COMF0334 Introduction to Information Systems Assignment 1

MANAGEMENT INFORMATION SYSTEM

NAME : THARMA RAJ A/L NADARAJAN

STUDENT ID : 0304245

Body- Contents

- **What does of Management Information System mean**

- **The Types of Management Information System**

- **Decision Structure of Information System**

- **How is Management Information System useful in companies**

- **Asset of a Management Information System**

- **Companies that Use Management Information System**

- **Impact of Management Information System**

- **How Management Information Systems Impact Organizations and Business Firms**
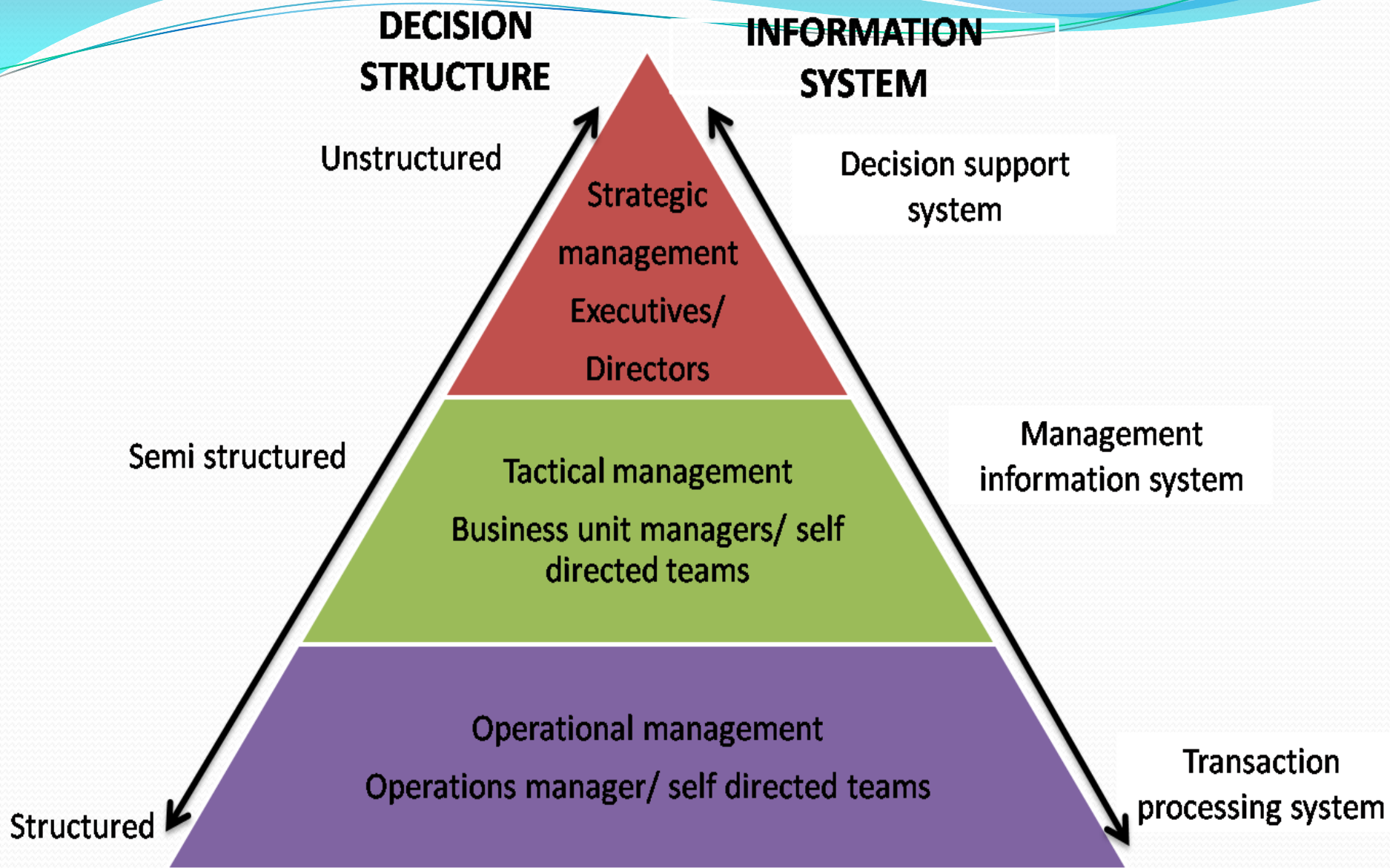
What does Management Information System (MIS) mean?

