

Cost Management

ACCOUNTING AND CONTROL

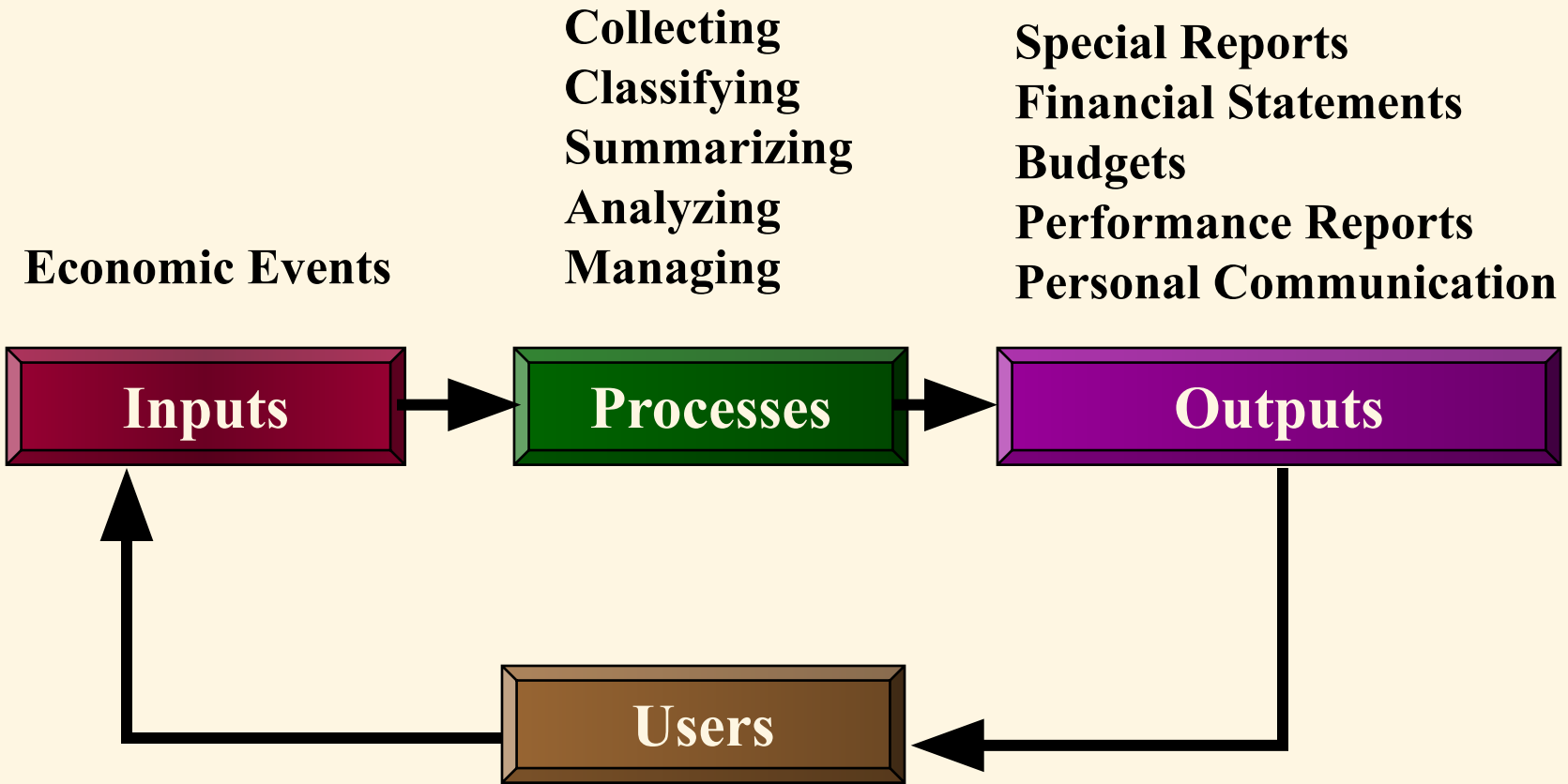
HANSEN & MOWEN

Basic Cost Management Concepts

CHAPTER
2

A Systems Framework

Operational Model for an Accounting Information System



A Systems Framework

Financial Accounting Information System

- ◆ Inputs: well-specified economic events
- ◆ Processes: rules and conventions established by the SEC and FASB
- ◆ Outputs: financial statements for **external** users

