



Information and Communication Technology:

INFORMATION

(the extended meaning)

FORMATION



presented by: **Rhiza S. Sadjad**

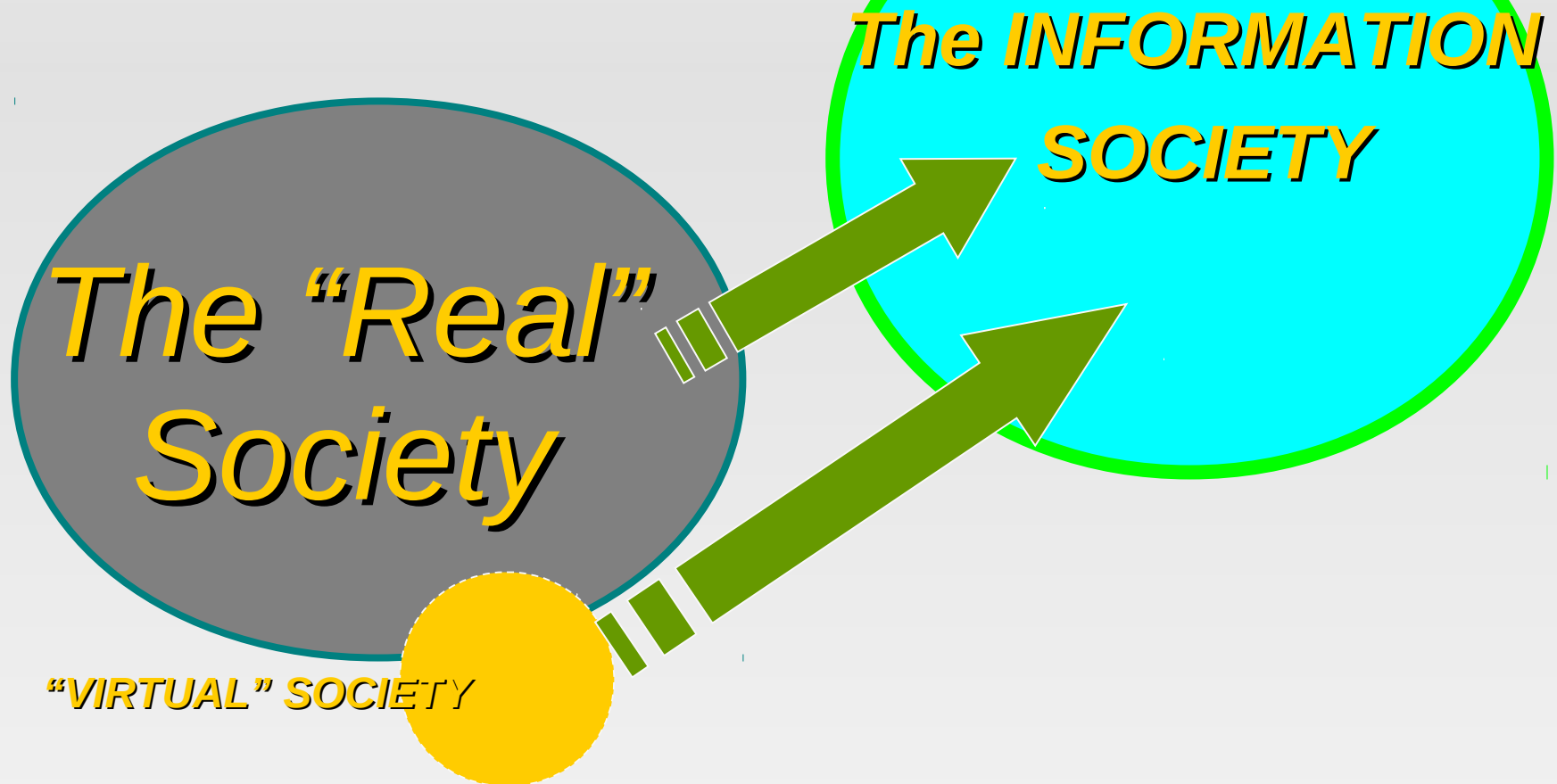
rhiza@unhas.ac.id <http://www.unhas.ac.id/rhiza/>

INFORMATION

(the extended meaning)

