Dr. SNS RAJALAKSHMI COLLEGE OF ARTS AND SCIENCE (Autonomous) Coimbatore -641049 Accredited by NAAC (Cycle- III) with 'Á+' Grade.

COMPUTER APPLICATIONS

MANAGEMENT INFORMATION SYSTEM

(21UCP302)

UNIT-II

Class: II BCA B Regulation: 2021-2024 Academic year:2022-2023 Subject In charge: Ms.S.Lalitha

UNIT-II

Organizational Structure:

An organization is a social unit of individuals that is designed and managed to achieve collective goals. As such organizations are open systems that are greatly affected by the environment they operate in. Every organization has its own typical management structure that defines and governs the relationships between the various employees, the tasks that they perform, and the roles, responsibilities and authority provided to carry out different tasks.

An organization that is well structured achieves effective coordination, as the structure delineates formal communication channels, and describes how separate actions of individuals are linked together.

Organizational structure defines the manner in which the roles, power, authority, and responsibilities are assigned and governed, and depicts how information flows between the different levels of hierarchy in an organization.

The structure an organization designs depends greatly on its objectives and the strategy it adopts in achieving those objectives.

An **organizational chart** is the visual representation of this vertical structure. It is therefore very important for an organization to take utmost care while creating the organizational structure. The structure should clearly determine the reporting relationships and the flow of authority as this will support good communication – resulting in efficient and effective work process flow.

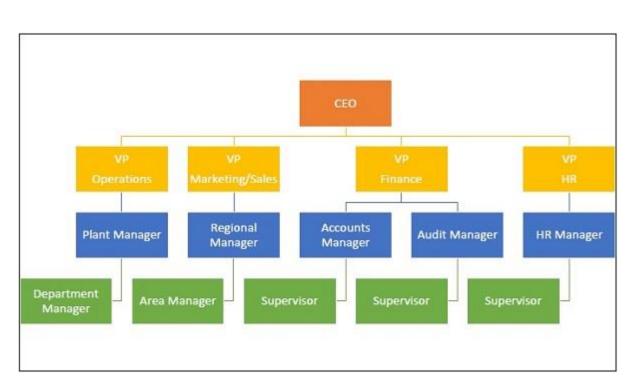
Common Organization Structures

Managements need to seriously consider how they wish to structure the organization. Some of the critical factors that need to be considered are -

- The size of the organization
- Nature of the business
- The objectives and the business strategy to achieve them
- The organization environment

Functional Organization Structure

The functional structure is the most common model found in most organizations. Organizations with such a structure are divided into smaller groups based on specialized functional areas, such as operations, finance, marketing, Human Resources, IT, etc.



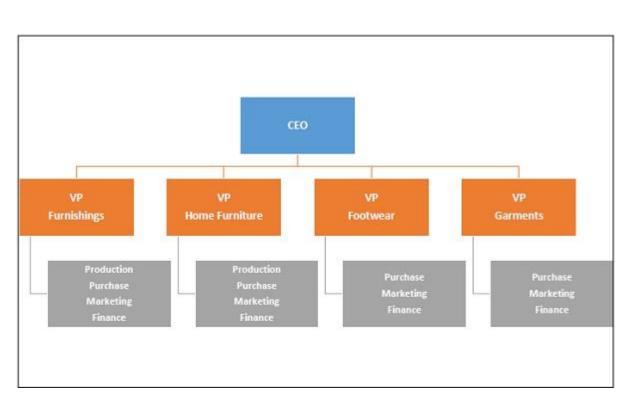
The organization's top management team consists of several functional heads (such as the VP Operations, VP Sales/Marketing). Communication generally occurs within each functional department and is communicated across departments through the department heads.

This structure provides greater operational efficiency as employees are functionally grouped based on expertise and shared functions performed. It allows increased specialization as each group of specialists can operate independently.

In spite of the above benefits there are some issues that arise with this structure. When different functional areas turn into silos they focus only on their area of responsibility and do not support other functional departments. Also expertise is limited to a single functional area allowing limited scope for learning and growth.

Product Organizational Structure

This is another commonly used structure, where organizations are organized by a specific product type. Each product category is considered a separate unit and falls within the reporting structure of an executive who oversees everything related to that particular product line. For example, in a retail business the structure would be grouped according to product lines.