Cost Management Information System

- ◆ Inputs and processes: set by management; not bound by externally imposed criteria
- ◆ Outputs: reports for **internal** users

A Systems Framework

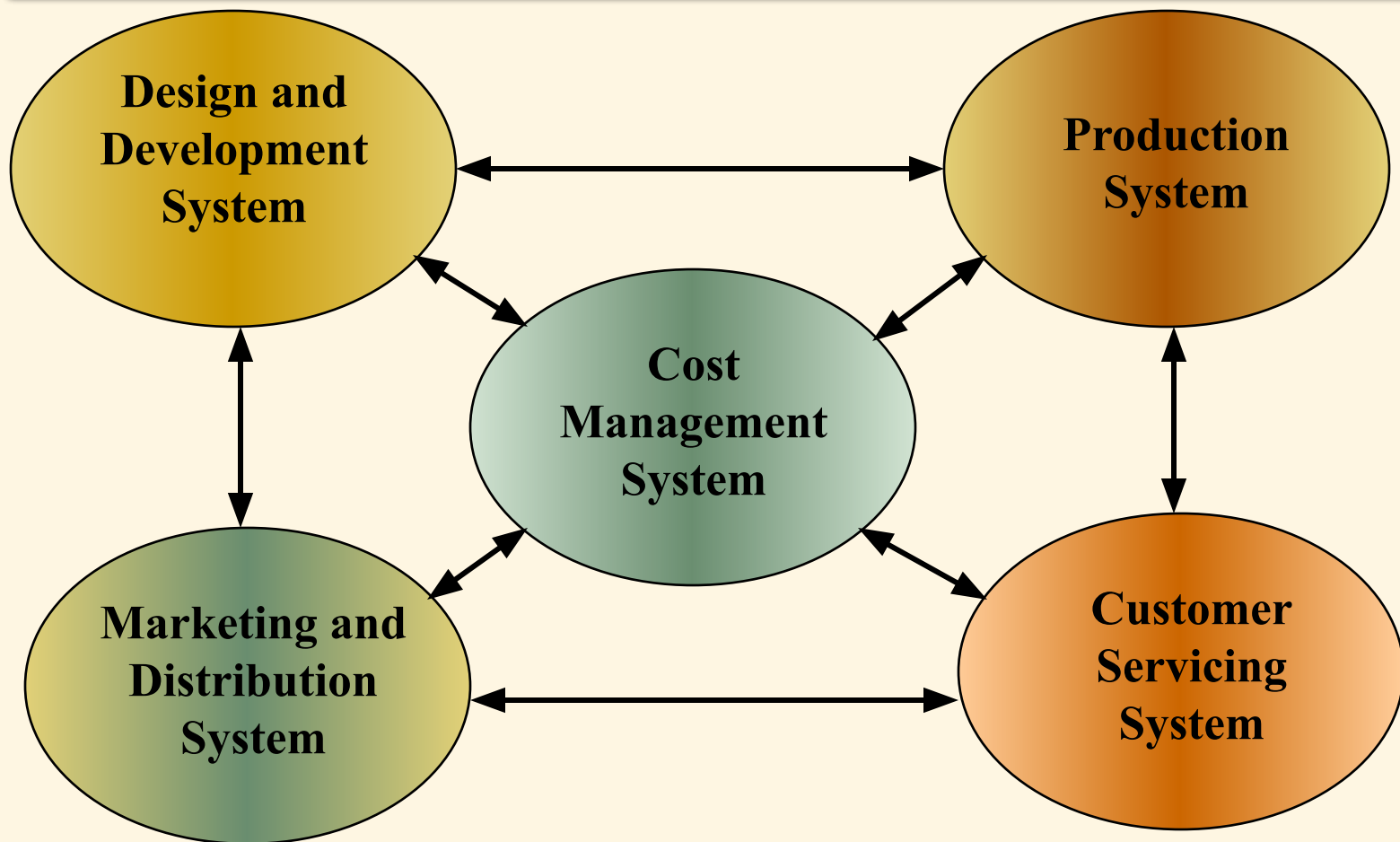
The cost management information system has three broad objectives that provide information for--

