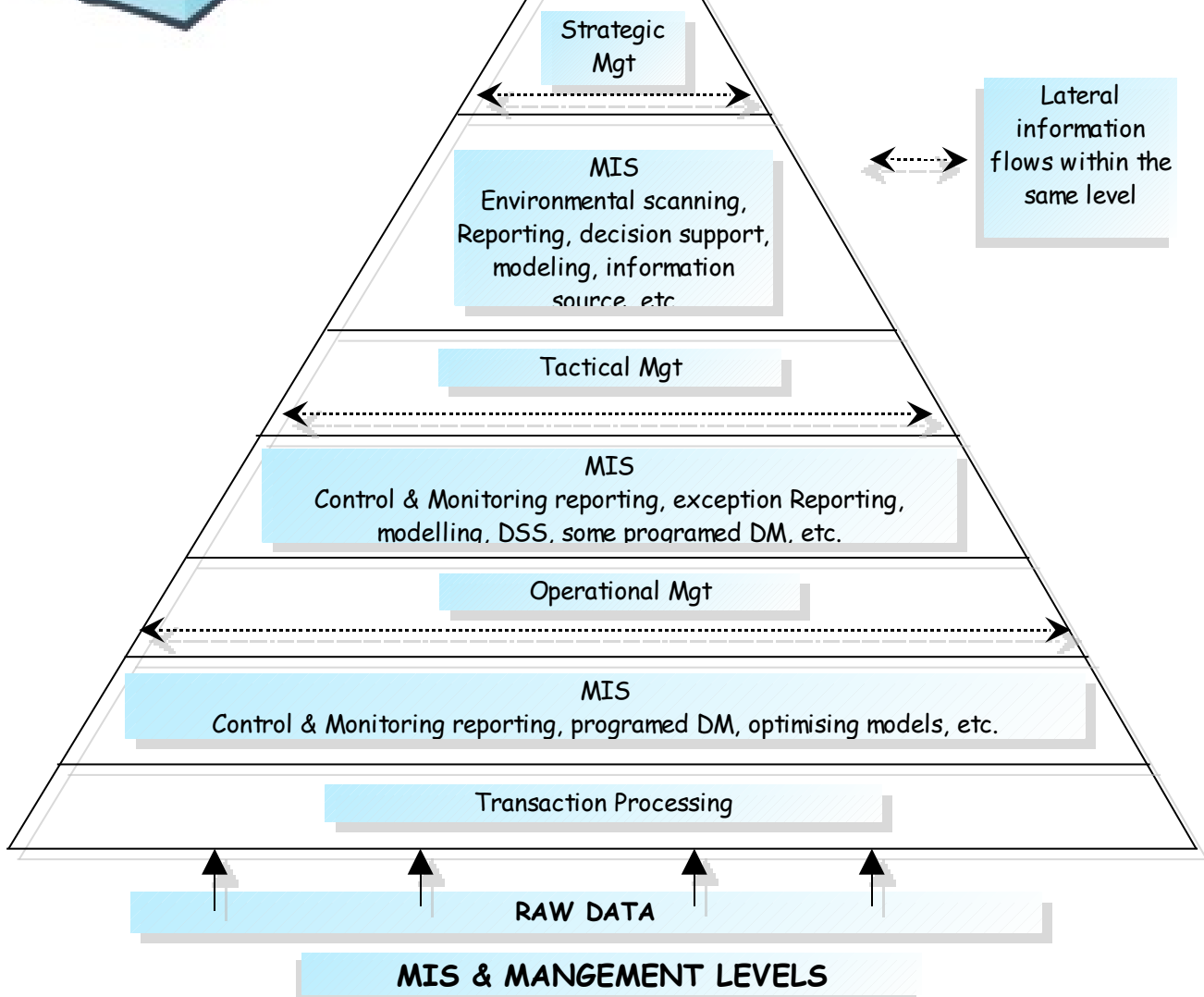


## BASIC CONCEPTS OF M.I.S.





**Intro :**

- Mgr. have been using information for discharging imp. mgt. function ( PODSCORDB)
- Therefore, Information must be capable of being used for informative or inference purpose, argument, or as a basis for forecasting or decision making (DM)
- Hence, a special sys. has to be instituted to ensure the flow of correct information at regular intervals to various hierarchical mgt. Levels.
- MIS – is an old mgt tool which is being used by business manager as a means for better mgt & scientific DM.
- It is a network of information that supports mgt DM.
- It provides for identification of relevant information needs, the collection of relevant information – processing of the same – to become usable by the bus.mgr - & timely dissemination of processed information to its user for properly managing the affairs of an enterprise by informed decisions.