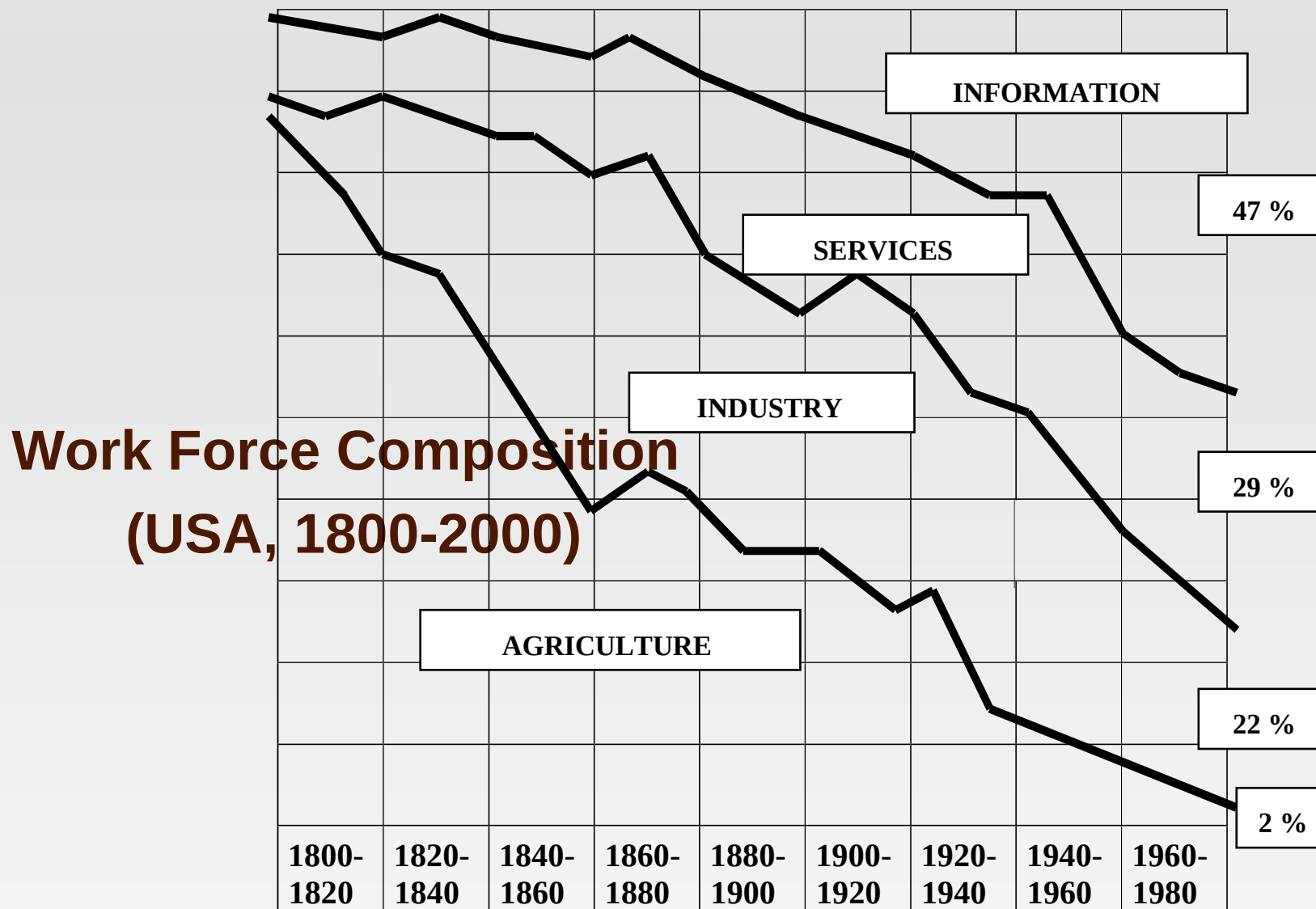
- *(more about)* **The Information Society**
- **The Information Workers**
- **The Information System**

Welcome to the Information Society !



An information society is a nation in which a majority of the labor force is composed of information workers, and which information is the most important element.
(Rogers, [1986], page 10)

The Information Society



(Source: Everett M. Rogers, [1986], *Communication Technology*, page 11)

The Information Workers:

Those who make their living by:

producing

processing.....

distributing.....