- 1) Costing out services, products, and other objects of interest to management
- 2) Planning and control
- 3) Decision making



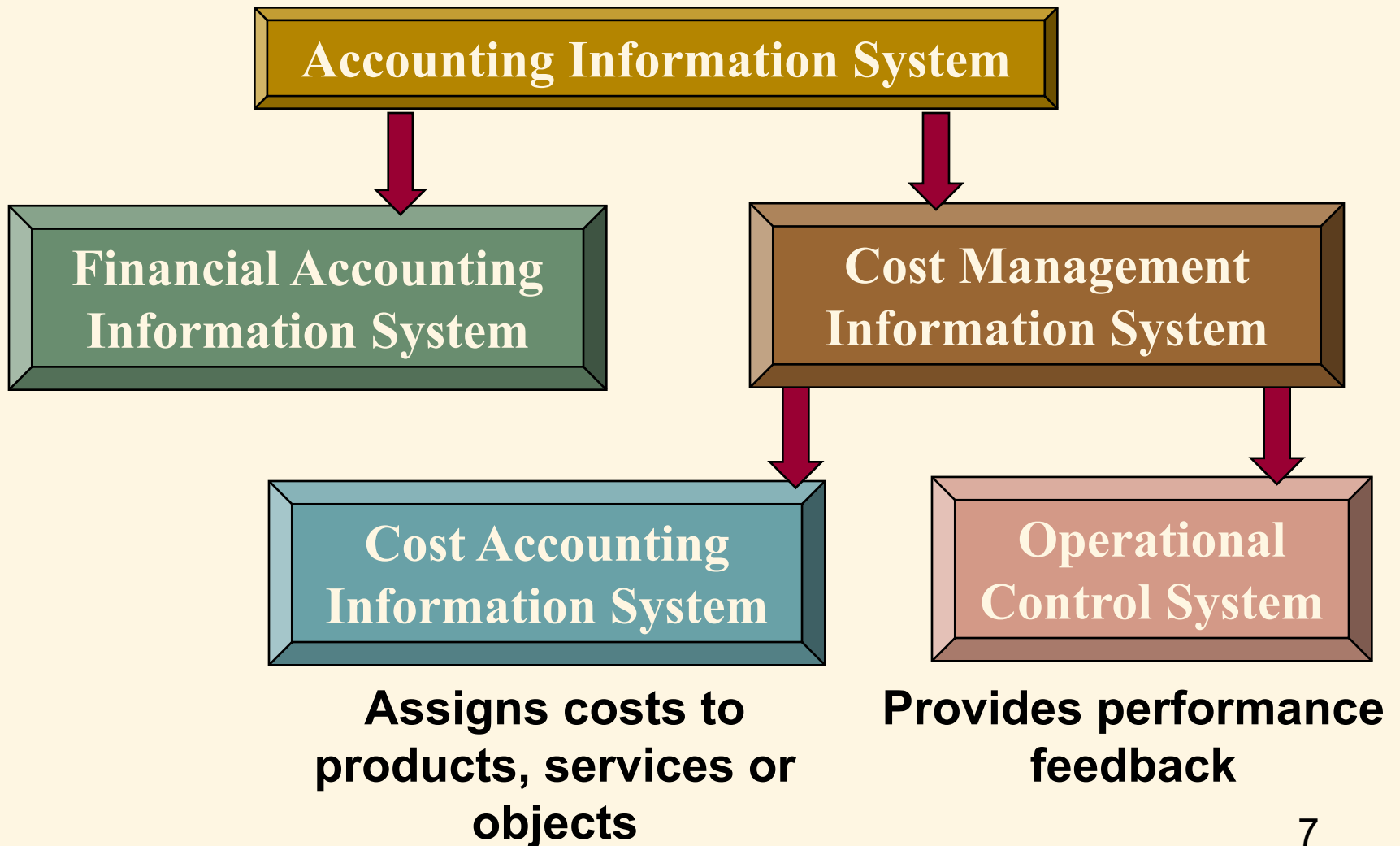
A Systems Framework

An Integrated Cost Management System



A Systems Framework

The Subsystems of the Accounting Information System



Cost Assignment: Direct Tracing, Driver Tracing and Allocation

- A **cost object** is any item, such as products, customers, departments, projects, activities, and