## WEEK ||

# • UNIT 4: MANAGEMENT AND OPERATIONS • UNIT 5: LEADERSHIP AND MANAGEMENT FOR SERVICE INDUSTRIES

#### **OVERVIEW**



 Business control systems consist of procedures and processes, which help an organization achieve its mission and objectives. Controls define how employees should conduct themselves and perform job duties. After business owners and managers implement standards, they must track and monitor performance. Systems require ongoing modifications and adjustments to help reach targets.

 Business must have quality control, or QC, procedures in place to review and check the quality of materials, products or service. The QC procedures depend on the function. For example, the manufacturing process may require controls at specific phases, such as pre-production, during production and the finished product.

 The manager will need to determine what quality assurance methods to use. Business owners may use statistical techniques to ascertain the quality of raw material on arrival to the plant, or may perform visual inspections of finished products.

 Distribution systems can be defined as the sequential flow of procedures, systems, and activities which are designed and linked to facilitate and monitor the movement of goods and services from the source to the consumer. Essentially, distribution is about making products and services available to the end users when and where they need them.

Global Supply Image

 Often times, you might hear the term channel of distribution or a marketing channel in reference to the distribution systems. These two terms relate to a group of organizations or individuals who have an impact on the flow of products and services from the source production and the end consumer.

 To reiterate, distribution systems refer to making products and services available to the customer base when they are in need and where they can be used.

- Below are some of the key attributes associated with distribution systems and the benefits they offer:
- Time: when the consumer wants to obtain the product or service.
- Place: the place attribute is where the consumer wants to obtain the product or service.
- Control: consumer ownership of the product or service.

- Distribution management is the process of overseeing the movement of goods from supplier or manufacturer to point of sale.
- It refers to activities and processes such as packaging, inventory, warehousing, supply chain, and logistics.

- Adopting a distribution management strategy is important for a company's financial success and corporate longevity.
- Distribution management helps keep things organized and keeps customers satisfied.

 Materials processing, the series of operations that transforms industrial materials from a raw-material state into finished parts or products. Industrial materials are defined as those used in the manufacture of "hard" goods, such as more or less durable machines and equipment produced for industry and consumers, as contrasted with disposable "soft" goods, such as chemicals, foodstuffs, pharmaceuticals, and apparel.

 Materials processing by hand is as old as civilization; mechanization began with the Industrial Revolution of the 18th century, and in the early 19th century the basic machines for forming, shaping, and cutting were developed, principally in England. Since then, materials-processing methods, techniques, and machinery have grown in variety and number.

 The cycle of manufacturing processes that converts materials into parts and products starts immediately after the raw materials are either extracted from minerals or produced from basic chemicals or natural substances. Metallic raw materials are usually produced in two steps.

 First, the crude ore is processed to increase the concentration of the desired metal; this is called beneficiation. Typical beneficiation processes include crushing, roasting, magnetic separation, flotation, and leaching. Second, additional processes such as smelting and alloying are used to produce the metal that is to be fabricated into parts that are eventually assembled into a product.

 The processes used to convert raw materials into finished products perform one or both of two major functions: first, they form the material into the desired shape; second, they alter or improve the properties of the material.

 A successful process design has to take into account the appropriateness of the process to overall organization objective. Process design requires a broad view of the whole organization and should not have a myopic outlook. And the process should deliver customer value with constant involvement of the management at various stages.

 In order to achieve a good process design, effective process strategy is required, which deals with a singular line items required to manufacture the end product. Effective process strategy deals with raw material procurement, customer participation, technology investment, etc.

 Over a period of time process design has undergone change and new concepts like Flexible Manufacturing Systems have been developed, which delivers efficient and effective production design and analysis.

- Process development for process design can be summarized through following steps:
- Process Requirement: The very 1st step is to collect and gather information to give structure with the end objective. That is to make process requirement document highlighting various stages, risk and stakeholders for production. This will include assessment of available technology, raw material requirement, factory/plant layout and demand forecast.

- Team Building: Once the process requirements are finalized, for each objective, a team is finalized based on skill level and experience. Function of the team is to get familiarize with the whole process.
- Planning and Implementation: Process planning team will develop module; policies and procedure require for production, which are after required approval internal as well as external is implemented.

- Audit: A regular audit is carried out to ensure that process thus implemented is in line and delivering value to customers.
- End of Life: Over a course of time there may be enhancement of the product or product may get discontinued in these circumstances, process thus develop is discontinued.

