

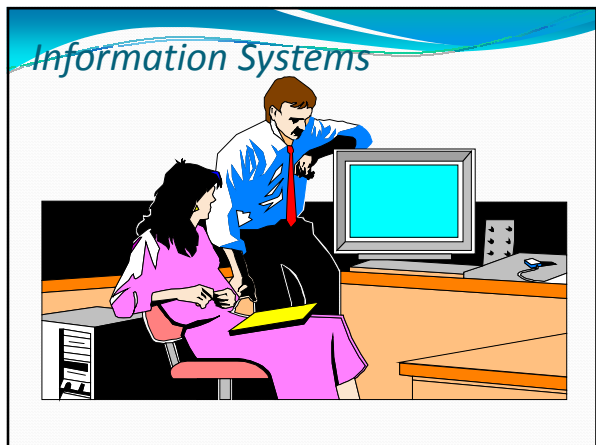
GAF 710 : Accounting Information Systems
GBS 789: Management Information Systems

Lecturer : Dr. N Chaamwe

E-Mail : chimz@cbu.ac.zm

Assessment

- Ca 40%
 - 10% Assignment
 - 30% Tests
- Exam 60%
- Hand outs
 - go to www.Lechaamwe.weebly.com
 - Lecture Notes - PostGraduate
 - GAF710 & GBS 789



Introduction to Information Systems

- Information Concepts
- System
- Business Information Systems
- Management Information Systems
- Decision Support Systems
- Expert Systems

Information Concepts

- Data
 - Collection of Raw facts and figures
 - Distinct pieces of information, usually formatted in a special way.
 - Eg.
 - Banda
 - 1989
 - Lusaka

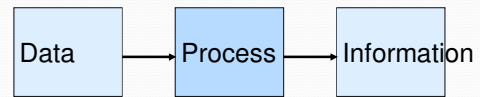
Types of Data

Data	Represented by
Alphanumeric data	Numbers, letters, and other characters
Image data	Graphic images or pictures
Audio data	Sound, noise, tones
Video data	Moving images or pictures

Information Concepts

- Information
 - A collection of facts organized in such a way that they have additional value beyond the value of the facts themselves
 - Eg:
 - Banda was born in Lusaka in 1989

Data → Information



Information Concepts

- Process
 - A set of logically related tasks performed to achieve a defined outcome
- Process
 - (n) An executing program. The term is used loosely as a synonym of task.
 - (v) To perform some useful operations on data.

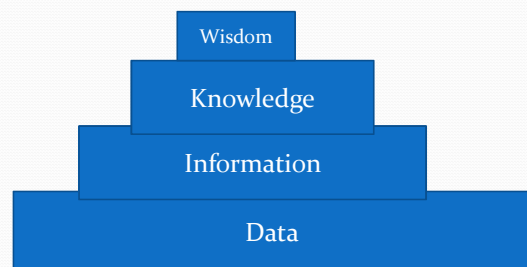
Information Concepts

- Knowledge
 - An awareness and understanding of a set of information and how that information can be made useful to support a specific task
- Knowledge base
 - The collection of data, rules, procedures, and relationships that must be followed to achieve value or the proper outcome

Information Concepts

- Wisdom
 - Acquired Knowledge used for the betterment of Mankind
 - The fear of the Lord is the beginning of Wisdom:

Data – Wisdom Hierarchy



Characteristics of Valuable Information

- Characteristics
 - Accurate, complete, economical, flexible, reliable, relevant, simple, timely, verifiable, accessible, secure

A System

- System
 - A set of elements or components that interact to accomplish goals
 - A combination of components working together to achieve set objectives