so on, for which costs are measured and assigned.
 - *Example: A bicycle is a cost object when you are determining the cost to produce a bicycle.*
- An **activity** is a basic unit of work performed within an organization.
 - *Example: Setting up equipment, moving materials, maintaining equipment, designing products, etc.*

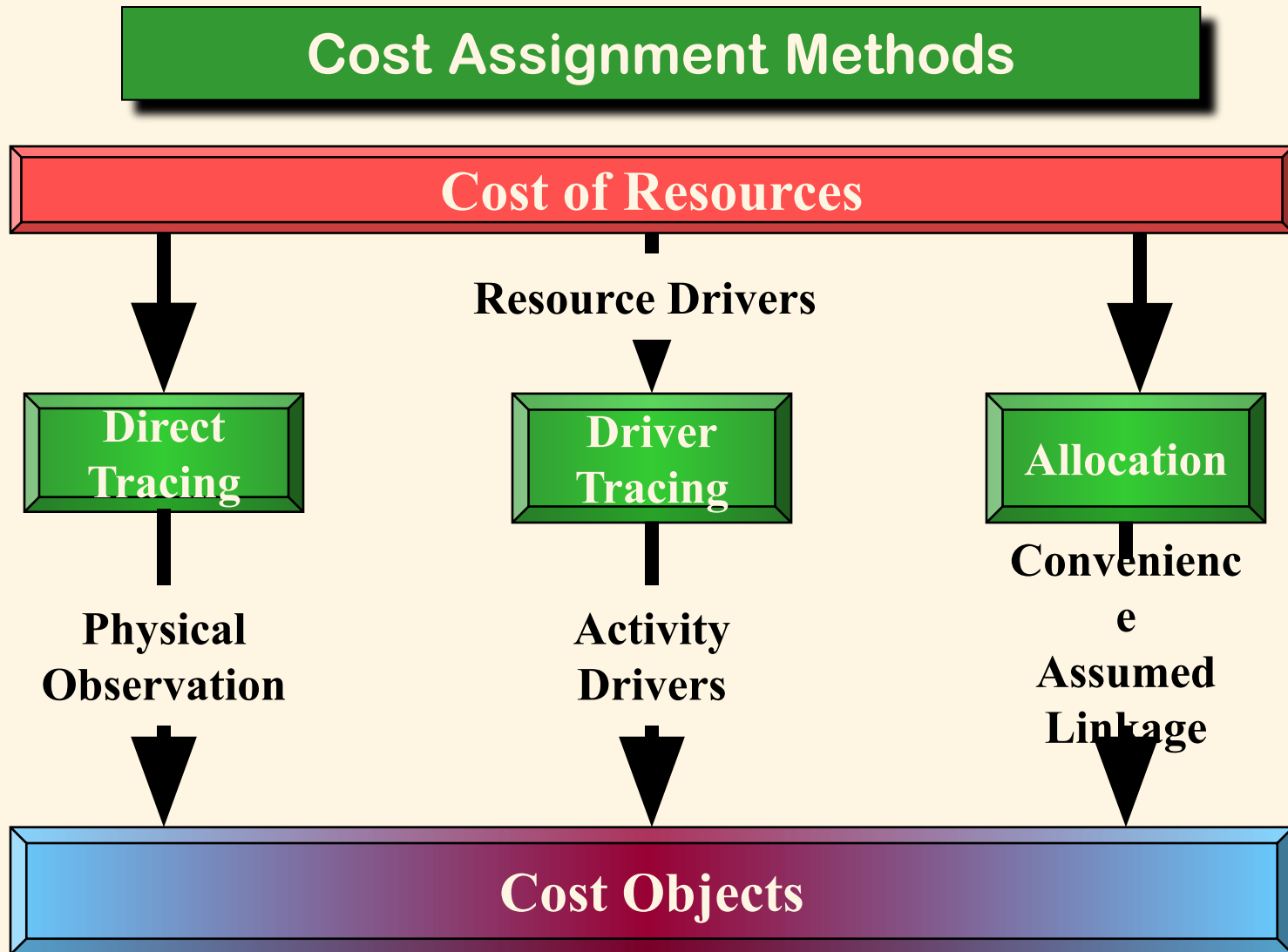
Cost Assignment: Direct Tracing, Driver Tracing and Allocation