 Capacity management refers to the act of ensuring a business maximizes its potential activities and production output—at all times, under all conditions. The capacity of a business measures how much companies can achieve, produce, or sell within a given time period.

- Consider the following examples:
- A call center can field 7,000 calls per week.
- A car service center can attend to 40 customers per hour.
- A restaurant has the seating capacity to accommodate 100 diners.

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 Capacity management also means calculating the proportion of spacial capacity that is actually being used over a certain time period. Consider a company operating at maximum capacity that houses 500 employees across three floors of an office building. If that company downsizes by reducing the number of employees to 300, it will then be operating at 60% capacity (300 /500 = 60%). But given that 40% of its office space is left unused, the firm is spending more on per-unit cost than before.

- Capacity management refers to the act of ensuring a business maximizes its potential activities and production output—at all times, under all conditions.
- Companies must remain nimble enough to constantly meet expectations in a cost-effective manner.
- Companies that poorly execute capacity management may experience diminished revenues due to unfulfilled orders, customer attrition, and decreased market share.

 Logistics & Inventory Management is a very critical supporting function on how these activities will be executed. Recent studies show that nearly 50% of businesses surveyed continue to see logistics as a nonstrategic business function, while the other 50% are investing in developing logistics as a competitive advantage.

 The dictionary defines logistics as the detailed coordination of a complex operation involving many people, facilities, or supplies. Although this definition is true, logistics has taken on a new meaning in today's digital world.

 Logistics can alternatively be explained as the detailed coordination of information, physical, and financial flows to and from trading partners and consumers. Each contains their own set of supporting activities and personnel to carry out those activities, but one cannot function without the other.

 Inventory management is certainly a function of logistics but the influencers impacting inventory extend beyond the logistics network. Inventory requires a capital investment to build and stock finished goods. However, inventory is essential as the time a consumer is willing to wait for a product may be much less than the time it takes to manufacture the product and then ship the product to the customer need location.

 Inventory management considers a number of complex variables including; risk, lead time, cost, location, transport, and service levels.

 Scheduling is a method that is used to distribute valuable computing resources, usually processor time, bandwidth and memory, to the various processes, threads, data flows and applications that need them. Scheduling is done to balance the load on the system and ensure equal distribution of resources and give some prioritization according to set rules. This ensures that a computer system is able to serve all requests and achieve a certain quality of service.

 Scheduling is largely based on the factors mentioned above and varies depending on the system and the programming of the system's or user's preferences and objectives. In modern computers such as PCs with large amounts of processing power and other resources and with the ability to multitask by running multiple threads or pipelines at once, scheduling is no longer a big issue and most times processes and applications are given free reign with extra resources, but the scheduler is still hard at work managing requests.

- Types of scheduling include:
- First come, first served The most straightforward approach and may be referred to as first in, first out; it simply does what the name suggests.
- Round robin Also known as time slicing, since each task is given a certain amount of time to use resources. This is still on a first-come-first-served basis.

- Shortest remaining time first The task which needs the least amount of time to finish is given priority.
- Priority Tasks are assigned priorities and are served depending on that priority. This can lead to the starvation of the least important tasks as they are always preempted by more important ones.

## REFERENCES

- Organizational Function: Operations. (2019). Retrieved 16 July 2019, from <u>https://www.slideshare.net/ajandne/organizational-function-operations</u>
- What Are the Control Systems of a Business?. (2019). Retrieved 16 July 2019, from <u>https://bizfluent.com/info-8332677-control-systems-business.html</u>
- (2019). Retrieved 16 July 2019, from <u>https://study.com/academy/lesson/distribution-system-definition-types-quiz.html</u>
- How Distribution Management Works. (2019). Retrieved 16 July 2019, from <u>https://www.investopedia.com/terms/d/distribution-management.asp</u>
- Materials processing. (2019). Retrieved 16 July 2019, from https://www.britannica.com/technology/materialsprocessing

## REFERENCES

- Process Design and Analysis. (2019). Retrieved 16 July 2019, from https://www.managementstudyguide.com/process-design-and-analysis.htm
- Maxing Out: The Importance of Capacity Management. (2019). Retrieved 16 July 2019, from https://www.investopedia.com/terms/c/capacity-management.asp
- Logistics & Inventory Management: Intentional & Coordinated Actions | IndustryStar Solutions. (2019). Retrieved 16 July 2019, from <u>https://www.industrystarsolutions.com/blog/2016/03/logistics-inventory-management/</u>
- What is Scheduling? Definition from Techopedia. (2019). Retrieved 16 July 2019, from https://www.techopedia.com/definition/9654/scheduling