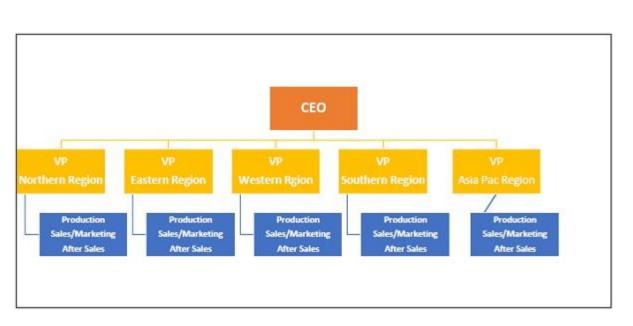


Organization structured by product category facilitates autonomy by creating completely separate processes from other product lines within the organization. It promotes depth of understanding within a particular product area and also promotes innovation. It enables clear focus with accountability for program results.

As with every model, this model also has a few downsides like requirement of strong skills specializing in the particular product. It could lead to functional duplication and potential loss of control; each product group becomes a heterogeneous unit in itself.

Geographic Organizational Structure

Organizations that cover a span of geographic regions structure the company according to the geographic regions they operate in. This is typically found in organizations that go beyond a city or state limit and may have customers all across the country or across the world.

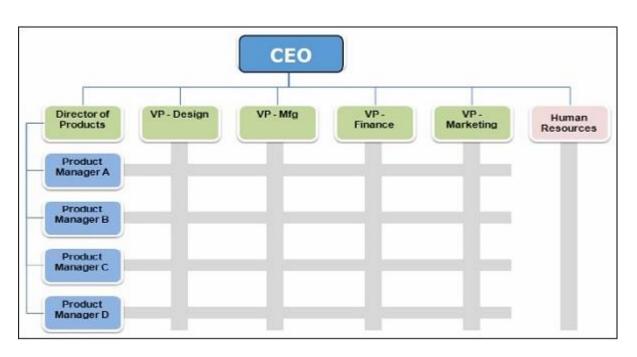


It brings together employees from different functional specialties and allows geographical division. The organization responds more quickly and efficiently to market needs, and focuses efforts solely on the objectives of each business unit, increasing results.

Though this structure increases efficiency within each business unit, it reduces the overall efficiency of the organization, since geographical divisions duplicate both activities and infrastructure. Another main challenge with this model is that it tends to be resource intensive as it is spread across and also leads to duplication of processes and efforts.

Matrix Organizational Structure

A matrix structure is organized to manage multiple dimensions. It provides for reporting levels both horizontally as well as vertically and uses cross-functional teams to contribute to functional expertise. As such employees may belong to a particular functional group but may contribute to a team that supports another program.



This type of structure brings together employees and managers across departments to work toward accomplishing common organizational objectives. It leads to efficient information exchange and flow as departments work closely together and communicate with each other frequently to solve issues.

This structure promotes motivation among employees and encourages a democratic management style where inputs from team members are sought before managers make decisions.

However, the matrix structure often increases the internal complexity in organizations. As reporting is not limited to a single supervisor, employees tend to get confused as to who their direct supervisor is and whose direction to follow. Such dual authority and communication leads to communication gaps, and division among employees and management.

Organizational theory:

Organizational theory is the study of the structures of organizations. Four major theories contribute to this study – classical organizational theory, human relations or neo-classical theory, contingency or decision theory and modern systems theory. Over time, the emphasis in organizational theory has shifted from stiff, hierarchical structures rampant in the industrial age to broader, more flexible structures more prevalent in the technological, modern age.

Classical Organizational Theory

Classical organization theory represents the merger of scientific management, bureaucratic theory and administrative theory. Scientific management theory has four basic principles: a scientific method exists to perform each task; select, train and develop workers for each task; closely supervise employees; and management's role is planning and control.

Bureaucratic theory and administrative theory expanded on these principles. However, over time academics and practitioners began to view <u>classical organization theory as too rigid and</u>

<u>authoritative</u>. It focused on structure and economic rewards and ignored individual freedom and the working environment.

Small-business owners often start out using a flat organization, where the owner and one or two other key employees make all or most of the decisions related to finance, human resources, product creation, pricing and sales.

Human Relations Theory

Human relations theory also is referred to as neoclassical theory. It uses some of the beliefs of classical theory as its base but expands those beliefs to incorporate other principles. Key principles include emphasizing differences between people to create different effective motivators, explains <u>Study.com</u>.