Traceability means that costs can be assigned easily and accurately, using a causal relationship.

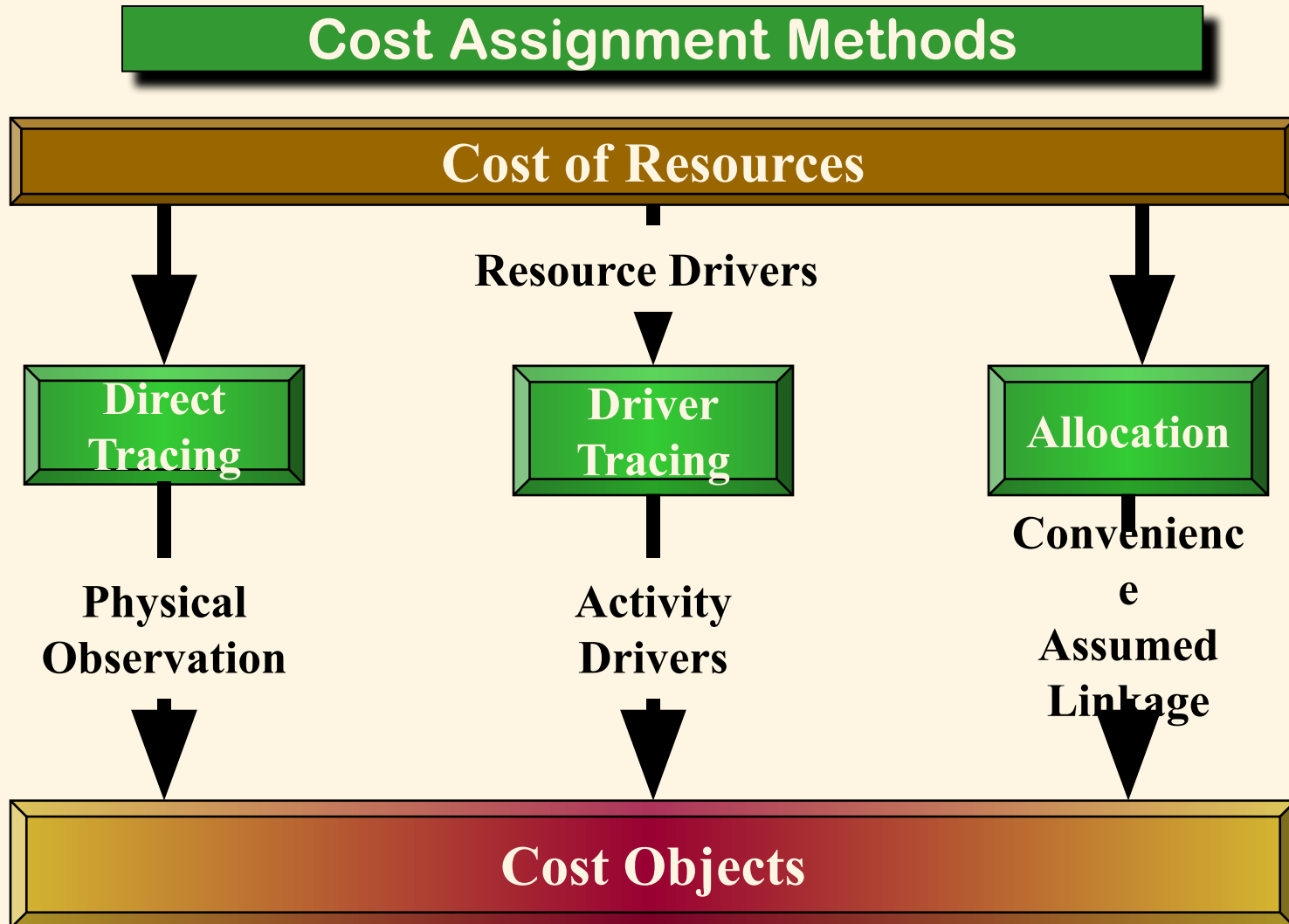
Methods of tracing:

- 1. Direct tracing:** relies on physical observance of causal relationships to assign costs to cost objects.
- 2. Driver tracing:** relies on drivers as causal factors to assign costs to cost objects.

Cost Assignment: Direct Tracing, Driver Tracing and Allocation



Cost Assignment: Direct Tracing, Driver Tracing and Allocation



Product and Service Costs

Examples of Product Cost Definitions

Value-Chain
Product Costs



Pricing Decisions
Product Mix Decisions
Strategic Profitability
Analysis

Operating Product
Costs



Strategic Design
Decisions
Tactical Profitability
Analysis

Traditional Product
Costs



External Financial
Reporting

Manufacturing Costs (Production Costs)

- **Direct materials** are those materials that are directly traceable to the goods or services being produced.
 - *Example: The cost of wood in furniture.*
- **Direct labor** is the labor that is directly traceable to the goods or services being produced.
 - *Example: Wages of assembly-line workers.*
- **Overhead** are all other manufacturing costs.
 - *Example: Plant depreciation, utilities, property taxes, indirect materials, indirect labor, etc.*

Product and Service Costs

Manufacturing costs are assigned to products and carried in inventories until the products are sold.

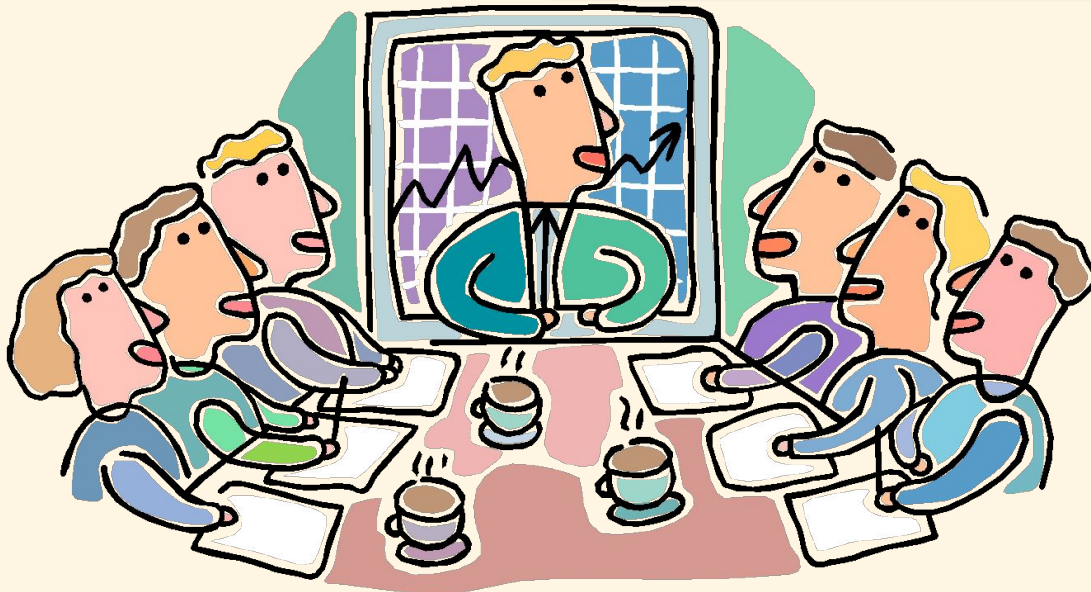


Nonmanufacturing Costs (Nonproduction Costs)

- **Marketing (selling) costs** are the costs necessary to market, distribute, and service a product or service.
 - *Example:* Advertising, storage costs, and freight out.
- **Administrative costs** are the costs associated with research, development, and general administration of the organization that cannot reasonably be assigned to either marketing or production.
 - *Example:* Legal fees, salary of the chief executive officer.

