

CONTROLLING

DEFINITION OF CONTROL

the management function which allows you to ensure that you are progressing in accord with your plan

that function of a system which provides direction in conformance with the plan

the maintenance of variations from system objectives within allowable limits

CATEGORIES OF CONTROLS

PREVENTIVE CONTROLS

to prevent undesired performance before it occurs

CORRECTIVE CONTROLS

to adjust for actions already taken

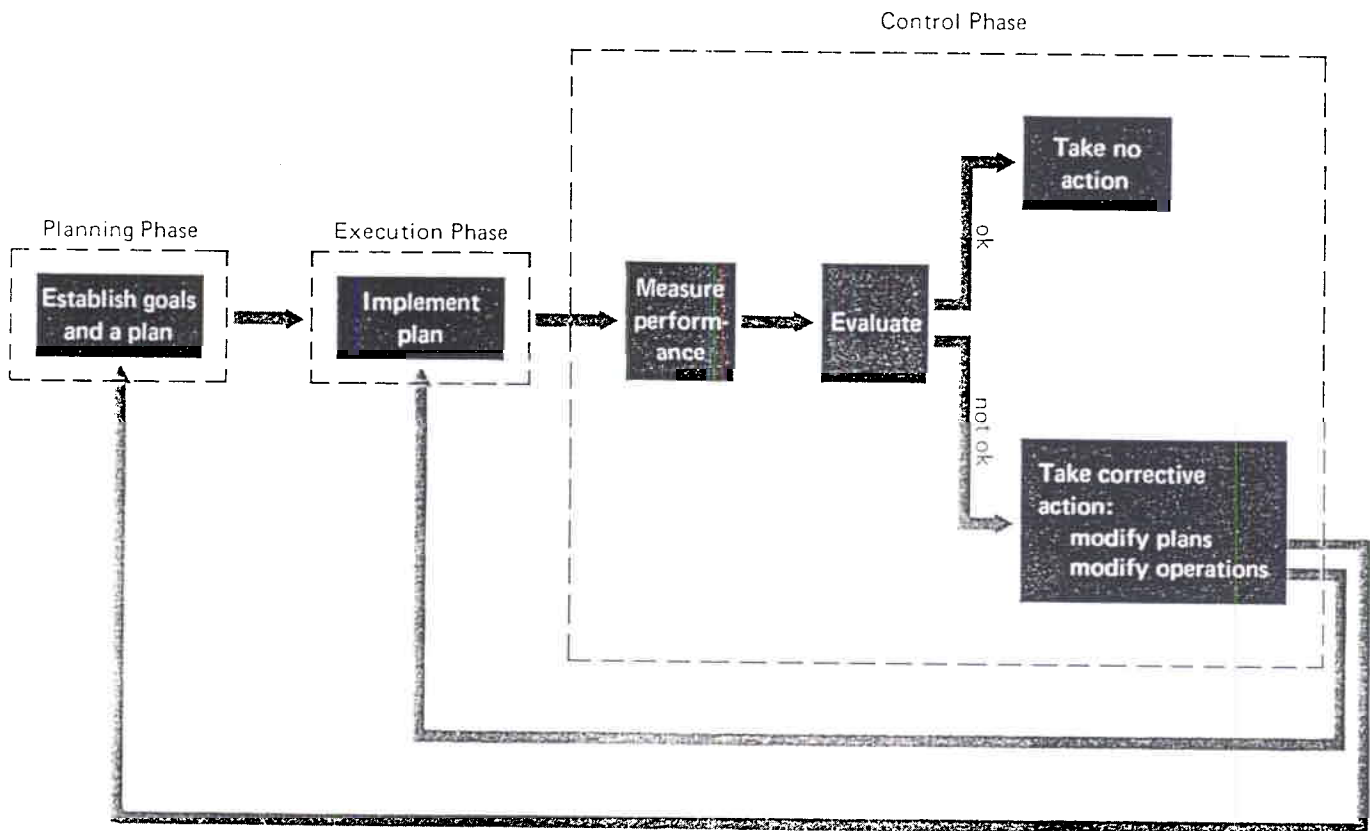
BASIC ELEMENTS OF CONTROL

Standards
(desired performance)

Comparison
(actual results against standards)

