

Types of Knowledge

Explicit Knowledge : (well explained)

- Can be formalised easily in the form of reports, charts etc,
- easily available
- Articulated - in the form of spoken words, written materials and compiled data
- codified, easy to document, transfer & reproduce.

Example : Policy & procedures, manuals, online tutorials,

Tacit Knowledge : (hidden)

- Resides in a few person & just one person
- Hasn't been captured by the organisation & made available to others
- unarticulated and represented as intuition, perspective, beliefs and values that individuals ~~form~~ based on their experiences
- personal, experimental and content specific.
- Difficult to document and communicate the tacit knowledge.

Ex : special know-how, employee experiences, hands on skill

Management Level Systems

• Unstructured

• Cannot substitute management

MIS [Management Information System]

- It is applicable to all dept
- It is a common system links all departments information

DSS [Decision Support System]

- Specific reports for specific decision making necessity for management
- It can be routine & non-routine

MIS: as defined by Davis and Olson as "An integrated user-machine system designed for providing information to support operational control, management control and decision making functions in an organisation".

Programmer needs to understand manager needs and design the system accordingly.

Characteristics of an effective MIS

- ~~Management~~ Based on the understanding of active involvement of manager.
 1. Management oriented
 2. Management directed
- Based on concept $\rightarrow$ MIS connects & is valid for all department
 3. Common data flow / ~~database~~
 4. Common data base
 5. Integrated (into one together)
 6. Sub-System concept
- From the definition $\rightarrow$ user-machine system
 7. Computerized
 8. Heavy Planning element: all the required features should be incorporated while preparing, because later it cannot be changed after it is ready.

(ix.)

Misconceptions about MIS / MYTHS

1. Any computer based information system is a MIS
2. Any reporting system is MIS
3. MIS is a management technique
4. MIS is a bunch of technologies
5. MIS is an implementation of organisational systems

and procedures. It is a file structure.

6. The study of MIS is about ^{use} of computers
7. More data in generated reports ~~refers~~ ^{refers} more information to managers.
8. Accuracy plays vital role in reporting.

Pre-requisites for an effective MIS

Data base	Qualified System & Mgmt staff	Support of top Mgmt	Control & Maintenance of MIS
→ User oriented → Capable of being used as a common data source → Available to authorised person only → Controlled by a separate authority	→ System & computer experts should also be capable of understanding management concepts → Management experts should also understand quite clearly the concepts and operations of a computer	→ no support the priority will be low → involvement of huge resources → to gain support all the supporting facts, benefits which will accrue should be placed before top management	→ Sometimes users develop their own short cuts & procedures which reduces the effectiveness of MIS.
[DBMS]			

Evaluation of MIS

- It should be flexible to cope with changes
- Ascertain the views of users and the designers about the capabilities and deficiencies of the system
- Guiding the appropriate authority about the steps to maintain the effectiveness of MIS.

Constraints of operating a MIS (what it is/actual MIS is what)

- Non-standardized approach
- Non-availability of experts: internal/mgmt staff to be groomed/trained through selection and training
- Selection of sub-system
- Non-availability of co-operation from staff

Limitation of MIS (restricted to)

- Quality of input decides $\Rightarrow$ Quality of output
- Not a substitute for management
- Not easily flexible to update quickly
- Cannot support every type type of decision
- Qualitative factors are ignored
- Hoarding (confidential/not to be shared) of information
- Frequent changes in top management

DSS = Decision Support System

- $\Rightarrow$ Specific unstructured problem
- $\Rightarrow$ this system gives information as per the necessity of management

- types of
- $\Rightarrow$ General purpose planning language
 - $\Rightarrow$ Special purpose

Components of DSS

1. User $\Rightarrow$ Manager

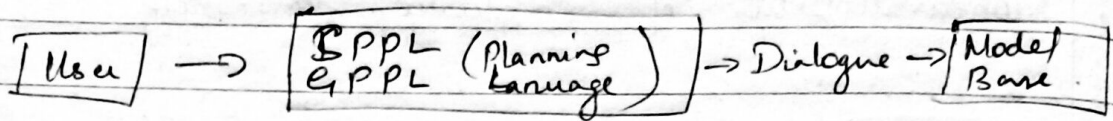
$\Rightarrow$ Staff specialist (analyst)

They have unstructured or semi-structured problem to solve.

2. Database : - Physical level (Storage)
- logical level (co-relative b/w each other)
- external level (authority to access)

Database contains both routine and non-routine data from internal & external

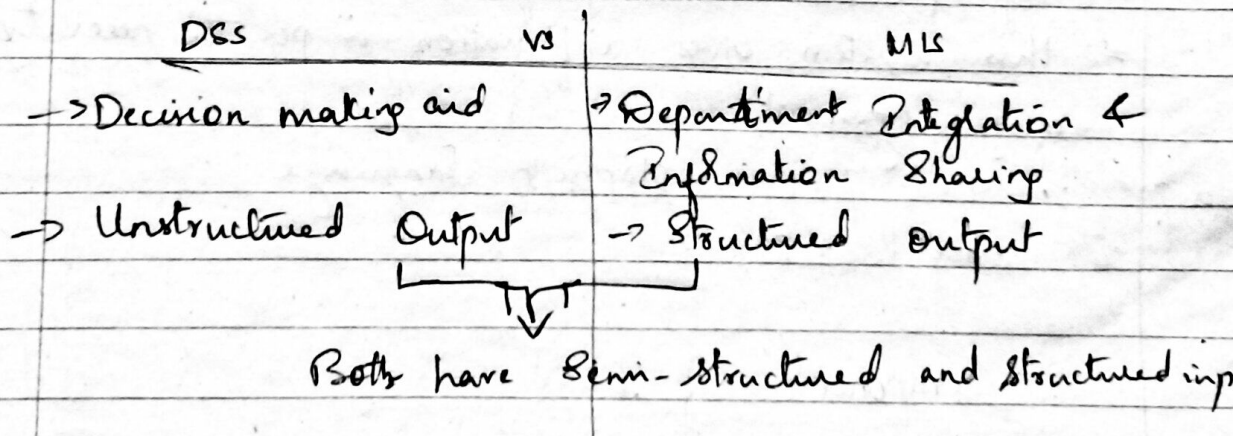
3. Model base : It is brain of DSS



Here it analysis, computes, cross-tabulation, regression etc

Characteristics of DSS

1. Flexible and adaptable
2. Focused on decision rather than data and information
3. Easy to use
4. Should be usable for structured problems also
5. DSS should be user friendly.
6. Extensible and evolve overtime



Dimension		DSS	MIS
1.	Philosophy	Providing ^{integrated} tools, data, models & languages to end users	Providing structured information to end users
2.	Orientation	External	Internal
3.	Flexibility	Highly	Relatively
4.	Analytical capability	More	Little
5.	System Analysis	Emphasis on tools to be used in decision process	Emphasis on information requirement analysis
6.	System design	Interactive process	Based on static information requirement

ESS = Executive Information System

- ⇒ Problem is future oriented
- ⇒ It is unstructured / Not structured
- ⇒ Time availability is less. No need of detailed analysis
- ⇒ not computer ~~or~~ known person / language unknown

Characteristics of the types of Information used for ESS

1. Lack of structure
2. High degree of uncertainty
3. Future orientation
4. Informal Source
5. Low level of detail