Product and Service Costs

For external financial reporting, marketing and administrative costs are not inventoried. They are are expensed in the period incurred and referred to as **period** costs.



Product and Service Costs

Production and Nonproduction Costs

Production or Manufacturing Costs

Nonproduction or Operating Costs

Direct Materials

} Prime Cost

Direct Labor

} Conversion Cost

Overhead

Marketing Expense
Order-Getting Costs
Order-Filling Costs

Administrative Expense

External Financial Statements

Manufacturing Organization Income Statement For the Year Ended December 31, 2007

Sales		\$ 2,000,000
Less: Cost of goods sold		<u>1,300,000</u>
Gross margin		\$ 700,000
Less operating expenses:		
Selling expenses	\$ 300,000	
Administrative expenses	<u>150,000</u>	
Operating income		



**From the Cost
of Goods Sold
Schedule**

External Financial Statements

OBJECTIVE
4

Statement of Cost of Goods Manufactured For the Year Ended December 31, 2007

Direct materials:

Beginning inventory	\$ 200,000	
Add: Purchases	<u>450,000</u>	
Materials available	\$ 650,000	
Less: Ending inventory	<u>50,000</u>	
Direct materials used in production		\$ 600,000

Direct labor 350,000

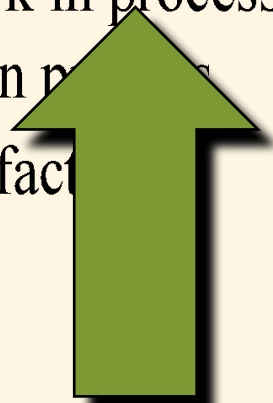
Manufacturing overhead:

Indirect labor	\$ 122,500	
Depreciation on building	177,500	
Rental of equipment	50,000	
Utilities	37,500	
Property taxes	12,500	
Maintenance	<u>50,000</u>	<u>450,000</u>

Total manufacturing cost **continued** \$ 1,400,000 19

External Financial Statements

Total manufacturing costs added	\$ 1,400,000
Add: Beginning work in process	200,000
Less: Ending work in process	<u>400,000</u>
Cost of goods manufactured	<u><u>\$ 1,200,000</u></u>



Work in process consists of all partially completed units found in production at a given point in time.