INFORMATION

and

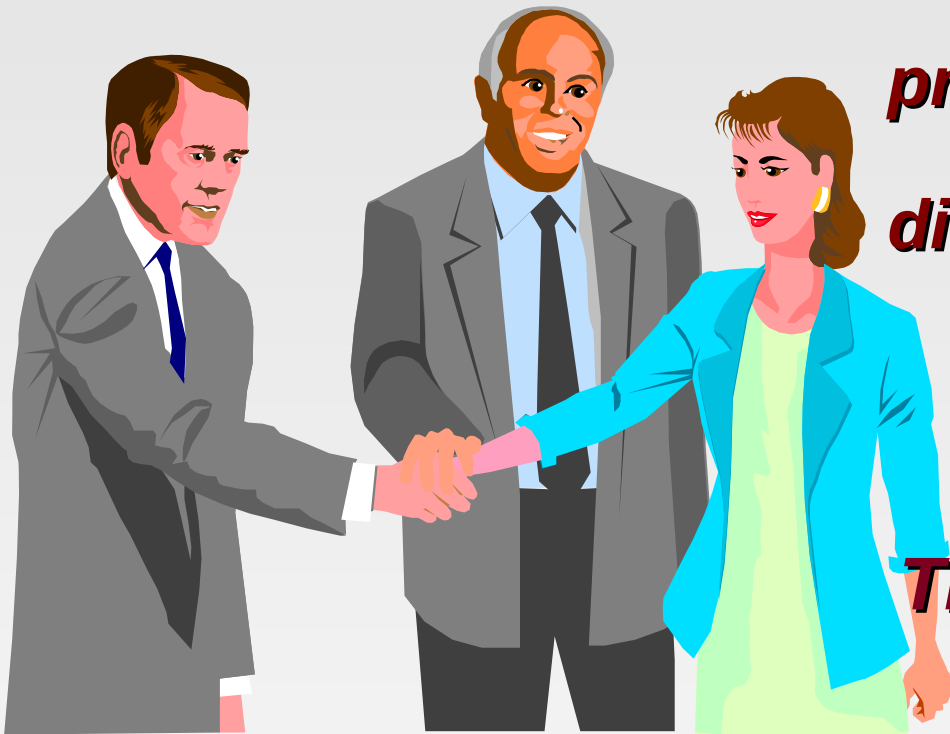
producing

The Information Technology

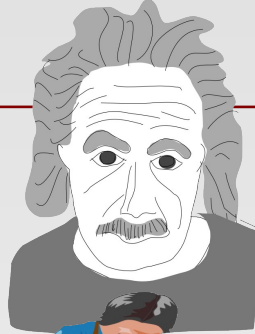
(Rogers, [1986], page 10)

*..... teachers, lecturers, researchers,
academicians, manager, secretary*

C/O



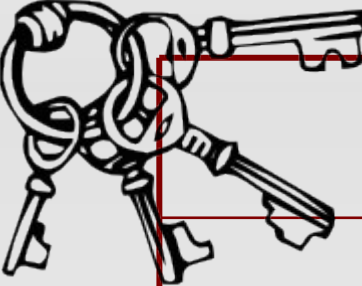
Main type of employment

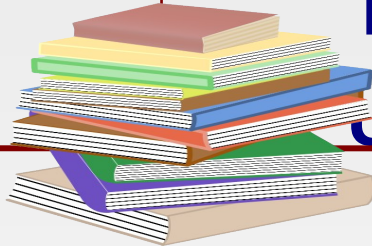
 Society	Profession
Agricultural	 FARMERS
Industrial	 FACTORY Workers
Information	 INFORMATION Workers

(Source: Everett M. Rogers, [1986], "Communication Technology", page. 13)



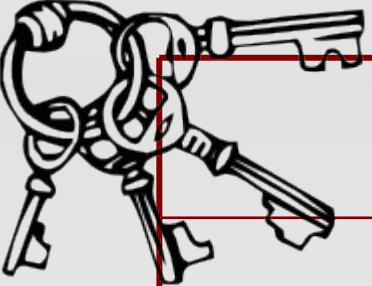
Key Social Institutions

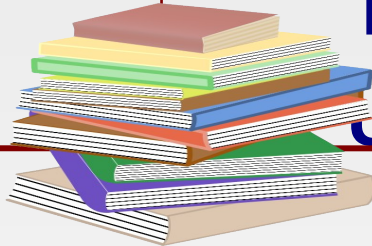


<i>Society</i>	<i>Key Social Institution</i>
<i>Agricultural</i>	FARM 
<i>Industrial</i>	FACTORY 
<i>Information</i>	RESEARCH UNIVERSITY   

(Source: Everett M. Rogers, [1986], “Communication Technology”,page. 13)