- **Management**: management covers the planning, control, and administration of the operations of a concern. The top management handles planning; the middle management concentrates on controlling; and the lower management is concerned with actual administration.

- **Information**: information, in MIS, means the processed data that helps the management in planning, controlling and operations. Data means all the facts arising out of the operations of the concern. Data is processed example recorded, summarized, compared and finally presented to the management in the form of MIS report.

- **System**: data is processed into information with the help of a system. A system is made up of inputs, processing, output and feedback or control.

- Thus, ***Management Information System*** means a system for processing data in order to give proper information to the management for performing its functions.

The Types of Management Information Systems

- **Executive Support Systems ("ESS") -**designed to help senior management make strategic decisions. ESS typically involve lots of data analysis and modelling tools such as "what-if" analysis to help strategic decision-making.

- **Management Information Systems ("MIS")-**mainly concerned with internal sources of information. MIS usually take data from the transaction processing systems and MIS reports tend to be used by middle management and operational supervisors.

- **Decision-support systems ("DSS")-**specifically designed to help management make decisions in situations where there is uncertainty about the possible outcomes of those decisions.

- **Knowledge Management Systems ("KMS")-**to help businesses create and share information. These are typically used in a business where employees create new knowledge and expertise - which can then be shared by other people in the organisation to create further commercial opportunities.

- **Transaction Processing Systems ("TPS")-**designed to process routine transactions efficiently and accurately. Managers often use these systems to deal with such tasks as payroll, customer billing and payments to suppliers.

- **Office Automation Systems ("OAS")-**that try to improve the productivity of employees who need to process data and information. Wide range of software systems that exist to improve the productivity of employees working in an office (e.g. Microsoft Office XP) or systems that allow employees to work from home or whilst on the move.

DECISION STRUCTURE

INFORMATION SYSTEM

Unstructured

Strategic management

Executives/ Directors

Decision support system

Semi structured

Tactical management

Business unit managers/ self directed teams

Management information system

Operational management

Operations manager/ self directed teams

Transaction processing system

Structured

How is a Management Information System Useful in Companies?

- **Planning and Control** : MIS improves the quality of plants by providing relevant information for decision – making. MIS serves as a link between managerial planning and control. It improves the ability of management to evaluate and improve performance.

- **MIS Minimizes Information Overload** : MIS change the larger amount of data into summarized form and therefore, avoids the confusion which may arise when managers are flooded with detailed facts.

- **MIS Encourages Decentralization** : Decentralization of authority is possibly when there is a system for monitoring operations at lower levels. MIS is successfully used for measuring performance and making necessary change in the organizational plans and procedures.

How is a Management Information System Useful in Companies? Cont.

- **Costs** : Invest in a consultant to help define your core requirements that include information for strategic planning and project management. To be useful and successful, a management information system should focus on company products and services, customers, operating costs, marketing opportunities and the company's exposure to risk.

- **MIS brings Coordination** : MIS facilities integration of specialized activities by keeping each department aware of the problem and requirements of other departments. It connects all decision centers in the organization .

- **MIS** assembles, process , stores , retrieves , evaluates and disseminates the information .

Asset Management Information System

CORE SYSTEMS

Project Management	Maintenance Management		Risk Management	Customer Management
Asset registry	Warranty Management	Safety, health & environment	Risk registry	Customer Feedback
PM Plan	Condition Assessment	Energy efficiency	Risk mitigation	Customer Service
Scheduling	Spares & Inventory	Modifications Management		
Permits	Works Management	Disposal & replacement		
	Scheduling			
	Condition Monitoring			

SUPPORT SYSTEMS

Document Management	Performance Management	Communication Management	Financial Management		Human Resource Management
DMS	KPI's	Communication System	Budgeting	Supplier registry	Human Resource
			Payment		Training
			Purchasing		

Companies that Use Management Information System

- **Dell Company** -This direct business model eliminates retailers that add unnecessary time and cost, or who can diminish Dell's understanding of customer expectations. They also use transaction processing system.

- **IBM Company**-A joint hierarchical databases and information management system with extensive transaction processing capabilities.