Corrective Action

PLANNING & CONTROL PROCESS



**LEVELS OF
PERFORMANCE STANDARDS**

ORGANIZATIONAL
Top Management

FUNCTIONAL
Upper Middle Management

DEPARTMENTAL
*Lower Middle Management
and Supervisory*

POSITION
Individual

PERFORMANCE STANDARDS EXAMPLES

ORGANIZATIONAL LEVEL
Market Share

FUNCTIONAL LEVEL
Sales Volume

DEPARTMENT LEVEL
*Advertising Expenditures
per Unit Sold*

POSITION LEVEL
Number of Units Sold

CHARACTERISTICS OF A GOOD CONTROL SYSTEM

Effective *measures what needs to be controlled*

Efficient *economical & cost-productive to use*

provides info in time to take appropriate action

Timely

Flexible *responsive to needs*

info needs to be in easy to comprehend form

Understandable

Tailored *proper information for decision making at various levels*

highlights when something is "out of control"

Highlights Deviations

Leads to Corrective Action

enables you to change

GENERAL REQUIREMENTS FOR GOOD CONTROL

Top Management Support

Management Participation

Relationship with Authority

Useful Standards

Good Information

DESIGNING GOOD CONTROL SYSTEMS

- **What should be controlled?**
- **Where should controls be concentrated?**
- **What are the steps in the control process?**
- **What are the tools and techniques to be used?**

BEHAVIORAL ASPECTS OF CONTROLS

Natural resistance to controls

Rejection of organizational goals

Unattainable or unclear standards

Excessive and mechanical controls

Subjective and inaccurate data

Imbalanced controls

Management attitude

Cost

GENERAL TYPES OF CONTROL SYSTEMS

BASED ON CONTROL VARIABLE

By type of input

(e.g., human resources)

By dimension of control

(i.e., quality, quantity, time, cost)

By time element

*(e.g., pre controls, such as feasibility studies
yes-no controls, such as legal
approval of contracts)*

EXAMPLES OF GENERAL TYPES OF CONTROL SYSTEMS

Dimension of Control	Human Resources	Financial Resources	Materials	Time	Space
Quality	Performance appraisal Psychological test Performance requirements reports Memoranda manpower inventories Accountability	Audits Work measurement reports Memoranda	Statistical quality control Visual inspection Inspection instruments Work measurement Inventory control Blueprints Reports Memoranda	Work measurement Reports Memoranda	Reports memoranda
Quantity	Time study Work measurement Performance appraisal Accountability reports Memoranda	Budgets Profit planning Audits Work measurement Reports Memoranda	Operations manual Work measurement Inventory control Blueprints Reports Memoranda	Time study Deadlines Commitments Schedules Work measurement Reports Ratios	Productivity per square foot Reports Memoranda Ratios
Time	Committees Staff meetings Standard procedure Reports Memoranda Policy manuals Organization manuals	Forecast Policy manuals Standard procedure Reports Memoranda	Operations manuals Standard procedure Reports Memoranda	Forecast Reports Memoranda Standard procedure	Standard procedure Reports Memoranda
Cost	Standard procedure Ratios Charts Performance requirements Policy manuals Organization manuals	Profitability accounting Return on investment Standard costs Policy manuals Standard procedure Ratios Charts	Operations manuals Estimates Standard procedures Charts Ratios	Standard procedures, Charts	Cost per square foot Standard procedures Estimates Charts

PRIMARY TYPES OF MANAGERIAL CONTROL SYSTEMS

PRODUCTION

FINANCIAL

HUMAN RESOURCE

TYPICAL PRODUCTION CONTROLS

INVENTORY CONTROL

How much is there and where is it?

