- Other dimension of Information
- Economic Dimension
  - It refers to the cost of information it may include.
    - Cost of acquiring data
    - Cost of maintaining data
    - Cost of generating information
    - Cost of Communicating information
- Business Dimension
  - It focus on scope and appropriateness of information. It has various parameters to measure.
    - Time, Accuracy, Reliability, Scope

- Other dimension of Information
- Technical Dimension
  - The two parameters of Technical dimension
    - Information Gathering
    - Analysis Methodology

    Cost of Information
    - Cost of data acquisition
    - Cost of Maintenance
    - Cost of data access

    Data Management
    - It is a process of maintaining the data into database.

- Organizational Dimension of Information
  - Downward Information Flow
    - The flow of information from superiors to juniors in the organization is known as downward.
    - information on instruction, plans, policies, and direction formally flow from the upper level to the lower levels.
    - Downward information is essential to maintain the regular operation of the enterprise and to meet planned objectives.
  - Upward Information Flow
    - The flow of information from juniors to superiors in a business is known as upward.
    - Generally, information of achievement of work done, problem faced in performance, suggestions, grievances, are the examples of such information
    - Such information enables the management to know what is happening actually in all the departments of the organization.

- Flow of Information in an Organization
  - Horizontal Information
    - In horizontal or sideward communication, information flows among the employees having an equal level of authority.
    - In such a communication system, employees of the same level exchange their ideas, views, experience, and knowledge with each other.
    - For example, the exchange of information between a marketing manager and a production manager.

Inward flow occurs when an outside entity or groups sends information into one of the four internal groups. Outward occur when an internal group sends information to an outside entity or group.

- Traditional View of Organization Management
- Strategic Management
- Strategic management is the process of setting goals, procedures, and objectives in order to make a company or organization more competitive.
- Tactical Management
- The administrative process of selecting among appropriate ways and means of achieving a strategic plan or objective.
- Operational Management
- Operations management is the branch of management that administers the complete production timeline of a service/ product from the input stage to the finished stage.

- Information Granularity
- Granularity indicates the level of detail of that data.
- High granularity level refers to a high level of detail,
- low granularity level refers to a low level of detail.
- Practically speaking, the more subdivided and specific a data is, the more granular it is considered to be.