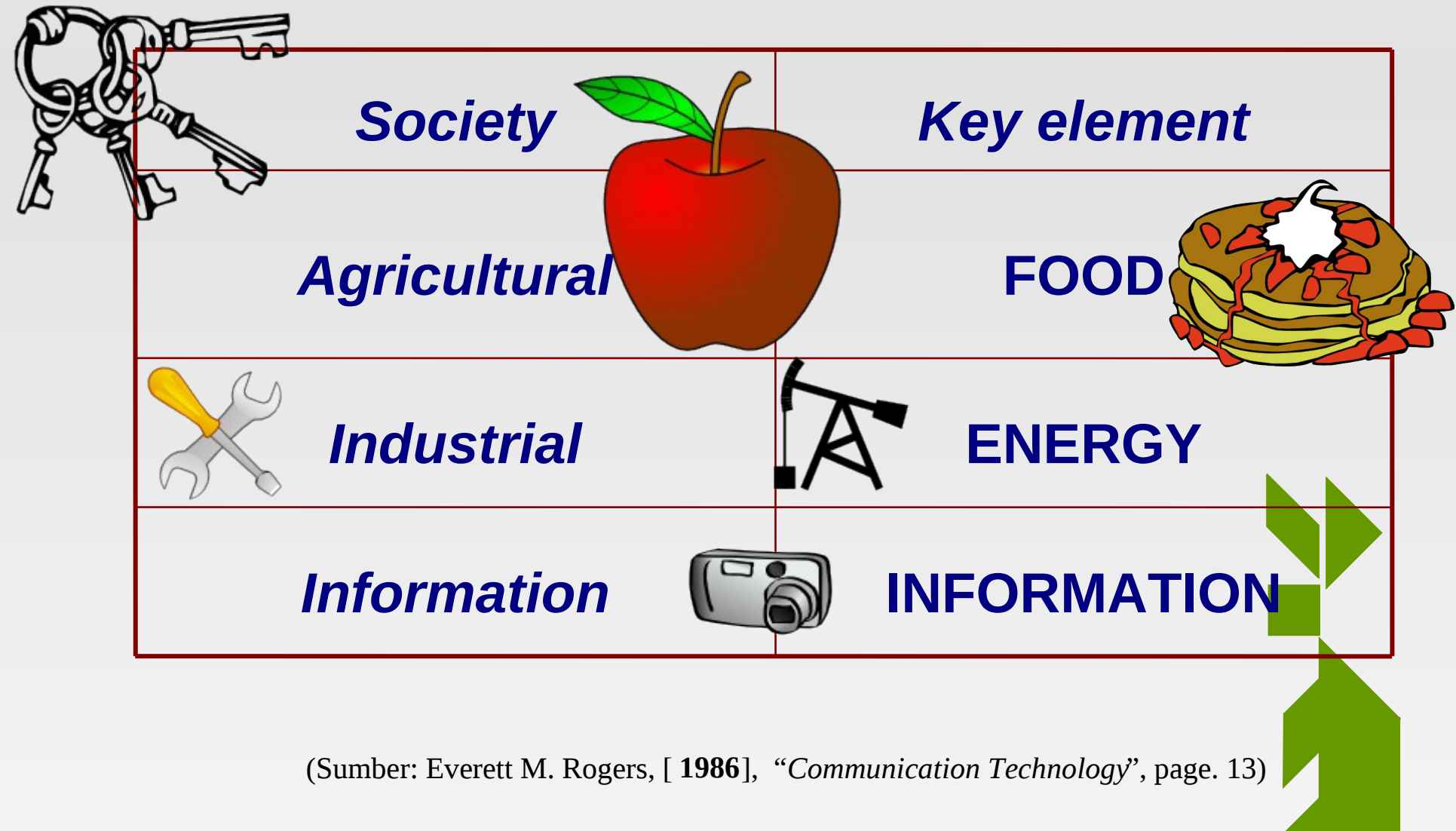
Key Social Institutions



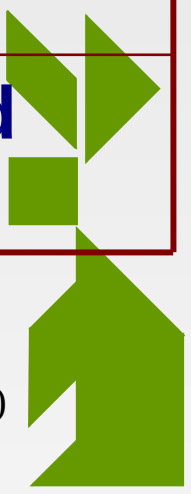
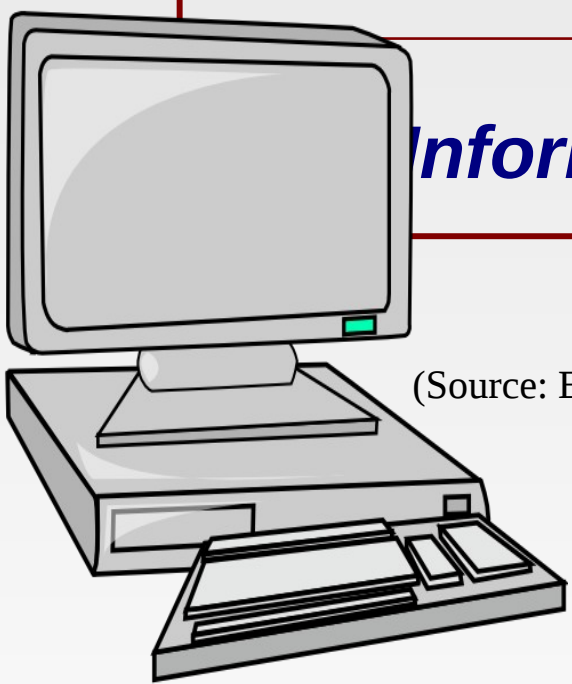
<i>Society</i>	<i>Key Social Institution</i>
<i>Agricultural</i>	FARM 
<i>Industrial</i>	FACTORY 
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(Source: Everett M. Rogers, [1986], "Communication Technology",page. 13)