- **Librarysoft Library Automation System by New Generation Technologies Inc**.-Easily manage a billion items with complete networkable cross-platform capability.

- **Toshiba Company**-Developed an Environmental Management Information System in order to collect and manage environmental data required to promote environmental management.

Companies that Use Management Information System Cont.

- **World Health Organization (WHO)**- Health Management Information System uses an information system specially designed to assist in the management and planning of health programmes, as opposed to delivery care.

- **Human Resource Management System (HRMS)**-It merges Human Resource Management as a discipline and in particular its basic Human Resource activities and processes with the information technology field, whereas the programming of data processing systems evolved into standardized routines and packages of Enterprise Resource Planning (ERP) software.
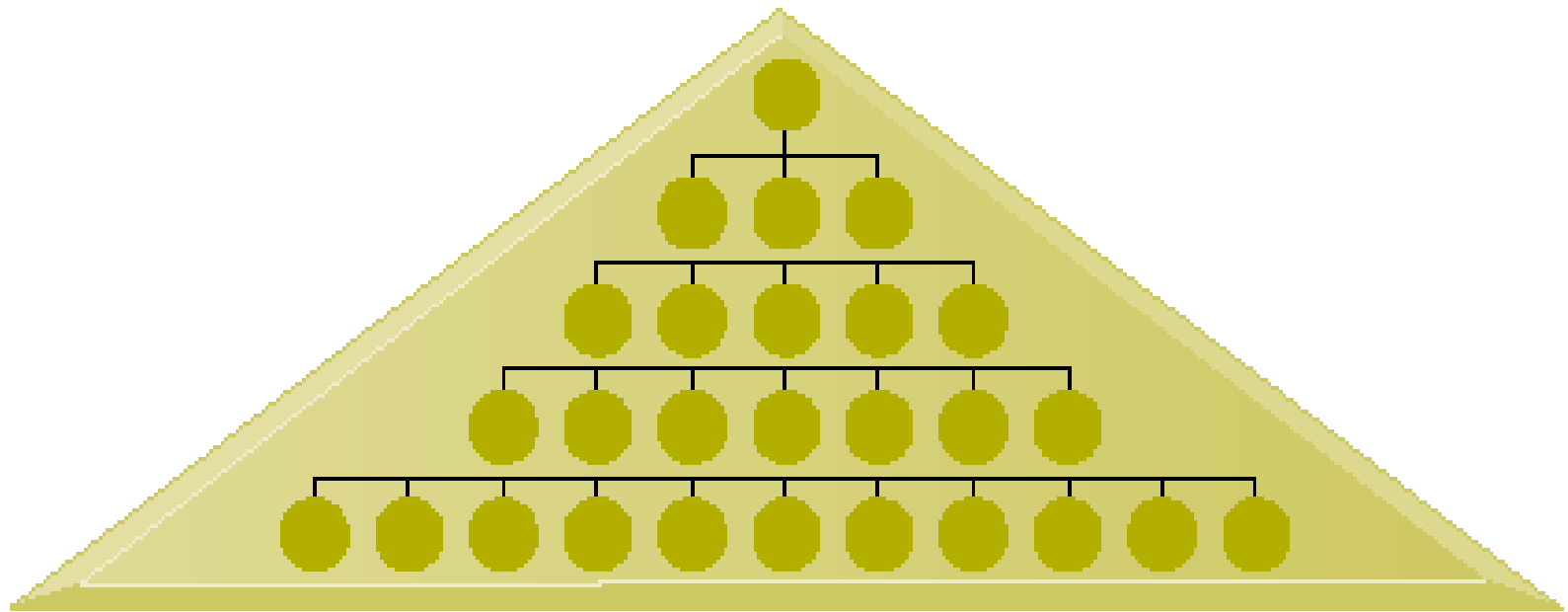
Impact of the Management Information System

- With a good **MIS** support, the management of marketing , finance, production and personnel becomes more efficient.

- The MIS begins with the definition of a data entity and its attributes, respectively, designed for information generation in the organisation.

- The MIS calls for a systemisation of the business operations for an effective system design.

- This leads to streamlining of the operations which complicate the system design.