MIS → mgt + information + sys. i.e.

Mgt = a set of function & processes // designed to initiate & co-ordinate group effort in an organized setting directed towards promotion of certain interest, preserving certain value & pursuing certain goals. Or

*“Mgt. is an art of getting things done from group of people in formally organized way to attain the organizations goal.”*

Information = Data that have been put into a meaningful & useful context.

Sys = a set of interrelated elements that operate collectively to accomplish some common purpose or goals.

∴ MIS = a network of information that support mgt DM.

**Definition :-**

- According to Schwartz

" MIS is a sys. of people, equipments, procedures, documents & communication // that collects, validates, operates, transformers, stores, retrieves & presents data // for use in planning, budgeting, accounting, controlling & other mgt process."

According to G.B.Davis

" an integrated Man / machine sys. for providing information to support the operations, mgt. & DM Function in an orgn."

**CHARACTERISTICS OF AN EFFECTIVE M.I.S.****Keyword ( or say Definition's As per Modern Experts ) :-**

*MIS is Mgt.Oriented Computerised Sub.sys which Direct Common data flow from common database, Integrate it for Mgt function, which requires Heavy planning.*

**1. Mgt. Oriented :**

- Its development start from appraisal of mgt needs and overall business objectivities.
- It meets information requirement not only of top but of all levels.

**2. Mgt. Directed :**

- Since it is Mgt oriented, Mgt should direct development efforts – not mere give time.

**3. Integrated :**

- All functional & operational sub.sys. should be tied together.
- It means taking a comprehensive view or a complete look at the interlocking sub-sys. that operate within a company.

**4. Common data flow :**

- Common I.P.O & Media - ∴ avoid duplication
- However some duplication is required, is necessary in order to ensure effective I.S.

**5. Heavy planning element :**

- Future oriented + future requirement of firm's is kept in mind.
- It take 3 to 4 years
- Designer must avoid the possibility of sys obsolescence before the sys gets into operation.

**6. Sub. Sys. Concept :**

- Break entity into digestible sub.sys. which can be implemented one at a time by developing a phasing plan.

**7. Common database :**

- "Superfile" which consolidated data records formerly stored in many separate data files.

**8. Computerized.**

- ↓ Clerical staff, ↑ accuracy

**MISCONCEPTIONS OR MYTHS ABOUT M.I.S.****1. Study of MIS is about the use of computer.**

- Computer is just a tool like other machine.
- MIS may or may not be computer based.
- It depends on other factors : -
  - How critical is response time required for getting information
  - How big is the organization.
  - How complex is the need of information planning


**2. More Data in reports means more information for mgr.**

- Imp. is to meet requirement – more or irrelevant data may create confusion.

**3. Accuracy in reporting is of vital importance.**

- The degree of accuracy is closely related to decision problem.
- In control of aircraft , bridge design etc. - accuracy is really imp.
- But in Financial reports for DM, fig. must be fairly correct, presentation of relevant data, i.e., in huge projects cost presentation – fig. in precise rupees is ignored.

**PRE-REQUISITES OF AN EFFECTIVE M.I.S.**

Keyword : 	1. <b>Top.mgt always support // quality staff//</b> in <b>evaluation</b> // of <b>Database</b> & it <b>maintainance</b> – for effective MIS.
	2. <b>Qualified staff // support//</b> in <b>evaluation</b> of // <b>database</b> & it <b>maintainance</b> – for effective MIS

**a) Database ( D/b ):-**

- It can be def. as " Superfile " which consolidates data & integrates data records formerly stored in many data files.
- Data are organized such that access improves & redundancy reduces.
- Normally, it is sub-divided into major information sub-set needed to run a bus. ( e.g. Vendor file, customer file...etc.)

Characteristics of Database :

- User oriented
  - Each sub.sys. utilizes same data & information - kept in the same file to satisfy its information needs.
  - Authorized person can access.
  - Controlled by authority – DBMS / DBA
- Maintenance of database requires computer h/w. & s/w. and experienced computer professional & good data collection sys.
  - Such database meets the information needs of control to its optimum.