Key element/basic resource



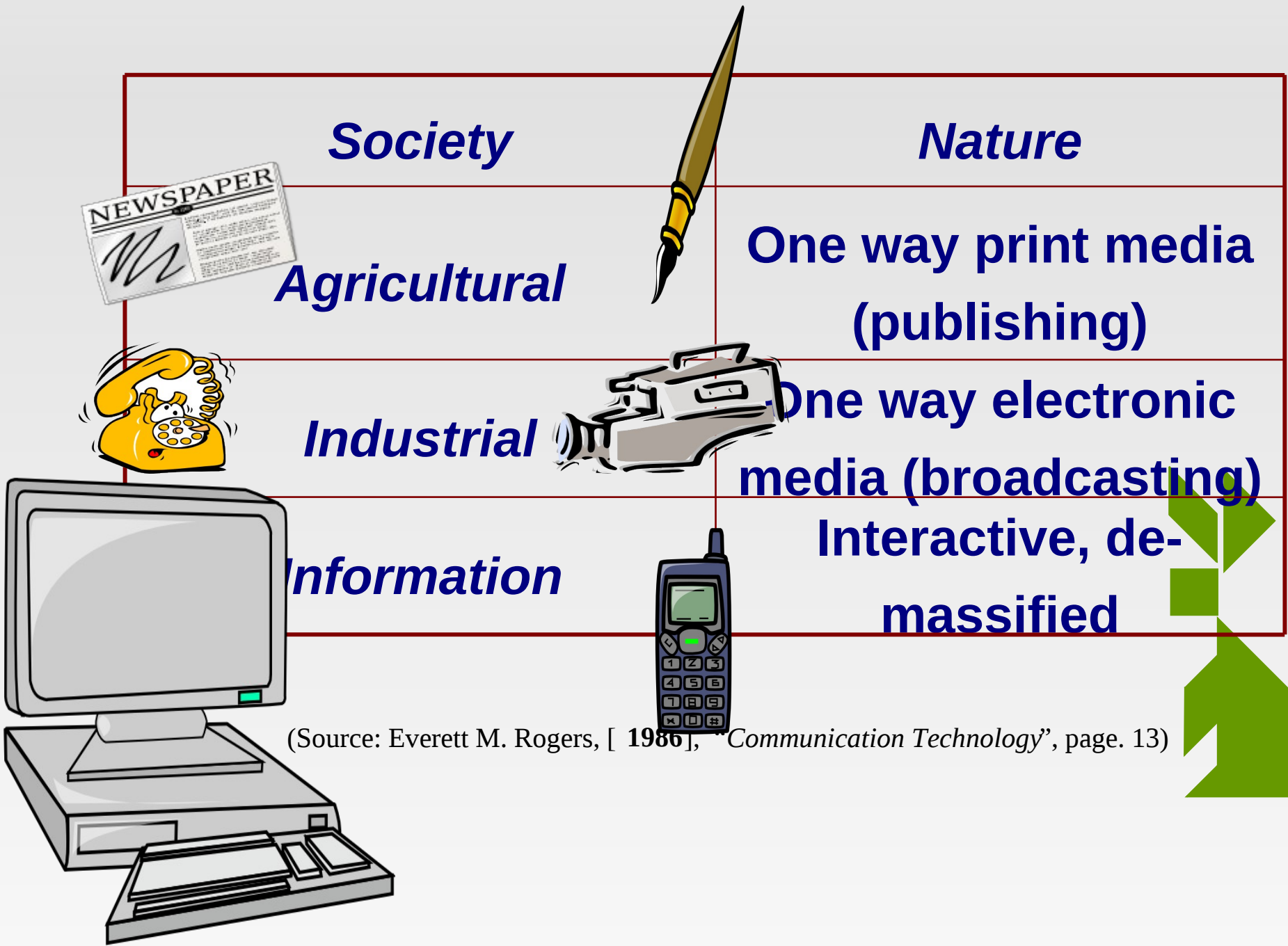
Basic Technology



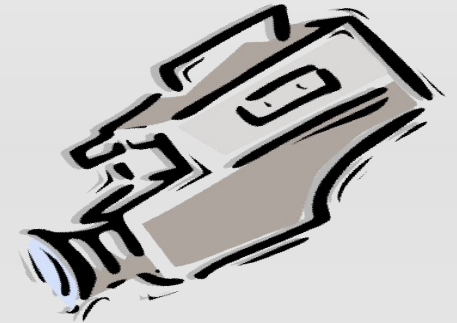
<i>Society</i>	<i>Technology</i>
<i>Agricultural</i>	Manual Labor
<i>Industrial</i>	Steam Engine
<i>Information</i>	Computer and Electronics