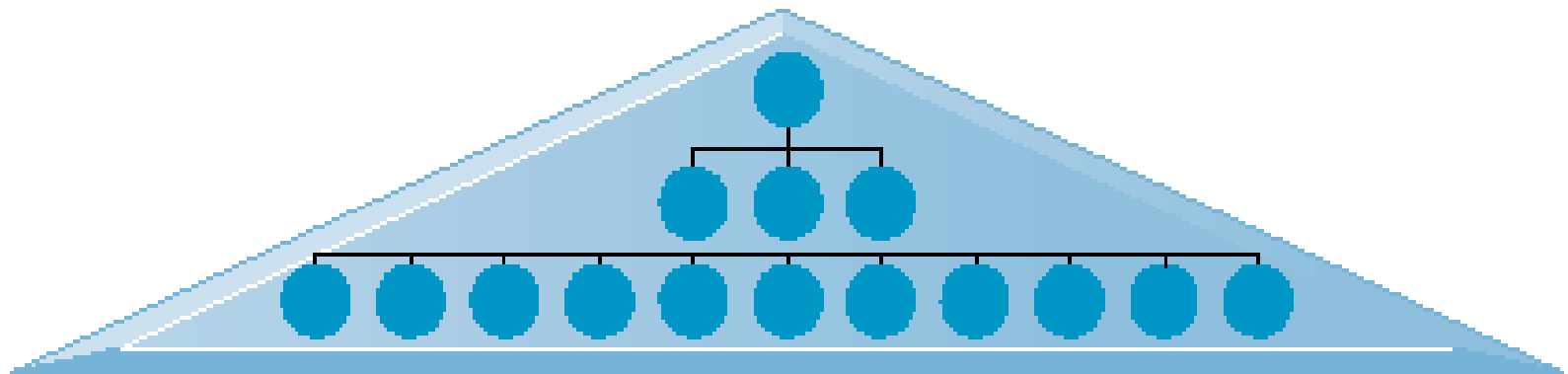# *Impact of the Management Information System Cont.*

- MIS improves the administration of the business by bringing a discipline in its operations as everybody is required to follow and use systems & procedures.

- This process brings a high degree of professionalism in the business operations.

- Since the goals and objectives of the **MIS** are the products of business goals & objectives, it helps indirectly to pull the entire organisation in one direction towards the corporate goals and objectives by providing the relevant information to the people in the organisation.

How Management Information Systems Impact Organizations and Business Firms

- **IT Flattens Organizations:**

  -Facilitates flattening of hierarchies.

  -Broadens the distribution of timely information.

  -Increases the speed of decision making.

  -Empowers lower-level employees to make decisions without supervision and increase management efficiency.

  -Management span of control (the number of employees supervised by each manager) will also grow.

A traditional hierarchical organization with many levels of management

An organization that has been "flattened" by removing layers of management

Figure 3-9

Conclusion

- Through the **Management Information System**, the information can be used as a strategic weapon to counter the threats to business, make businesses more competitive, and bring about the organisational transformation through integration. MIS provides support to managers as they work to achieve corporate goals and enables managers to compare results to established company goals and identify problem areas and opportunities for improvement.

Referencing

- ("Definition of Management Information System", 2010). Retrieved March 18, 2010, from *http://lecture-notes-forstudents.blogspot.com/2010/03/management-information-system.html*

- *("Types of Information System",2009). Retrieved June 26, 2009, from http://tutor2u.net/business/ict/intro_information_system_types.htm*

- *("How Management Information System is Useful in Companies",2005). Retrieved May 16, 2005, from http://tutor2u.net/business/ict/intro_information_system_types.htm*

- ("Companies that uses Management Information System",2011). Retrieved September 20, 2011, from http://ivythesis.typepad.com/term_paper_topics/2008/01/the-current-man.html, *http://www-01.ibm.com/software/data/education/selfstudy.html*, *http://www.dmoz.org/Reference/Libraries/Library_and_Information_Science/Software/*, *http://www.toshiba.co.jp/env/en/management/information_system.htm*, *http://www.who.int/management/resources/information/en/index.html*, *http://humanresources.about.com/od/glosaryh/a/hris.htm*

- *("Impact of Management information System",2009). Retrieved July 15, 2009, from http://www.slideshare.net/himanshulove3/management-information-system-1176769*

- *(Prentice Hall, 2006, "How Management Information Systems Impact Organizations and Business Firms"). Retrieved March 14, 2006.*

- (Gordon B.Davis,2005 "Information Systems"). Retrieved May 13, 2005.