**b) Qualified sys. & mgt. staff :-**

- Experts who clearly understand views of their fellow officers, i.e., (1).System & computer experts (2) Management expert

i. Sys. & Computer experts

- a) Capable of understanding mgt. concept & problems.
- b) Clear about process of mgt., i.e., DM, plan etc.

ii. Mgt. Expert

- a) Quite clear with the concept & operations of a computer
- b) Must have basic knowledge of computer

**c) Support of top mgt. :-**

- Support is fully required - as subordinate mgr. are usually lethargic about activities, which do not receive support from their superior.
- Growing larger view of imp. of MIS, officer must place before mgt. all supporting facts & clearly state the benefits – this will enlighten the mgt. & change, their attitude towards MIS
- Whole hearted support is required for effective MIS

**d) Control & Maintenance of MIS :**

- Control means the operation of sys. as it was designed to operate.
- Check behavior of user
- Maintenance closely related to control
- Formal methods for changing & documenting changes must be provided.

**e) Evaluation of MIS :**

- MIS must meet requirement of its executives in future as well, i.e., Flexibility must exist.
- View users & designer about their requirements & capabilities & deficiencies of sys.
- Timely action
- Proper maintenances of effective MIS.

**CONSTRAINTS IN OPERATING M.I.S.**

Keyword :

No Expert, Cooperate staff for selecting std. MIS for bringing high turnover & cost benefit to organization.

**1. Non-availability of experts :-**

- No experts - who can diagnose the obj. of orgn. & provide a desired direction for installing & operating sys.

**2. Selecting of MIS :-**

- Experts unable to judge the need & imp. function for which MIS can be installed first, as only proper judge will help in proper selection of MIS.

**3. MIS is a non-standardized one :-**

- Due to varied obj. of bus. Concern.
- But may be standardized for org. in same industry.

**4. Non-cooperation of staff :-**

- Proper awareness of MIS & they must be handled tactfully.

**5. High turnover of Expert of MIS :-**

- Due to promotion, etc., which reduces creating better working conditions.

**6. Cost benefit analysis :-**

- Benefits of MIS are tangible & intangible. These are difficult to analyze. Therefore, before implementing, it must be judged that it is economical ( worthy )

**Limitations of MIS**

1. GIGO
2. MIS can help mgt., but it cannot replace mgt.
3. Does NOT adopt change fast – less flexibility, then fast changing & complex environment.
4. MIS cannot generate all requirements of mgt.

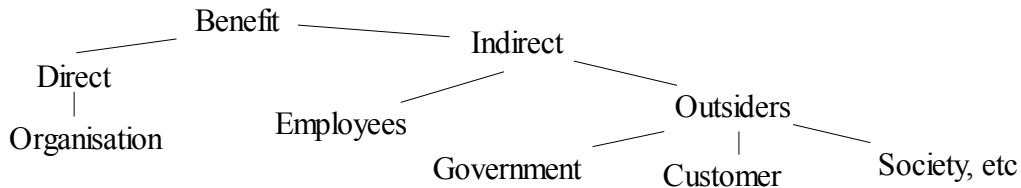
5. It accounts mainly quantitative factors. ( not quality like morale & attitude of members, etc. )
6. Non-routine ( Non-programed decision ) decision cannot be taken.
7. Effectiveness of MIS ↓ Decreases , where the culture of holding information & not sharing with others holds.
8. Effectiveness of MIS ↓ Decreases , if top. mgt. changes frequently.

### EFFECTS OF USING COMPUTER FOR M.I.S.

1. **Speed of processing & retrieval of data increase↑**
2. **Scope of use of information sys. has expanded**
  - Use of information by mgt. in real time.
3. **Scope of analysis widened**
  - Various types of reports.
4. **Integrates the working of different information sub.sys.**
  - Common d/b., each dept. gives their information for planning to various levels of mgt.
5. **Increase ↑ the effectiveness of I.S.**
  - Time.
6. **More comprehensive information.**
7. **Complexity of sys. design & operation ↑.**

conclusion :- can be divided in

- org. view – benefit
- individual – employee- view – benefit
- other – society , govt, customer benefit in indirect way



Establishing the information needs in mgt. process.

**Keyword : ICE ←, GIFT ( GEFT) + I-CICI**



***note .. this will be used again and again.***

**ICE = Internal, Competitive, Environment**

**I-CICI = Competitive information ( main) , Industry, Competitive data, Internal.**

a) **Environment Information (GEFT)**

- i. **G**ovt. Policies
- ii. **E**conomic trends
- iii. **F**act of production
- iv. **T**echnological environment