(Source: Everett M. Rogers, [1986], “*Communication Technology*”, page. 13)

Nature of Mass Communication



Another extended meaning of INFORMATION

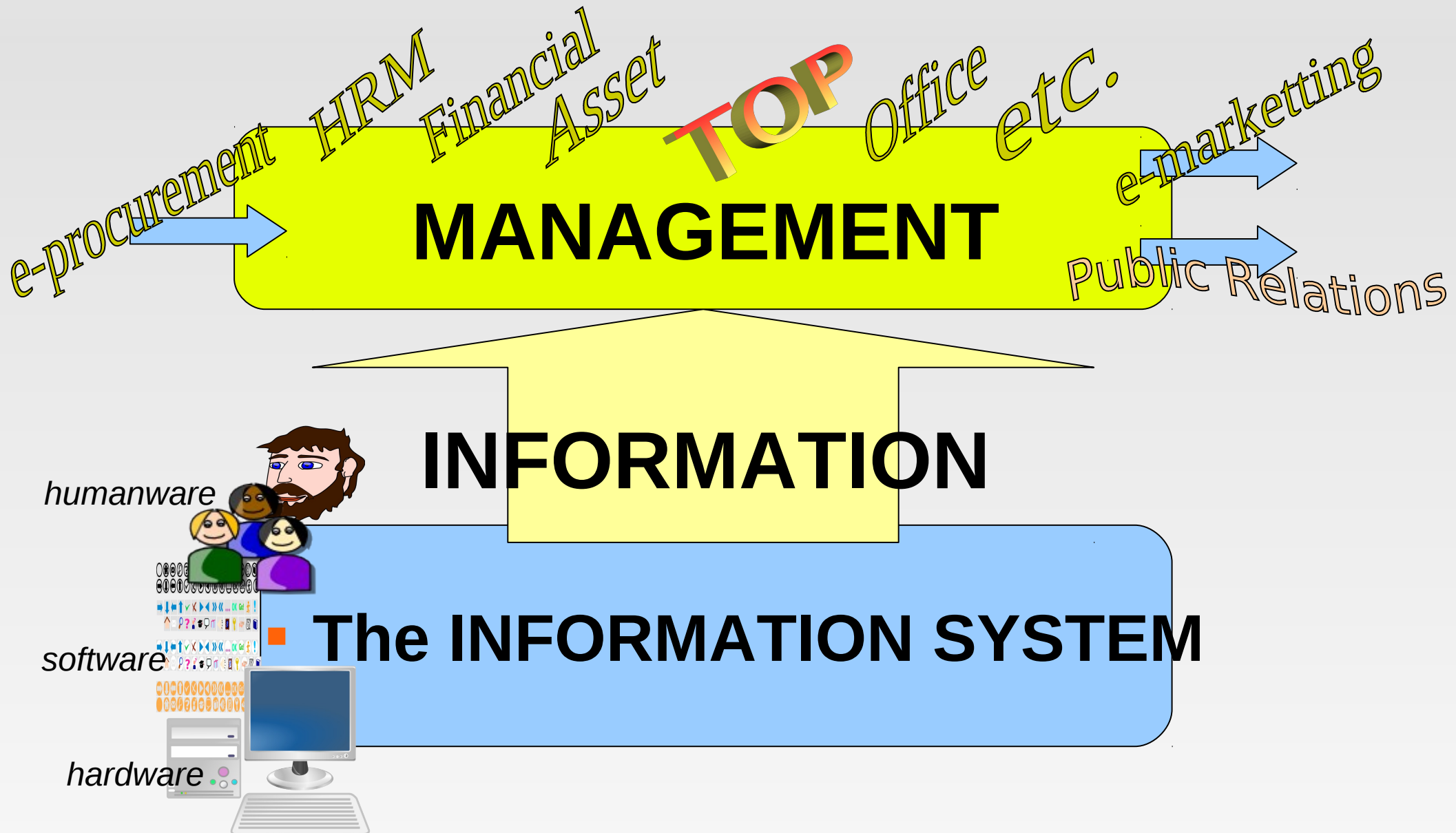


■ The INFORMATION SYSTEM

INFORMATION SYSTEMS



FRONT DOOR!