It also involves resolving creative conflict to help develop new ideas and build stronger working relationships. Another principle involves emphasizing social interactions, participative management and decision-making. Learning "soft" business skills, such as interpersonal communications, leadership, project management and team management are important for business owners who want to use a more employee-centered approach to management.

Contingency/Decision Theory

Followers of contingency theory, also referred to as decision theory, view conflict as manageable. This theory espouses the principle that organizations act rationally to adapt to environmental changes. Contingency theory assesses management effectiveness by management's environmental adaption abilities.

In addition, in volatile industries – for example, technology – managers at all levels must have the authority to make decisions in their area, contingent on what is happening. Companies and managers must adjust their managerial styles and techniques based on the conditions occurring around them.

Small-business owners who hire most or all of their employees should consider outsourcing part of this function to professionals, or making sure other key executives review job postings and interview candidates.

Modern Systems Theory

The foundation of the modern systems theory is the principle that all of an organization's components interrelate nonlinearly, therefore making a small change in one variable impact many others.

A small change can cause a huge impact on another variable or large changes in a variable can cause a nominal impact. Another principle is that organizations operate as open systems in dynamic equilibrium as they constantly adjust and adapt to changes in their environment.

Strategic Management of Business:

Strategic Management is basically a continuous process of identifying and describing the strategies of an organization, which managers use for achievement of better performance and gaining competitive advantage for the organization.

A **strategy** is an action plan built to achieve a specific goal or set of goals within a definite time, while operating in an organizational framework.

According to Rajiv Nag, Donald Hambrick & Ming-Jer Chen, "Strategic management is the process of building capabilities that allow a firm to create value for customers, shareholders, and society while operating in competitive markets."

The process of strategic management entails -

- Specifically pointing out the firm's mission, vision, and objectives
- Developing the policies and plans to achieve the set objectives
- Allocating the resources for implementing these policies and plans

Keeping an Eye on Expenses and Goals

A balanced record of plans and policies in relation with operational moves are used to evaluate the business's overall performance. Starting from the executive level, the basic starting point is stakeholder interest, needs and expectations (i.e., financiers, customers, owners, etc.)

The following image is an example of a strategy map applicable to a public-sector organization. It shows how various goals are linked with one another and provides the trajectories to achieve these goals.

Rumelt's definition of strategy includes the following steps -

- **Diagnosis** What problem needs to be addressed? How do the vision, mission and objectives of a firm imply its actions?
- **Guiding Policy** What according to the firm's approach will be the framework to solve the problems?
- Action Plans How would the operations look like (in detail)? How can the processes be enacted to be in sync with the policy guidelines and to address the issues available in the diagnosis?

Michael Porter

In 1980, Michael Porter provided the following four key elements that needs to be considered while forming a competitive strategy. The elements are -

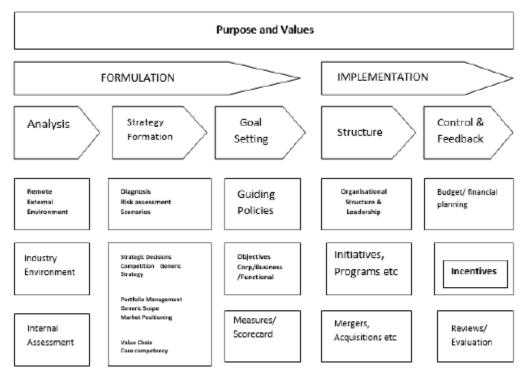
- SWOT, especially the strengths and weaknesses of the firm
- Ethical points or personal values of key executives (i.e., management or the board)
- The industry's opportunities and threats
- Broader societal and stakeholder expectations

Henry Mintzberg

Mintzberg hypothesized five basic approaches, popularly known as 5Ps that can help in developing a robust business strategies.

- Strategy as plan Strategy is a directed course of action to reach the intended set of goals; these are similar to the various strategic planning concept.
- Strategy as pattern Strategy here emerges from a consistent pattern of past organizational behavior. A strategy is realized over time rather than being planned or intended.
- Strategy as position This includes locating the brands, products, or the companies within the market and industry depending on the conceptual framework of the firm's consumers or other stakeholders.
- Strategy as ploy This is a specific manoeuvre and manipulation intended to outwit a competitor.
- Strategy as perspective This kind of strategy is based on the "theory of the business" or it may be a natural extension of the given mindset or ideological attributes of the organization.