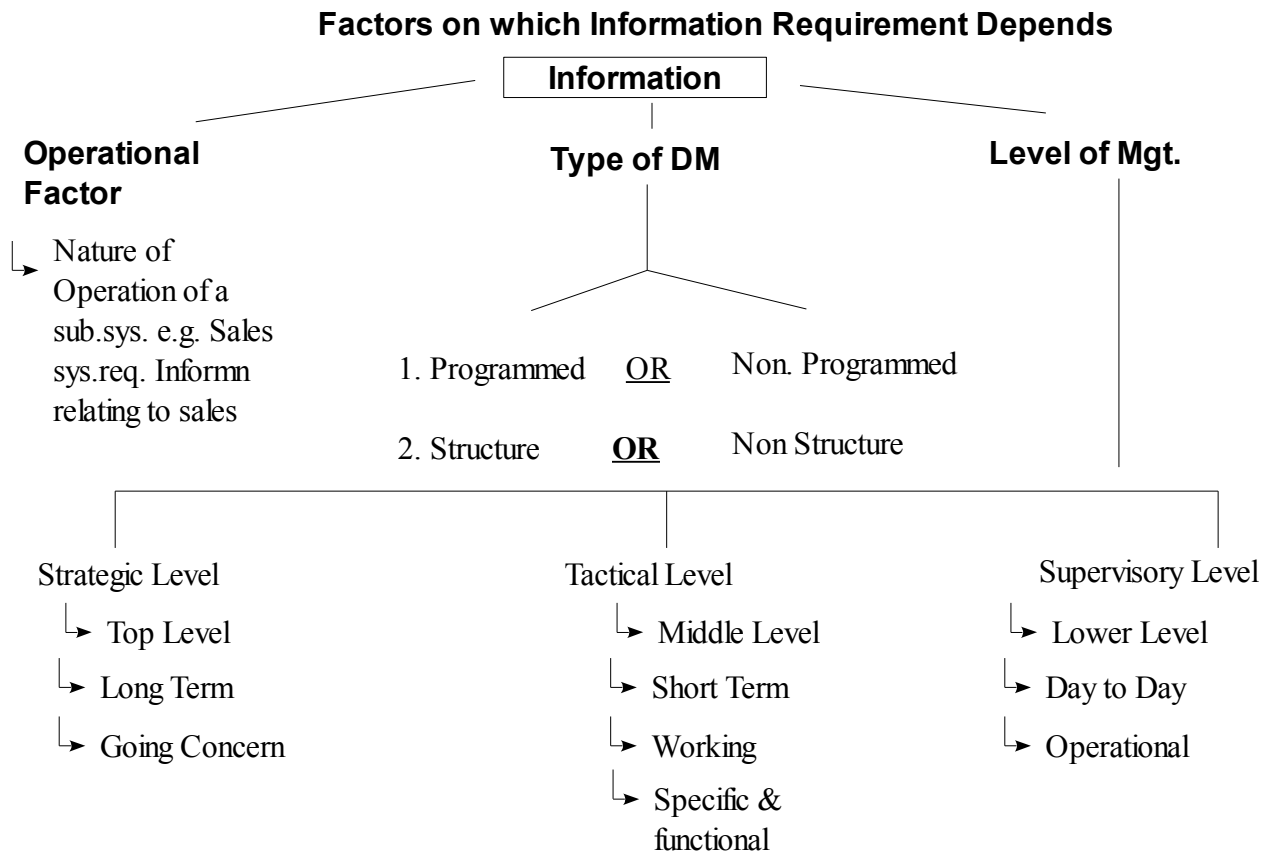
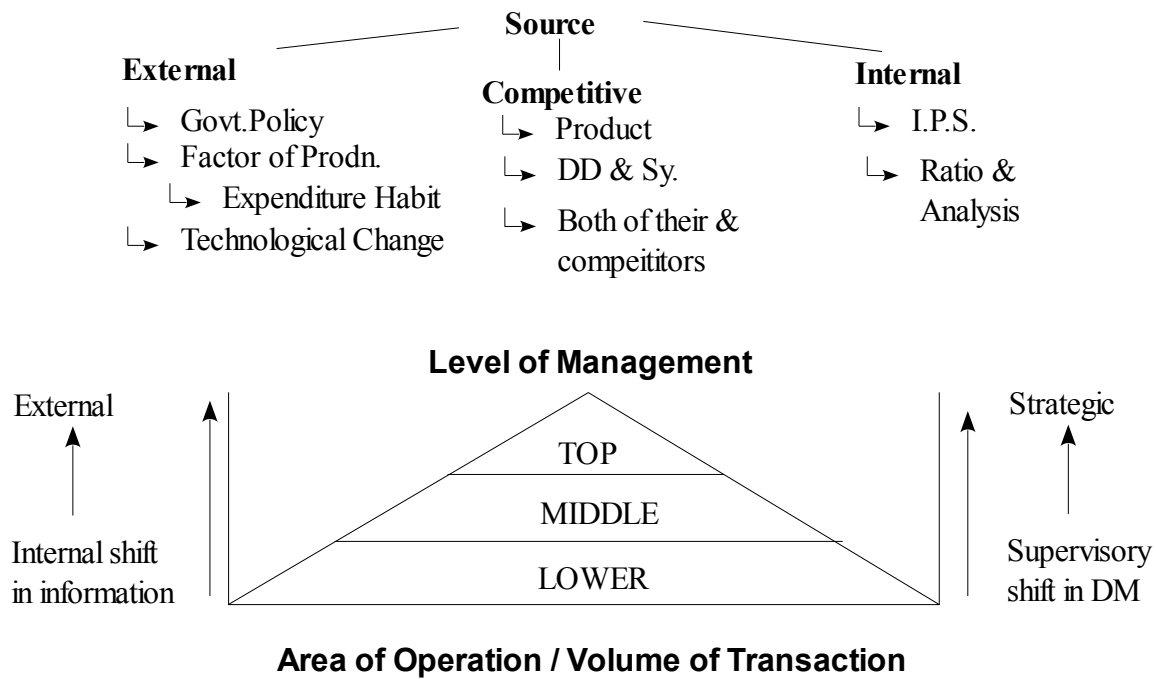
b) **Competitive information**