QUALITY CONTROL

**Quality of incoming, in-process,
and outgoing goods and services**

CONFIGURATION CONTROL

Engineering design changes

PRIMARY TYPES OF MANAGERIAL CONTROL SYSTEMS

PRODUCTION

FINANCIAL

HUMAN RESOURCE

SELECTED TYPES OF FINANCIAL CONTROLS

RATIO ANALYSIS

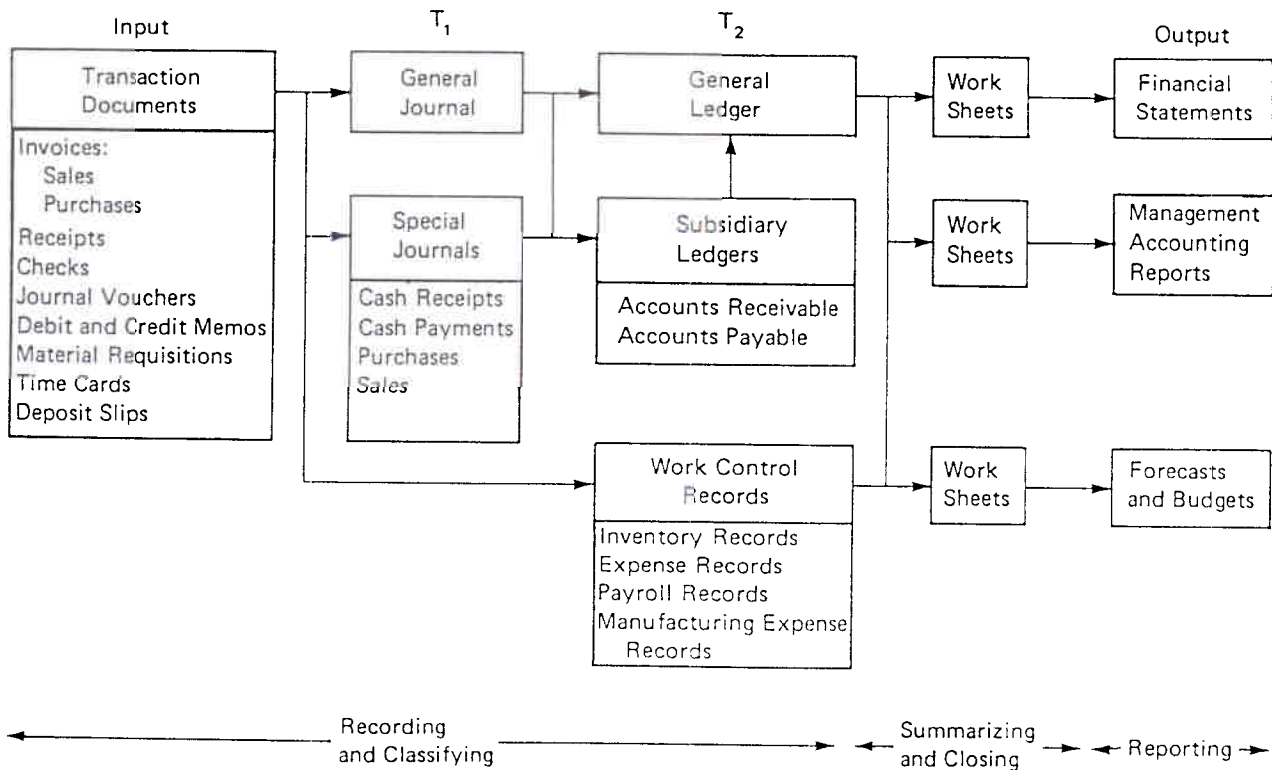
BUDGETS

BREAKEVEN ANALYSIS

CASH FLOW ANALYSIS

FINANCIAL AUDITS

PROCESS STRUCTURE OF THE ACCOUNTING INFORMATION SYSTEM



FINANCIAL RATIO ANALYSIS

Uses information from accounting statements

Ratios of values are computed

Some ratios have meaning on their own

Some ratios have comparative meaning

BASIC FINANCIAL STATEMENTS

Balance Sheet

Income Statement

Statement of Retained Earnings

Statement of Changes in Financial Position

BALANCE SHEET

Illustrates financial position on a particular date
Reflects the fundamental accounting equation, $A = L + OE$

Assets		
Current assets		
Cash	\$ 150,724	
Securities (at cost)	<u>99,866</u>	\$ 250,590
Accounts receivable		416,304
Inventories (at lower of cost or market)		
Raw materials and supplies	208,046	
Work in process	182,702	
Finished goods	<u>289,610</u>	680,358
Prepaid expenses		<u>29,498</u>
Total current assets		1,376,750
Property, plant, and equipment	4,461,150	
Less accumulated depreciation and depletion	<u>2,402,024</u>	
Net property, plant, and equipment		<u>2,059,126</u>
Total Assets		<u>\$3,435,876</u>
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	\$ 105,056	
Installments due within one year on debt	26,836	
Federal income and other taxes	239,194	
Interest	7,702	
Other accrued liabilities	<u>113,066</u>	
Total current liabilities		491,854
Long-term debt		<u>968,664</u>
Total Liabilities		\$1,460,518
Stockholders' equity		
Capital stock	505,130	
Retained earnings	<u>1,470,228</u>	<u>1,975,358</u>
Total liabilities and equity		<u>\$3,435,876</u>

INCOME STATEMENT

Illustrates results of operations for a specified time period

Gross sales	\$3,246,386	
Less returns and allowances	<u>150,050</u>	
Net sales		\$3,096,336
Less expenses and cost of goods sold		
Cost of goods sold	2,002,376	
Depreciation and depletion	258,502	
Selling expenses	104,500	
General and administrative expenses	<u>180,076</u>	2,545,454
Operating profit		550,882
Plus interest and other income		<u>59,480</u>
Gross income		610,362
Less interest on long-term debt		<u>33,260</u>
Income before taxes		577,102
Provision for federal income taxes		<u>261,142</u>
Net income		315,960
Retained earnings January 1, 1990		1,370,988
		<u>1,686,948</u>
Dividends declared		216,720
Retained earnings December 31, 1990		<u>1,470,228</u>
