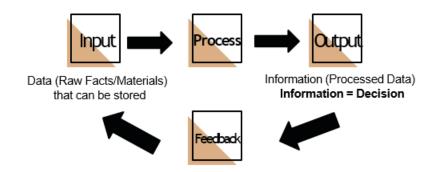
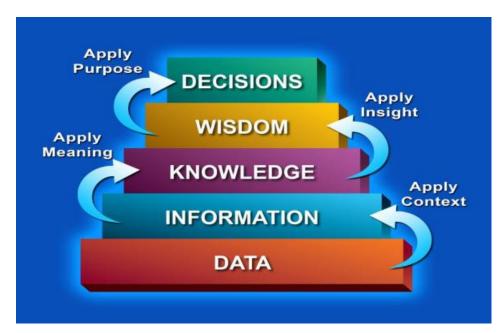
# Information System Components





## Introduction

- Today, Decision-Making is more **Difficult**.
- The need for Decision-Making Speed has Increased,
- Overload of Information is Common, and there is more Distortion of information.
- On the Positive Side, there is a greater emphasis on **Fact-Based** Decision Making.
- A Complex Decision-Making Environment creates a need for Computerized Decision Support.
- Research and Case-Studies provide evidence that a well designed and appropriate Computerized
  Decision Support Systems can Encourage Fact-based Decisions, Improve Decision Quality, and
  Improve the Efficiency and Effectiveness of Decision Processes.



## 1.1 What is a Decision?

- A decision is making the choice between different Options (two or more available alternatives) to achieve an aim or a goal.
- Also, Decision can be defined as:
- > The **Selection** from several available alternatives.
- ➤ The **Act or Process** of deciding something.
- ➤ The **Need** for making something.
- > The **Solution Chosen** from among alternatives.
- > A **Report** of the conclusion.
- > A Choice Made between alternative courses of action in a situation of uncertainty.
- > A Conclusion or Resolution reached after consideration.
- > The **Ability to decide** quickly and what to do.
- ➤ A Choice that you make about something after thinking about several possibilities

## Difference Between "Urgent" & "Important" Decisions

Decisions can be differentiated according two dimensions: IMPORTANCE and URGENCY.

- ➤ An **Important-Decision** is one that has the potential to have a **Significant Impact** on your Business or on a Person's Life.
- ➤ An Urgent-Decision is one that you must make immediately, there is No time for further Consideration.





Urgent and Important – such as a deadline for submitting a sales report Important and Not Urgent – such as long-term planning Urgent and Not Important – such as dealing with interruptions Not Urgent and Not Important – such as activities that take too much time

## 1. NEITHER URGENT, NOR IMPORTANT

- Consider taking No action (Not need to make it at all).
- **Delegate to Others** (Such decisions provide an opportunity for a manager to coach subordinates on how to think about decision-making).
- Delay to less Hectic-times (when there are other more Important and Urgent decisions that need attention).
  - Beware of Morphing (Don't delay the decision until it becomes Urgent).

#### Such as:

- Watching TV or online videos
- Playing video games or web games
  - Playing card games

#### 2. URGENT, BUT NOT IMPORTANT

- Don't Overanalyze (Because these decisions are Not Important).
- Use Principles (Rules of thumb, guidelines and principles can provide a great way to make decisions quickly and efficiently).
- Listen to your gut (As an experienced businessperson, you have good judgment -- Don't be afraid to use it).

#### Such as:

- Unexpected texts or phone calls
- Coworkers who ask for work-related advice
- Employee emails
- Unannounced family requests

#### 3. BOTH URGENT AND IMPORTANT

- **Prevent Morphing** (Left unaddressed, many decisions will morph into this category. Don't let it happen).
- **Beware of False-Urgency** (Many decisions that are portrayed as urgent, aren't. Don't be pressed into making an important decision without careful consideration when you don't have to).
- **Reduce Urgency** (Consider whether you can take steps to buy yourself time to make this important decision).
- Keep Options Open (Consider options that will allow you the most flexibility later. If you can avoid it, don't get locked in).
  - Consult Experts (These are the people that are the most likely to have immediate insight into the right direction to proceed).

#### Such as:

- An urgent call from family
- Any measure taken to uphold or reinforce safety or company policy
- An incoming call from any member of a board of directors or important stakeholder
- Outside media reporting, such as an interview or filming for company-related production
- Tax deadlines

#### 4. IMPORTANT BUT NOT URGENT

- Identify and address the Right Problem.
- Have the Right Mindset (When you face a big decision, don't be overcome by emotions).
- Utilize Appropriate Analytical Tools.
- Seek the Counsel of Experts (Any time you face an important decision, seeking help from experts is a good idea).
- Live with your decision before executing (Make a decision and sleep on it before implementing).

#### Such as:

- A set obligation to exercise
- Study related to a particular project venture
- Time with family
- Car maintenance
- Improving a personal hobby
- Investing in a new hobby

## 1.2 Tips for Making Good Decision

- Making Good Decisions is a **method that must be learned**.
- It is Critical to Business Success.
- The first step in good decision-making is to Understand that <u>all</u> <u>decisions Not are created equal</u>

because decisions can vary so obviously from one situation to the next.