The following diagram illustrates the five important steps of strategic management process.



The Five Steps of Strategic Management

Strategic management is a very large, complicated, and always-evolving endeavor. Therefore, it is handy to group it into a set of solid steps to describe the process of strategic management. The most common and used frameworks of strategic management include five steps, grouped in two general stages – Formulation and Implementation.

Formulation

- Analysis Analysis involves comprehensive market, financial and business research on the external and competitive environments. The process includes conducting Porter's Five Forces, SWOT, PESTEL, and value chain management analyses and combining expertise in each industry that are part of the strategy.
- Strategy Formation After analyzing internal and external environments, the organization arrives at a generic strategy (for instance, low-cost, differentiation, etc.) that is based upon the value-chain implications. It is done for deriving and maximizing core competence and prospective competitive advantages.
- **Goal Setting** Goal setting is the next step of strategy formation. As the defined strategy is in hand, management now tends to find out and communicates the goals and objectives of the company that are linked to the predicted results, strengths, and opportunities.

Implementation

- **Structure** The implementation phase has the basic function of structuring the management and operational processes. As there is a strategy in place, the business now wants to solidify the organizational structure and leadership patterns (making many changes if required).
- **Feedback** Feedback is the final stage of strategic management process. In this final stage of strategy, all of the budgetary figures are collected and disseminated for evaluation. Financial ratios calculation and performance reviews are delivered to relevant managers, executives and concerned departments.

Strategic management is a continuous process. It starts with defining the vision, mission, objectives, and goals of the organization.

Vision

Vision stays at the top in the major hierarchy of strategic intent. It explains what the organization ultimately wants to achieve in the long term.

John Kotter defines vision as, "It is a statement of the organization in the future."

Alex Miller and Gregory Dess defined vision as, "the category of intentions that are broad, allinclusive and forward thinking."

Advantages of Vision

A few benefits accruing to an organization having a vision are as follows -

- Vision fosters the idea of experiment.
- Vision promotes long-term thinking about the organization.
- Visions is one of the major factors to foster risk taking.
- Vision makes an organizations more competitive, original and unique.
- Good vision is a factor of representation of integrity.
- Vision inspires and motivates the people working in an organization.

Mission

Mission statements are responsible for the role an organization plays in the society.

A few definitions of mission are as follows -

David Hunger and Thomas Wheelen are of the view that mission is "the purpose or reason for the organization's existence."

John L. Thompson states that mission is "the essential purpose of the organization, concerning particularly why it is in existence, the nature of the business it is in, and the customers it seeks to serve and satisfy."

According to David F. Harvey "A mission provides the basis of awareness of a sense of purpose, the competitive environment, degree to which the firm's mission fits its capabilities and the opportunities which the government offers."

MISSION STATEMENT – EXAMPLES

Apple – "Apple designs Macs, the best personal computers in the world, along with OS X, iLife, iWork and professional software. Apple leads the digital music revolution with its iPods and iTunes online store. Apple has reinvented the mobile phone with its revolutionary iPhone and App store, and is defining the future of mobile media and computing devices with iPad."

Ranbaxy Industries – "To become a research based international Pharmaceuticals Company."

Basics of Management information system:

Decision Making:

Decision making is a daily activity for any human being. There is no exception about that. When it comes to business organizations, decision making is a habit and a process as well.

Effective and successful decisions make profit to the company and unsuccessful ones make losses. Therefore, corporate decision making process is the most critical process in any organization.

In the decision making process, we choose one course of action from a few possible alternatives. In the process of decision making, we may use many tools, techniques and perceptions.

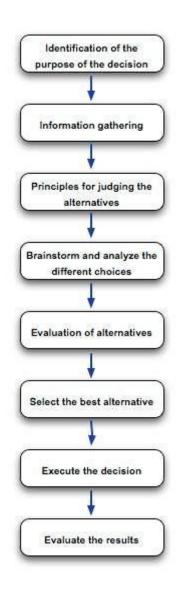
In addition, we may make our own private decisions or may prefer a collective decision.

Usually, decision making is hard. Majority of corporate decisions involve some level of dissatisfaction or conflict with another party.

Let's have a look at the decision making process in detail.

Steps of Decision Making Process

Following are the important steps of the decision making process. Each step may be supported by different tools and techniques.