System Elements

- Inputs
- Processing mechanisms
- Outputs
- Feedback

System Example1

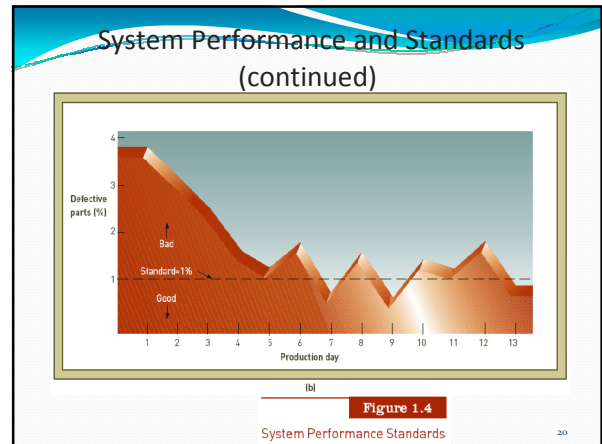
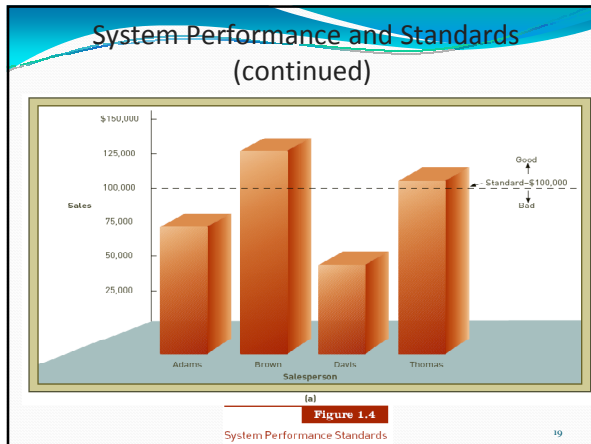
System	Elements			Goal
	Inputs	Processing elements	Outputs	
Movie	Actors, director, staff, sets, equipment	Filming, editing, special effects, distribution	Finished film delivered to movie studio	Entertaining movie, film awards, profits

System Example2

System	Elements			Goal
	Inputs	Processing elements	Outputs	
University	Students, staff, equipment	Lectures, tutorials, Exams	Graduates	Provide human resource

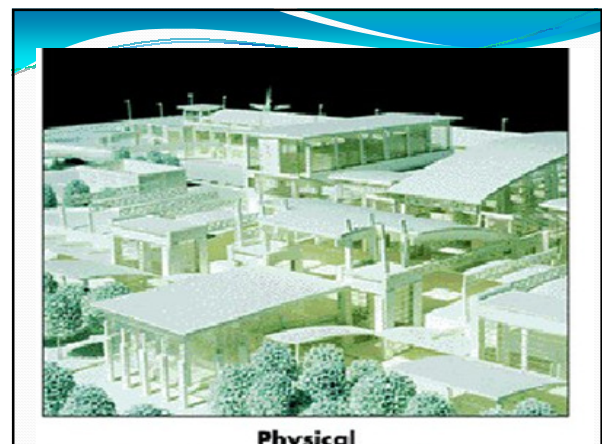
System Performance and Standards

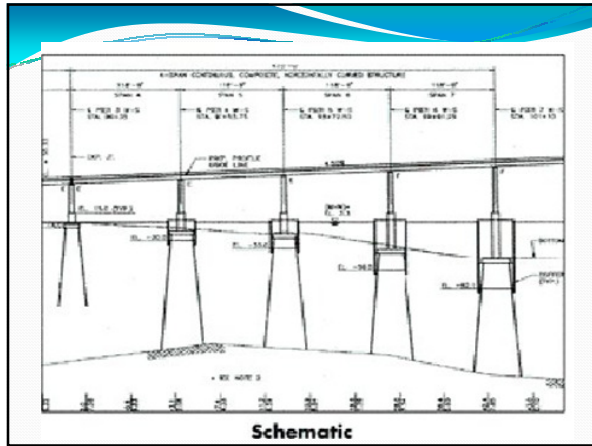
- Efficiency
 - A measure of what is produced divided by what is consumed
- Effectiveness
 - A measure of the extent to which a system achieves its goals
- System standard
 - A specific objective of the system



- ### System Variables and Parameters
- System variable
 - A quantity or item that can be controlled by the decision maker
 - E.g. the price a company charges for a product
 - System parameter
 - A value or quantity that cannot be controlled by the decision maker
 - E.g., cost of a raw material

- ### Modeling a System
- Model
 - An abstraction or an approximation that is used to represent reality
 - Types of models
 - Narrative (aka descriptive)
 - Physical
 - Schematic
 - Mathematical





	B	C	D	E	F	G	H	I	J	K	L
149	W0 =	16.50	in		A _g =	32.76	in ²			Gross Area	
150	t0 =	1.000	in		A _n =	22.63	in ²			Net Tension Area	
151	W1 =	6.50	in		alpha =	0.646	= F _y (ρh ² /F _u)				
152	t1 =	1.250	in		beta =	0.691	= A _n / A _g				
153					A _g =	26.74	in ²			= A _n / alpha	
154					If beta > or = alpha, then yield controls						
155					If beta < alpha, then fracture controls						
156											
157											
158	A _p =	16.50	in		F _t =	1337	kips			Tension Capacity	
159	A _d =	16.25	in		F _{td} =	1303	kips			Design Force	
160											
161											

Mathematical