.....**BACK DOOR!**

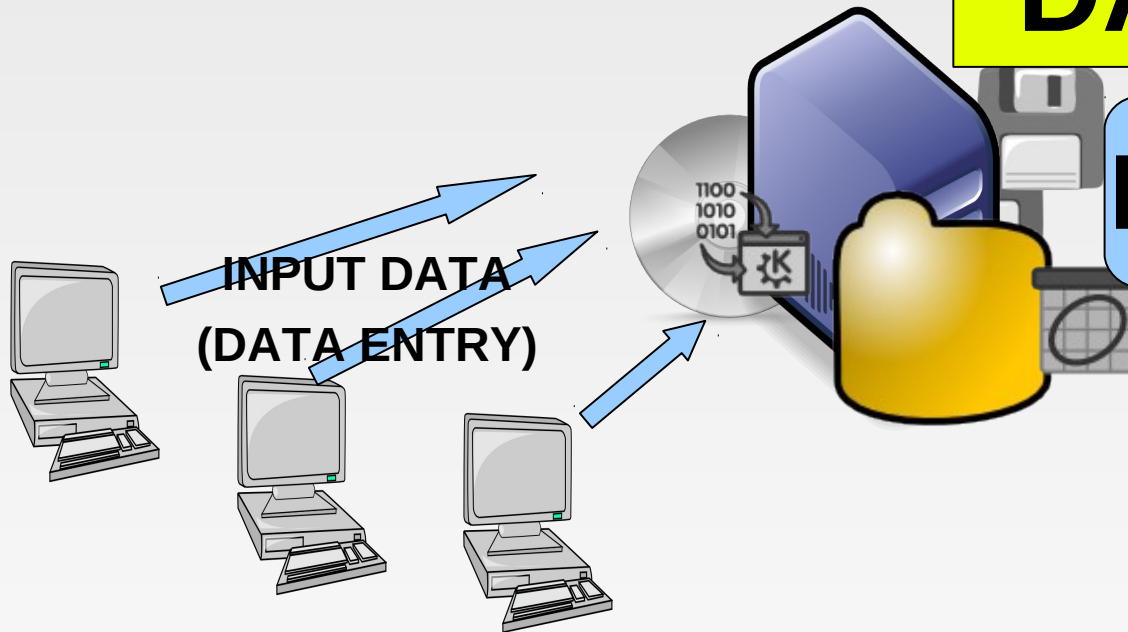
INFORMATION

The INFORMATION SYSTEM

DATA

DATA-BASE

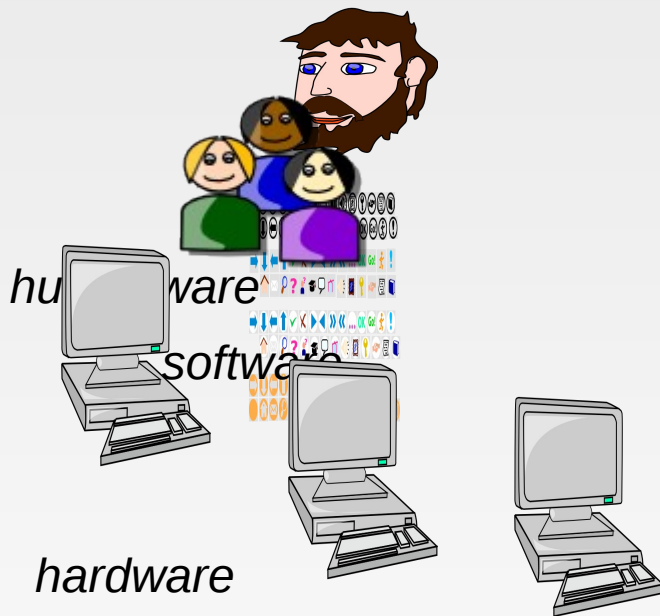
**INPUT DATA
(DATA ENTRY)**



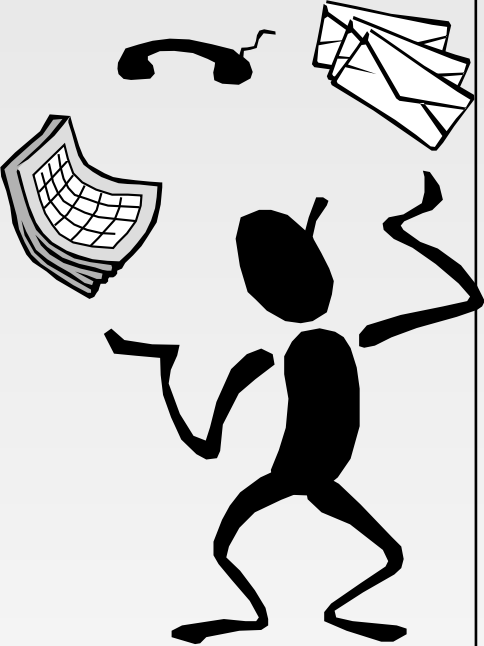
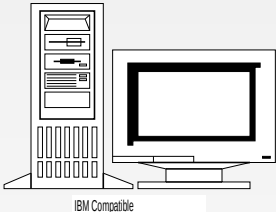
The Levels of INFORMATION SYSTEMS