Step 1: Identification of the purpose of the decision

In this step, the problem is thoroughly analysed. There are a couple of questions one should ask when it comes to identifying the purpose of the decision.

- What exactly is the problem?
- Why the problem should be solved?
- Who are the affected parties of the problem?
- Does the problem have a deadline or a specific time-line?

Step 2: Information gathering

A problem of an organization will have many stakeholders. In addition, there can be dozens of factors involved and affected by the problem.

In the process of solving the problem, you will have to gather as much as information related to the factors and stakeholders involved in the problem. For the process of information gathering, tools such as 'Check Sheets' can be effectively used.

Step 3: Principles for judging the alternatives

In this step, the baseline criteria for judging the alternatives should be set up. When it comes to defining the criteria, organizational goals as well as the corporate culture should be taken into consideration.

As an example, profit is one of the main concerns in every decision making process. Companies usually do not make decisions that reduce profits, unless it is an exceptional case. Likewise, baseline principles should be identified related to the problem in hand.

Step 4: Brainstorm and analyse the different choices

For this step, brainstorming to list down all the ideas is the best option. Before the idea generation step, it is vital to understand the causes of the problem and prioritization of causes.

For this, you can make use of Cause-and-Effect diagrams and Pareto Chart tool. Cause-and-Effect diagram helps you to identify all possible causes of the problem and Pareto chart helps you to prioritize and identify the causes with highest effect.

Then, you can move on generating all possible solutions (alternatives) for the problem in hand.

Step 5: Evaluation of alternatives

Use your judgement principles and decision-making criteria to evaluate each alternative. In this step, experience and effectiveness of the judgement principles come into play. You need to compare each alternative for their positives and negatives.

Step 6: Select the best alternative

Once you go through from Step 1 to Step 5, this step is easy. In addition, the selection of the best alternative is an informed decision since you have already followed a methodology to derive and select the best alternative.

Step 7: Execute the decision

Convert your decision into a plan or a sequence of activities. Execute your plan by yourself or with the help of subordinates.

Step 8: Evaluate the results

Evaluate the outcome of your decision. See whether there is anything you should learn and then correct in future decision making. This is one of the best practices that will improve your decision-making skills.

Conclusion

When it comes to making decisions, one should always weigh the positive and negative business consequences and should favour the positive outcomes.

This avoids the possible losses to the organization and keeps the company running with a sustained growth. Sometimes, avoiding decision making seems easier; especially, when you get into a lot of confrontation

Information Systems:

Information system is group of people, information technology, and business process to achieve a business goals. Information systems are a group of interconnected elements working to collect, process, store, and distribute data to provide coordination, visualization in an organization, analysis, and decision-making.

The Information system can be represented as a set of software, hardware, and telecommunications network that people create and use to gather, produce, and distribute beneficial data, generally in organizational settings.

Information System is a particular discipline or department of learning that is concerned with the application of data to organizational needs. The scope of information system involves manual, computer-based and other forms of automated process and applications of information technology usually.

A system is a group of components that connect to accomplish some goals or in other terms, a system is a group of interrelated components or objects that work together for the complete objective.

In information system, it defines an organized relationship between its components. The system can be represented as orderly grouping of interdependent elements linked together according to plan to implement a specific objective or goal. Hence, a system is designed to achieve one or more goals. The components of a system defines sub-system. A sub-system is a system which is a component of a higher system. The large system is known as super system or supra system.

The information system contains resources for shared or processed information, and the people who handle the system. People are considered part of the system because without them, systems would not work correctly. IT professionals, programmers, system analysts, high-level managers, and help-desk workers are all part of an information system.

An information systems triangle is generally used to define how an IS includes hardware components (such as computers), people and processes at the three vertices.

There are several types of information systems, depending on the need they are designed to fill. An operations support system, including a transaction processing system, converts business data (financial transactions) into valuable data. Similarly, a management information system needs database information to output files, supporting users and businesses make decisions based on extracted data.

An example of Information system including some famous TV shows can be considered as an amazing and unexpected example of IS. In talent shows, the TV audience is requested to cast their vote to decide which candidates will advance to the following stage of the show.

The system that taking the votes and records them is the hardware computer, the steps through which these votes are cast (phone call, text, or online poll) and the rules that decides who is removed are the process, and the voters are the people contained with the system.