## There are 5 Steps for Making Good Decisions:

## Step 1: Identify Your Goal

One of the most effective decision-making strategiesis to keep an eye on your goal.

## Step 2: Gather Information for Weighing Your Options

When making good decisions it is best to gather necessary information that is directly related to the problem (make a list of every possible alternative).

## **Step 3: Consider the Consequences**

This step can be just as important as step one becauseit will help you determine and/or review the **Pros** and **Cons** of the different options that you listed in the previous step.

Step 4: Make Your Decision

Step 5: Review & Evaluate Your Decision

## 1.3 Types of Decisions

#### 1. ROUTINE AND BASIC DECISIONS:

- Routine Decision means such decisions, which are taken in respect of the day-to-day activities of the Organization, and which require less thinking and advice. These are of a repetitive nature.
- Basic Decision means such decisions that are essential for the existence of the Organization and for which complete study, analysis, power, and critical thinking are essential.

#### 2. PERSONAL AND ORGANIZATIONAL DECISIONS:

- Personal Decision means such decisions, which are taken by any Person in his Personal Capacity, and Not as a member of the Organization. For example, decisions for leave, dress, resign From the organization and accepting or rejecting promotions, etc.
- Organizational or Institutional Decisions means such decisions, Which are taken by the Executives or Officers in their Formal Capacity, and which may be delegated to other persons. Such decisions, directly affect Organizational behavior.

#### 3. INDIVIDUAL AND GROUP DECISIONS:

- When the decision is taken by a Single Individual, it is known as Individual Decision. Usually, routine type decisions are taken by Individuals within the broad policy framework of the Organization.
- Group Decision mean such decisions, which are Not taken by A Single Individual, But by a Group.

#### 4. POLICY AND OPERATING DECISIONS

Policy Decisions are those which relate to the Basic Policies of the Organization, and these are taken by the top management Or board of directors or Executives. Such decisions are also Known as Management Decisions or Basic Decisions.

Operating Decision is in respect of decisions relating to the general affairs of the Institution or Enterprise and is of mechanical nature. Such decisions making is also known as Executive or Current Decision Making because they are Helpful in the execution of Policy decisions.

#### 5. PROGRAMMED AND NON-PROGRAMMED DECISIONS:

- Programmed or Structured Decision is of repetitive and routine nature, and nwhich is taken through some well-decided and well-organized System. So that, when the problem arises, it may be solved by using that method.
- Non-Programmed or Unstructured Decision is Not a routine or repetitive nature. These are Unique and New, and they have a long-lasting effect on the Organization. It's related to difficult situations for which there is No easy solution.

## 6. Planned and Unplanned Decisions:

- Decisions for which advance preparation is done, are based on the collection of facts, analysis and scientific methods are Known as Planned Decision.
- Unplanned Decision means Such decisions for which No plan is made, But are necessary, according to the circumstances, problems and opportunities prevailed.

#### 7. TACTICAL AND STRATEGIC DECISIONS

- Tactical Decision is of routine nature, related to the normal day-to-day activities taken by Manager and is of relatively lesser significance. For these decisions, the options are limited and do not require much analysis and evolution.
- Strategic Decision is those decisions, which are very difficult to be taken. This affects the future of the Business and is Related to the whole Organization. In other words, these are the decisions, which are taken presently, But their primary effect is observed after some time.

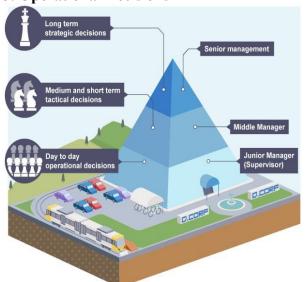
## 8. ORGANIZATIONAL, DEPARTMENTAL AND INTERDEPARTMENTAL DECISIONS:

- Organizational Decision means such decisions, which are taken by the higher authorities of the Institution and affect the Whole Organization or Enterprise. Such decision is also known as Enterprise Decision-Making.
- Departmental Decision is for those decisions which affect the Operation of the whole
  Department of an Enterprise and its Employees. Such decisions are taken by
  department managers, chairman, or management Inter-Departmental Decision is for
  those decisions which are taken by the higher authorities / chairpersons /
  representatives of two or more departments of the Organizations, after mutual
  deliberations.