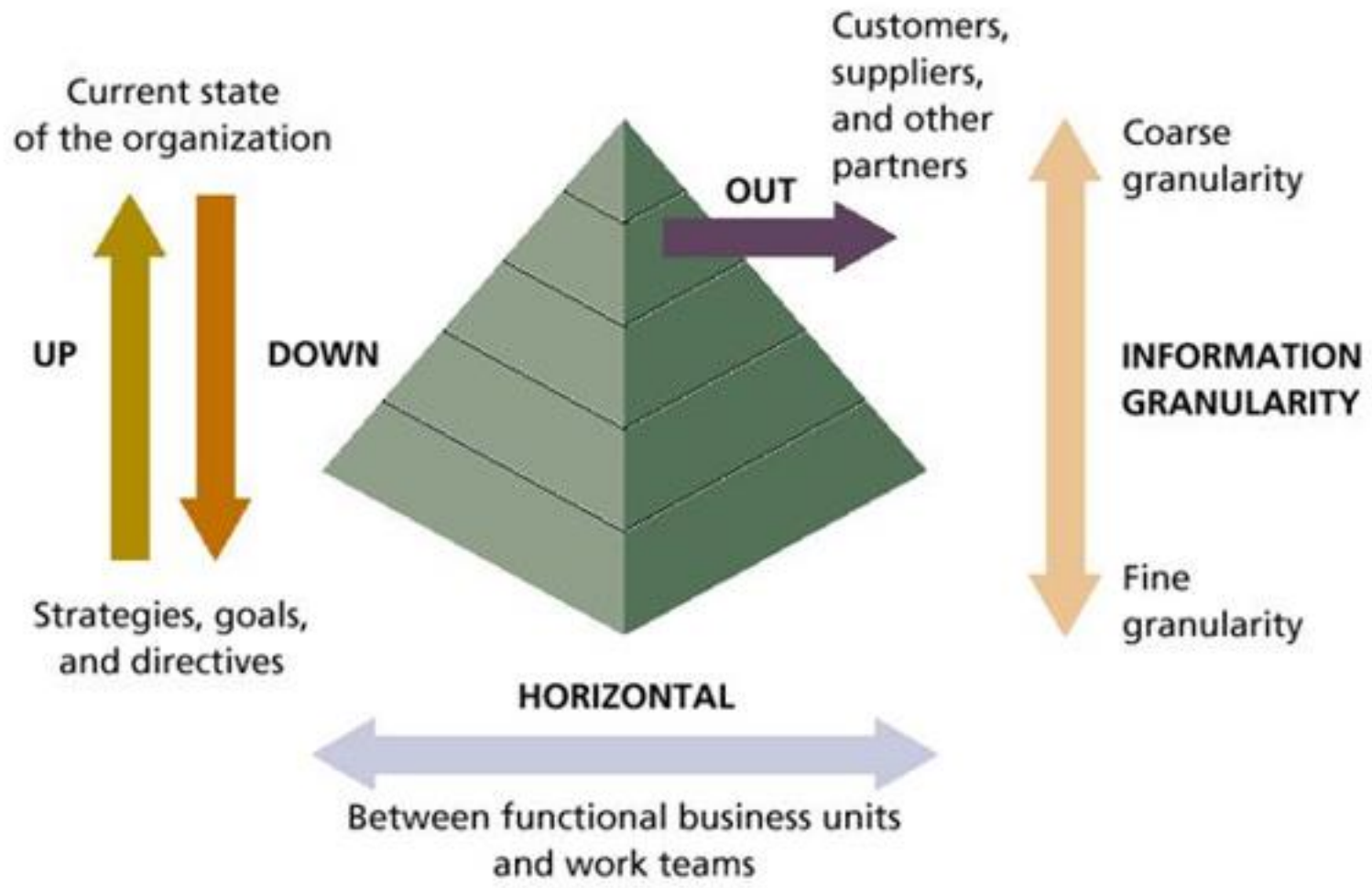

Fig : An Organization its Information Flows and Information Granularity

- What Information Describes
- Internal Information describes specific aspects of an organization.
- External Information Describes the environment surrounding the organization.
- Objective Information quantify describes the environment surrounding the organization.
- Subjective information attempts to describe something that is unknown.

- What is System
- System is a set of interacting or interdependent components forming an integrated whole. Every system is delineated by its spatial and temporal boundaries.
- system is an interrelated set of business procedures (or components) used within one business unit, working together for some purpose.
- For example, a system in the payroll department keeps track of checks, whereas an inventory system keeps track of supplies. The two systems are separate.

- Characteristics of System
- **Organization**
  - structure and order
  - Example: Hierarchical organization in a company.
  - Computer system: organization of various components like input devices, output devices, CPU and storage devices
- **Interaction**
  - Between sub systems or the components
  - Example: the main memory holds the data that has to be operated by the ALU.
- **Interdependence**
  - Component linkage
  - Component dependence
- **Integration**
  - How subsystems are tied together to achieve the system objective
- **Central Objective**
  - Should be known in early phases of analysis

- **Elements of System**
- **Components :** An irreducible part or aggregation of parts that makes up a system; also called a subsystem.
- **Interrelated components :** Dependence of one part of the system on one or more other system parts.
- **Boundary :** The line that marks the inside and outside of a system and that sets off the system from its environment.
- **Purpose :** The overall goal or function of a system.
- **Environment :** Everything external to a system that interacts with the system.
- **Interfaces :** Point of contact where a system meets its environment or where subsystems meet each other.
- **Constraints :** A limit to what a system can accomplish.
- **Input :** Inputs are the information that enters into the system for processing.
- **Output :** The main objective of a system is to get an output which is helpful for its user. Output is the final outcome of processing.

- **Types of System**
- **Physical or Abstract System**
  - Physical system: tangible entities
  - static or dynamic in nature.
  - Example : system-computer centre
  - Desks and chairs are the static parts
  - Programs, data, and applications can change according to the user's needs.
  - Abstract systems are conceptual. These are not physical entities. They may be formulas, representation or model of a real system.
- **Open Closed System- Majority of systems are open systems**
  - open system has many interfaces with its environment
  - can also adapt to changing environmental conditions
  - can receive inputs from, and delivers output to the outside of system
  - Closed systems: Systems that don't interact with their environment. Closed systems exist in concept only.

