisions, and operation planning and control, or short term decisions (Chase, Jacobs & Aquilano, 2005). It is important to note that none of these decisions are mutually exclusive. Many times one or more of the three decisions will occur simultaneously within operations management. Operations management frequently involves the addition of new resources, the rearrangement of existing resources within a system, and the deletion of resources from a system to execute the strategic, intermediate or short-term decisions made by operations managers.

Consider a cable company that wants to implement the strategic goal of providing cable service using a digital cable system, while simultaneously phasing out the existing analogy cable system. This would represent a strategic decision. The company would then purchase new equipment to deliver a digital cable signal to its customers. This represents the tactical decision. Retraining the existing staff to support and maintain the day-to-day functions of the new digital cable system becomes the controls and planning i. e. short-term decision. It is important to realize that the goal of operations management is to affect the entire system in a positive manner (Chase, Jacobs & Aquilano, 2005).

To this end system level thinking is critical for successful operations management. For the last 10 years the Viacom Corporation has been outsourcing all of its maintenance work. This has been accomplished through layoffs and/or transfers of maintenance personnel over to subcontractors.



Subcontractors have assumed the responsibilities for all maintenance work within the company. The only maintenance personnel that are still on the Viacom Corporation's payroll consist of five men who have each been with company for about 22 years. All five of the men were within three years of retirement. Maintenance personnel are either laid off or transferred over to the sub contractors' payrolls in the month of August.

This last August it was expected that the last five maintenance personnel on Viacom Corporation's payroll would either be transferred or laid off. However operations managers in the Viacom Corporation's maintenance department decided to keep the five workers on the company's payroll since they have worked with the company for so long and are so close to reaching retirement. From a purely business standpoint this was not the expected decision since all of the maintenance work has been contracted out as part of a strategic company directive to outsource all non core business activities. The question becomes, ethically did the managers who decided to keep the 5 men on the company payroll do the right thing. Did they dodge a business responsibility and move against a company directive for no substantial reason other than to allow a select few workers to retire on the company's pension plan. Is this an ethical act? The managers in this case did perform ethically. By keeping the five-men on the company's payroll they retained a significant level of worker experience within the company. They also showed other employees that the company has a commitment that extends beyond the norm to its employees. The managers' actions will discourage talented employees from seeking employment elsewhere and help with the retention

of core employees. [10] Operation management is a critical component of the successful management of a business.

Operations management is the management of productive resources that are used to create saleable products or services. It is that sale of products and services that provide an opportunity for profitability. [11] The Profit Model was introduced as an organizing framework of operations concepts. The model provides three primary elements. The first, foundations for success, consists of value, strategy and value, and processes. This connection is critical because finance exists in the environment of operations management decisions. Profitability is a measure of the productivity of money invested in a business, typically a ratio of net income to some input as net sales or total assets.

The goal of any investor is to find an investment that will create value for the owner. The second, components of value, consists of cost, quality and timeliness. Cost is an expenses associated with ownership. Quality is a meeting customer expectation and timeliness is the speed at which a business completes tasks and the degree to which it completes tasks on schedule and as promotion. The third, managing resources used to create value, consists of demand forecasting, followed by inventory, logistic, capacity, facilities, and workforce. These resource management topics are enhanced by three integrative frameworks, supply chain management, lean systems, and constraint management.

Integrative management framework is a management approach or philosophy that guides day-to-day decisions in a way that is consistent with a

firm's profitability goals. Lean systems is a productive system that functions with little waste or excess, usually with low inventory levels. Constraints management is a framework for managing the constraints of a system in a way that maximizes the system's accomplishment of its goals. An overview of the Profit Model shows that profitability results from the creation of value and a strategy for maintaining a link to the customers who define it. The creation of value at a level that exceeds the cost of creating it provides the potential for profitability.

Operations management has responded to and will continue to respond to four dominant environmental forces, competition resulting from the globalization of business, increasing levels of communication and competition brought about by the internet and other disruptive technologies, the impact of the natural environment, and regional pressures that have varying impacts on business decisions. Two business outputs, where is products and services, are critical to the management of operations resources. Effective operations management must acknowledge the differences and similarities of those environments. Two different types of customer must be recognized because of the differences in their expectations and needs.

Example of the different is products are tangible while services are intangible. The important of operations familiarity and familiarity with all aspects of the enterprise is discussed as an important way for the business student to differentiate himself from other student. It is an employee's ability to make the best decisions for the business, after all that is the most highly

prizes. The interaction among processes makes it particularly important for all managers to have a basic knowledge of all business functions. Product differentiation, high quality, low cost, on time delivery and flexibility can only be achieved when operations managers make effective decision in ten areas of operation management.

One of strategic operation management critical decisions is product and design decision. Design products and services affect much of the transformation process. They determine the costs of operations as well the quality of products and services. An organization has to develop product design strategies in line with market changes as the product life cycle so as to sustain market share in the industry. Next is location selection decision. Depending on the nature of the business, location selection is crucial for the organization success. The decision influences costs such as transportation cost, logistic cost and rent as well as human resource in the area. Process and layout design is also a critical decision has to be made.

Selecting the right processes and making decisions on appropriate process and layouts strategies affect management decisions to use specific technology, types of processes with suitable layouts, to procure resources and also develop maintenance strategies. An organization has to make the right decision on capacity needs, manpower requirements, purchasing decisions, and inventory need requirements; all these affect the processes and layout decisions because processes and materials must be located in relations to each other. Besides that, aggregate planning decisions are required on forecast demand, production or capacity strategies and demand

strategies or maintain level production strategies so as to meet the market demands.

In addition, an organization has to develop feasible and efficient production schedule; the demand on human resources and facilities must be determined and controlled. Making the right scheduling decisions enable jobs or products or services to be delivered to customers on time and within datelines. People are integral part of total work system. Proper division of jobs, work methods and work measurements must be decided by the organization to ensure the quality of work life, motivation of workers, the skills required for specific jobs, standard operating procedures and standard time for a job and also the relative costs for the jobs such as wages and incentives.

Right decision has to be made on quality strategies so as to remain customer focus, develop quality policies and quality objectives, and to establish quality process strategies and a quality management system that yield excellent quality products, processes and services. Inventory decisions can be optimized only when customer orders, production schedules and human resource planning are considered. An organization has to plan for its inventory management system for its finished products, as well as its raw materials and work in progress. The manager also has to make decisions whether to carry out preventive maintenance or breakdown maintenance as it incurs maintenance costs.

To do this, an organization has to decide on its desired levels of reliability, stability and maintenance costs. Basically, these ten strategic operations

management critical decisions are crucial to determine the organization success in order to fulfil organization's goals and missions. Only by making proper and appropriate decisions; and review those on timely basis to ensure the decisions are feasible for the current condition, the organization able to pass all problems and hassles in the future. ————— [1] [http://en.wikipedia.org/wiki/Operations\\_management](http://en.wikipedia.org/wiki/Operations_management)

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