### 1.4 Levels of Decisions

Decision-Making can also be classified into Three Categories based on the level at which they occur:

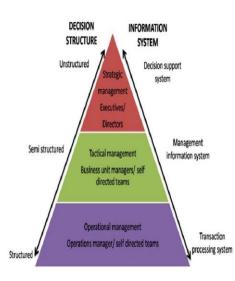
- 1. Strategic Decisions set the course of organization.
- **2. Tactical Decisions** are decisions about how things will get done.
- **3. Operational Decisions** are decisions that employees make each day to run the organization.



strategic	tactical	operational
long term	medium term	day-to-day
complex	less complex	simple and routine
made by senior managers	mode by middle managers	made by junior managers
eg aiming to be market leader	eg launching new product/opening new branches	eg regular ordering of supplies/creating staff rota

- (a) whether to enter the European market with the firm's products
- STRATEGIC
- (b) to move an Admin Assistant to another Department to help out on a temporary basis
- OPERATIONAL
- (c) whether to increase or decrease departmental staffing levels
- TACTICAL
- (d) when to schedule the weekly team meeting
- OPERATIONAL
- (e) whether to introduce flexi-time to the organisation
- TACTICAL

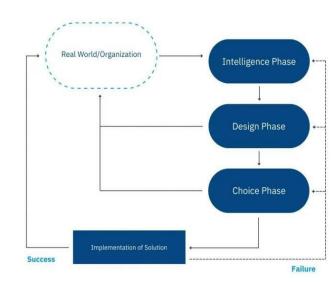
- (f) whether to re-rorganise the layout of desks in the office
- OPERATIONAL
- (g) whether to merge with another organisation
- STRATEGIC
- (h) whether to change from traditional to an open-plan layout by knocking down walls etc
- TACTICAL
- (i) whether to change the supplier of office stationery
- OPERATIONAL
- (j) whether to install new computers in the organisation
- TACTICAL



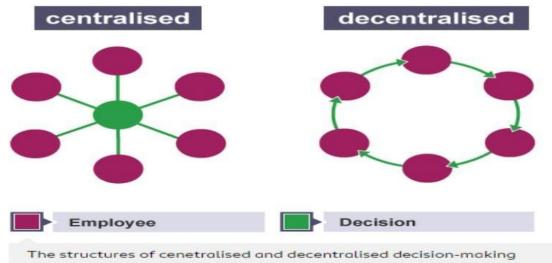
# 1.5 Phases of Decision-Making Process

Simon's Model defines Four Phases of Decision Making Process:

- 1. Intelligence Phase,
- 2. Design Phase,
- 3. Choice Phase,
- 4. Implementation Phase.



## 1.6 Where Decisions are Made



## 1. CENTRALIZED DECISION MAKING

 Centralized Decision Making is when most decisions are taken by Senior Managers or the Head Office.

Advantages	Disadvantages
decisions made by the most experienced people	staff demotivated from lack of input in decisions
decisions made more quickly	central team slower to respond to local changes in market
lead to greater uniformity within the organisation	

## 2. DECENTRALIZED DECISION MAKING

# • Decentralized Decision Making is when each department within the organization has the authority to make their own decisions.

Advantages	Disadvantages
staff motivated by opportunity to make decisions and be creative	decisions made by less experienced people
local teams can respond quickly to changes in local market	local decisions may be inconsistent with overall strategy
can provide better level of customer service	

# 1.7 Examples of Decisions in Business

- At work, the Core Function of the Management is to Make-Decisions on Business Operations and Growth.
- Whether it is Managing the workforce, servicing clients, ramping up production, or hiring new

employees, we see plenty of decision-making skills examples in everyday operations.

• Let's understand the importance of decision-making better by looking at some examples of

decision-making in management:

- 1. Decision-Making in Human Resources.
- 2. Decision-Making in Production.
- 3. Decision-Making in Marketing.
- 4. Decision-Making in Client Servicing.

## 1.8 Decision Modeling

- Decision Model is an intellectual template for Perceiving, Organizing, and Managing the Business-Logic behind a Business-Decision.
- Decision Model provides a way to visualize the sequences of events (actions) that can occur following alternative decisions in a logical framework, as well as the health Outcomes associated with each possible pathway.
- So, the Decision Model is the new way of looking at business logic.
- The Decision Model groups the rules into their natural logical groups to create the structure that makes the model Simple and Easy to understand, Communicate and Manage.
- The Decision Model is *Not* simply a list of business rules or business statements. Rather, it is a model representing a structural design of the logic embodied by those statements

- The Decision Model provides a framework for Organizing Business Rules into well-formed decision-based structures that are Predictable, Stable, Maintainable, and Normalized.
- More than this, the Decision Model directly correlates business logic to the business drivers behind it.
- allowing it to be used as a lever for meeting changing business objectives and marketplace demands.
- To accomplish this the Decision-Model, builds business logic structures within the scope of a single business decision.
- Each decision consists of families of business rules and can be represented graphically.
- Finally, it is important to distinguish between Good Decisions and Good Outcomes.
- By a stroke of good luck, a poor decision can lead to a very good outcome.
- Similarly, a very good decision can be followed by a bad outcome
- Supporting Decisions means Supporting the Decision making Process so that Better Decisions are made.
- Better Decisions can be expected to lead to Better Outcomes.

# The Steps of Decision Modeling

**Decision Modelling has Four Steps that are Performed Iteratively:** 

- 1. Identify Decisions.
- 2. Describe Decisions.
- 3. Specify Decision Requirements.
- 4. Decompose and Refine.