

## BS427: Accounting Information Systems

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1

## Assessment

- Ca 40%
  - 20% Assignment
  - 20% Tests
- Exam 60%
- Hand outs
  - go to **[www.Lechaamwe.weebly.com](http://www.Lechaamwe.weebly.com)**
  - Lecture Notes - undergraduate
  - BS427

2

## Information Systems



3

## Introduction to Information Systems

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

4

## Information Concepts

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

5

## 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

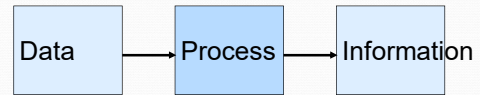
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## Information Concepts

- 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

7

## Data → Information



8

## 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.

9

## 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

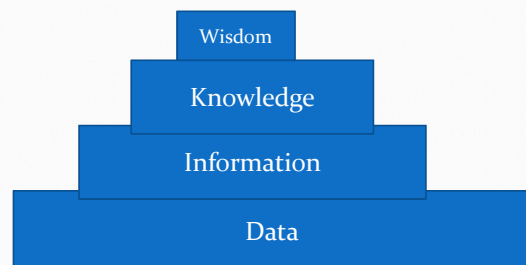
10

## Information Concepts

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

11

## Data – Wisdom Hierarchy



12

### 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

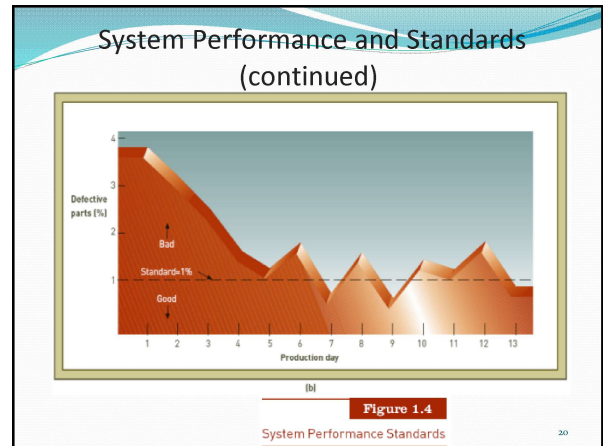
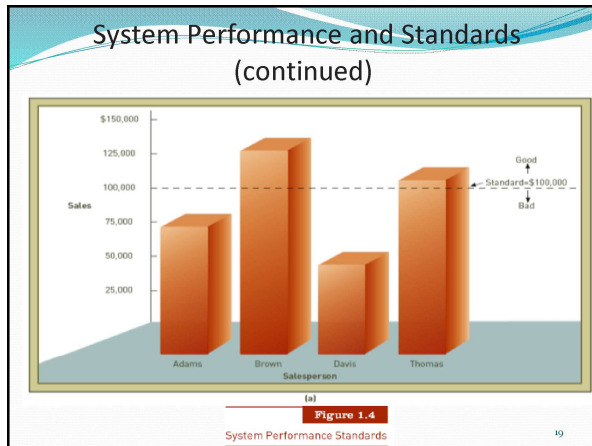
### System Example2

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

### System Performance and Standards

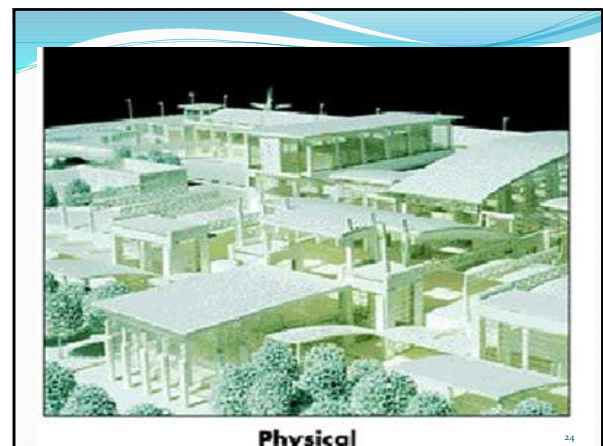
- Efficiency
  - A measure of what is produced divided by what is consumed
- Effectiveness
  - A measure of the extent to which a system achieves its goals
- System standard
  - A specific objective of the system

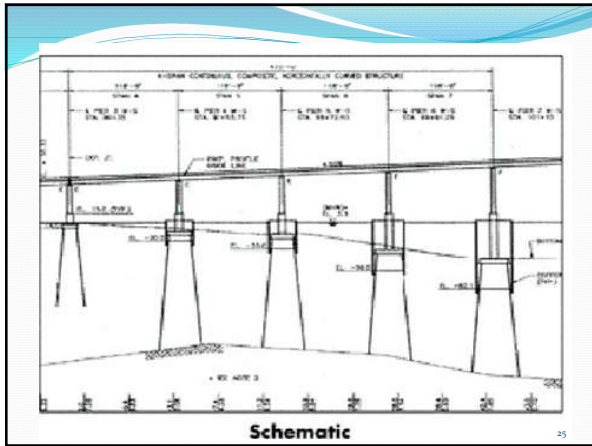




- ### System Variables and Parameters
- System variable
    - A quantity or item that can be controlled by the decision maker
    - E.g. the price a company charges for a product
  - System parameter
    - A value or quantity that cannot be controlled by the decision maker
    - E.g., cost of a raw material
- 21

- ### Modeling a System
- Model
    - An abstraction or an approximation that is used to represent reality
  - Types of models
    - Narrative (aka descriptive)
    - Physical
    - Schematic
    - Mathematical
- 22





	B	C	D	E	F	G	H	I	J	K	L
149	w0 =	16.50	in		Ag =	32.75	in <sup>2</sup>				Gross Area
150	t0 =	1.000	in		An =	22.63	in <sup>2</sup>				Net Tension Area
151	w1 =	0.80	in		alpha =	0.646	= Fy1*ph <sup>2</sup> /Fu				
152	t1 =	1.250	in		beta =	0.691	= An / Ag				
153					Ag1 =	26.74	in <sup>2</sup>				= An / alpha
154											
155											
156											
157											
158	Ay =	16.50	in		Ft =	1337	kips				Tension Capacity
159	Aj =	16.25	in		Fjd =	1303	kips				Design Force
160											
161											