- **Types of System Continue**
- **Man made Information System**
  - Information system is the basis for interaction between the user and the analyst.
  - Main purpose-manage data for a particular organization.
- **Formal Information Systems**:
  - Responsible for flow of information from top management to lower management But feedback can be given from lower authorities to top management
- **Informal Information Systems**:
  - Informal systems are employee based. These are made to solve the day to day work related problems.
- **Computer-Based Information Systems**:
  - This class of systems depends on the use of computer for managing business applications

- **Subsystem**:
  - A subsystem is a set of elements which is a system itself and a component of a larger system.
  - If we take a example of in computer system a unit or device that is a part of a system.
- **Feedback Control:**
  - It is a self monitoring and self regulating system.
  - Feedback is data about performance of the system.
  - Control involves monitoring and evaluating feedback to determine whether a system is moving towards its goal or not.

- **System approach to organization**
  - This approach encourages to look at problems differently and to change how people learn from each other.
  - A system is a set of interrelated but separate parts working together for common purpose.
  - System approach to management to views the organization as unified, purposeful system composed of interrelated parts.
  - It also gives the manager to see the organization as a whole and as part of the larger external environment.
  - System connects all the department that can be lead by managers to achieve organization goal.

- **Application of System Concept**
- **System in Information and Computer Science**
  - In computer and information system, system is a software which has components as per structure and behavior.
  - System can also be used referring to framework, be it software or hardware designed to allow software program to run.
- **System in Physics and Engineering**
  - In Physics, system is the portion of the universe that is being studied.
  - In Engineering system refers to all of the parts and interactions between parts of complex project.
- **System in Cognitive science and Management Research**
  - In cognitive Science system include human and brain function and human mental process.

- **Information System**
- An information system is the organized and integrated form of people, hardware, software, networks and a data resources, which is used to create, process, transform and disseminate information in an organization for specific decision making.
- The information system accepts data resources as input and processes them into information products as output.
- An IS is a system that uses the resources(users and specialists), and network(communication media and network support) to perform various kinds of activities such as inputting, processing, outputting.

- **Types of Information System**
- Operation Support System
  - Transaction Processing System
  - Process Control System
  - Enterprise Collaboration System
- Management Support System
  - Management Information System
  - Decision Support System
  - Executive Information System

- **Types of Information System**
- Transaction Processing System
  - (TPS) capture and record information about the transactions that affect the organization.
  - A transaction occurs each time, a sale is made, supplies are ordered, an interest payment is made are the examples of transactions.
  - Transaction processing system is basically of two types, In batch processing transaction are accumulated over a period of time and processed periodically.
  - In online processing data are processed immediately after the transaction occurs.

- **Types of Information System**
- Process Control System
  - The controlling monitoring and refining system occurs for the business operation and industrial activities.
  - This system is always related to the quality control mechanism.
- Enterprise Collaboration System
  - It enhances team and workgroup by communicating to increase productivity which includes application that are sometimes called office automation system. Ex. Email chatting, video conferencing groupware.

- **Types of Information System**
- Management Support System
  - **Management Information System**
  - (MIS) are systems that take information captured by TPS and produce reports that management needs for planning and controlling the business.
  - MIS are possible because the information has been captured by the TPS and placed in organizational databases.
  - **Decision Support System**
  - **Decision support systems** (DSS) allow a user to explore the impact of available options or decisions. Whereas an MIS produce reports, DSS provide an interactive environment in which decision makers can quickly manipulate data and models of business operations.

- **Types of Information System**
- Management Support System
  - **Executive Information System**
  - **Executive information systems** (EIS) provide information for executives to use in strategic planning.
  - Some of the information comes from the organizational databases, but much of the information comes from external sources – news about competitors, stock market reports, economic forecasts, and so on.

- **Other Classification of Information System**
- Expert System
  - They are acknowledge-based system that provide expert advice and act as expert consultants to users.
- Knowledge Management System
  - They support the creation, organization and dissemination of business knowledge within organization.
- Strategic Information System
  - This information system provides strategic advantages over its competition using information technology tools and techniques.
- Functional Business System
  - They support variety of operational and managerial applications of the basic business function of a company.