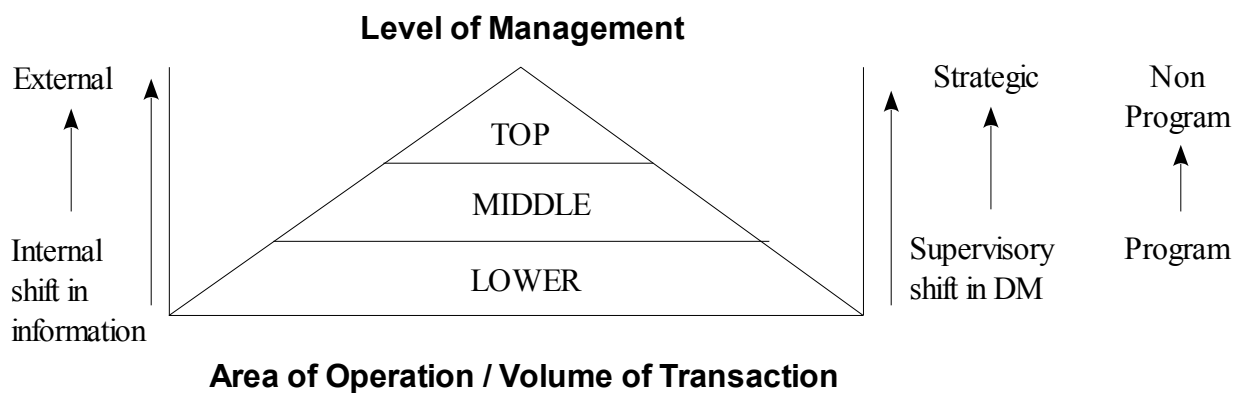
- i. Industry & Firm demand
- ii. Competitive data

c) **Internal information :-**

Sales forecast, fin. plan/budget, supply factors, policies, which are vital for subsidiary planning at all levels.

Specifically, the information should be suitable for identifying, classifying & grouping activities before assigning them to different work groups.





**Operational Function :-**

The grouping or clustering of several functional units on the basis of related activities into a sub.sys.is termed as operational fun. E.g., Marketing is an operational fun.

The information requirement of different operating functions vary not only in content but also in characteristics

There is no unanimity over the number of mgt Levels 3 levels based is carried out to distinguish the types of tasks, extent of authority and degree of accountability within hierarchy.

External	Internal
<b>1. Top Level (strategic level)</b>	
Competitive activities, customer preference style, changes in eco. trends, technological changes, legal rulings.	Historical, sales, cost, profit, cash flow,divisional income, sales, expenses, financial % ratio, interest, credit o/s., long term debt, delinquent A/c., project reports and cost updates.
<b>2. Middle Level ( tactical level)</b>	
Price changes, shortages, demand & supply, credit condition.	Descriptive information (happenings) current performance indicators, over-under budgets, historical profits, sales, income.
<b>3. Supervisory level ( operation level )</b>	
Sensitive changes affecting material supplies & sales	Unit sales & expenses, current performance shortage & bottlenecks operating efficiencies & inefficiencies, input-output ratios, maintenance reports.

*Pl. ref :- characteristics of each level ( module : pg 3.19 )*