- **MANUAL-based INFORMATION SYSTEMS**
- **COMPUTER-based INFORMATION SYSTEMS**
- **NETWORK-based INFORMATION SYSTEMS**

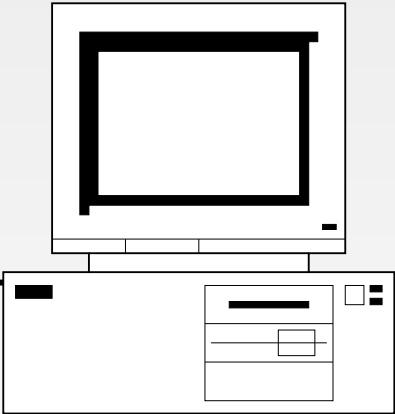
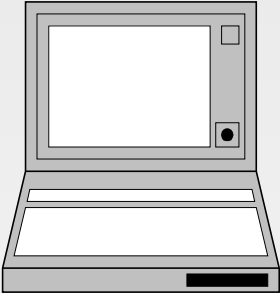
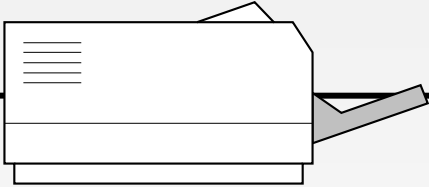
MANUAL
COMPUTER
NETWORK



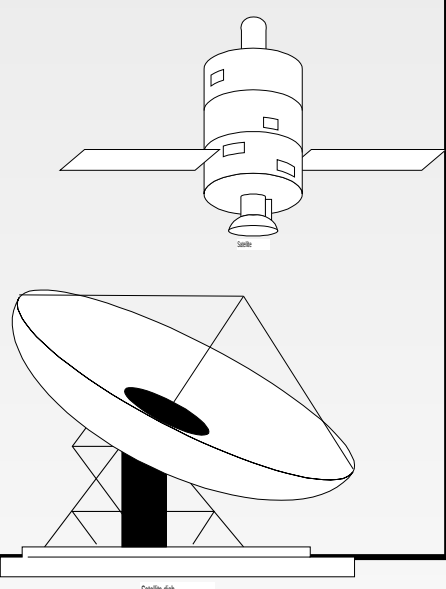
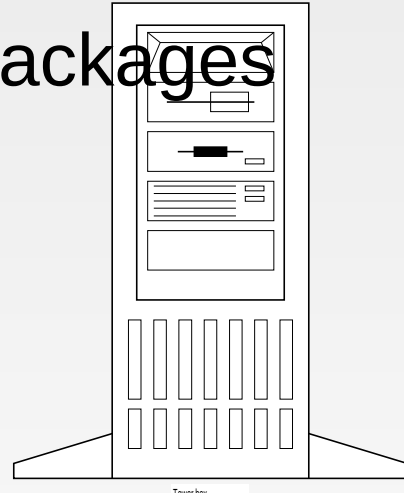
Levels of Information Systems (1)

LEVEL	Hardware	Software	Characteristics
MANUAL- based 	Pencils, ballpoints, pens, notebooks, typewriters, computers 	Non-Available, only “generic”, such as word processors, <i>spread-sheet</i>, etc.	Rely on human capabilities, such as memory, accountability, etc.

Levels of Information Systems (2)

Level	Hardware	Software	Characteristics
COMPUTER-based  IBM Compatible	COMPUTER generally PCs  Laptop computer  Laser printer	Specifically developed application software package, for example: <i>Academic Information Systems</i>, etc.	Most tasks that are relying on human capabilities have been taken over by computers programs.

Levels of Information Systems (3)

Level	Hardware	Software	Characteristics
NETWORK-based <i>(on-line)</i>  The illustration shows a satellite in orbit with two solar panel wings, and a large parabolic satellite dish on a tripod stand on the ground. Labels 'Satellite' and 'Satellite dish' are present at the bottom of the respective images.	COMPUTER(PC , Workstation, Server), network components (NIC, HUB, BRIDGE, SWITCH), Tele-communication Systems	Network-based Application software packages  The illustration shows a tall, vertical computer tower case with multiple drive bays and ventilation slots. A label 'Tower box' is at the bottom.	<i>Resource sharing, accessible from other networks.</i>

The End

The END

The END

THE END

Next:
The Fundamentals of
The Information Theory