External Financial Statements

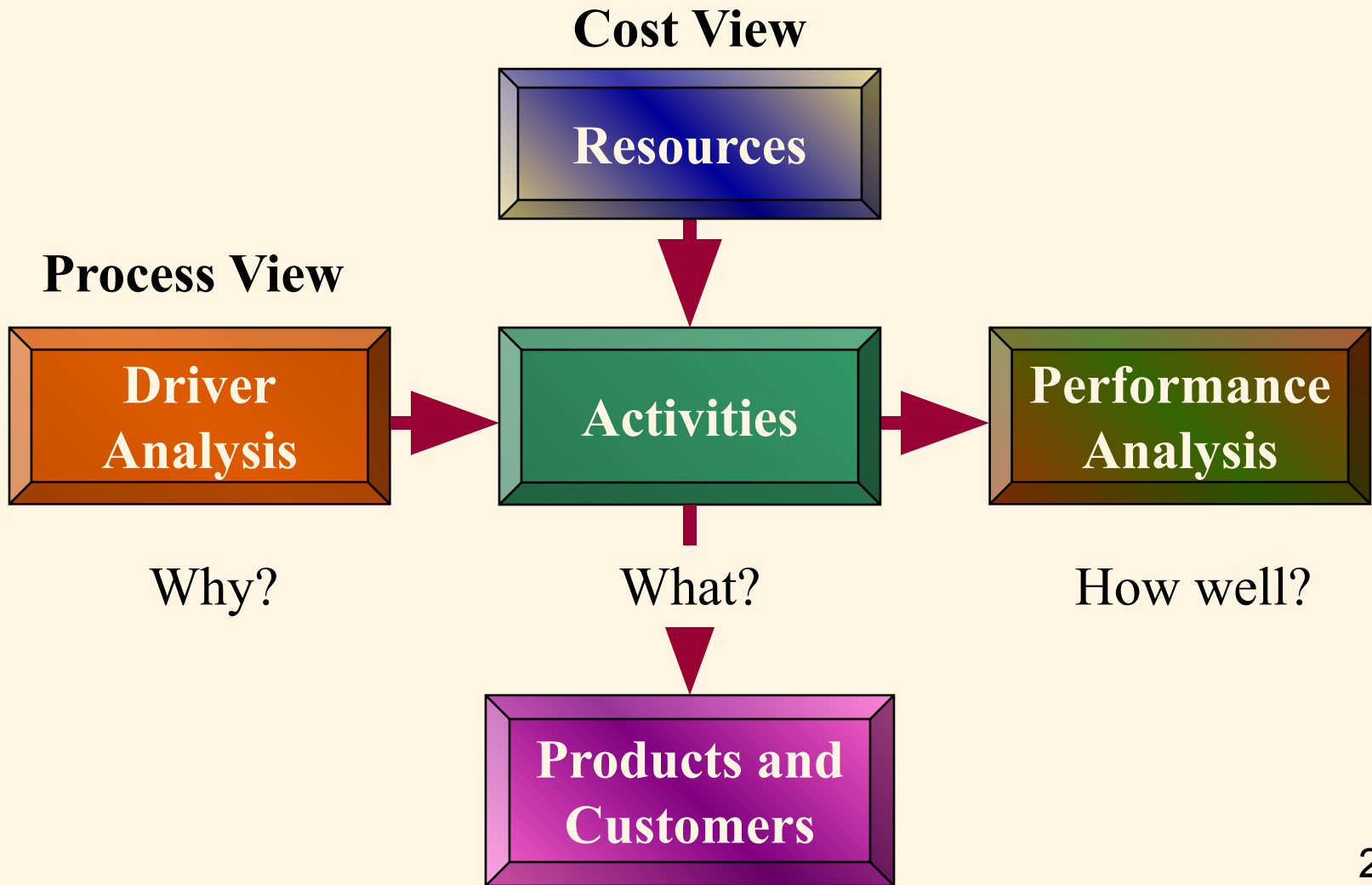
OBJECTIVE
4

Cost of Goods Sold Schedule For the Year Ended December 31, 2007

Cost of goods manufactured	\$ 1,200,000
Add: Beginning inventory finished goods	<u>250,000</u>
Cost of goods available for sale	\$ 1,450,000
Less: Ending inventory goods	<u>150,000</u>
Cost of goods sold	<u><u>\$ 1,300,000</u></u>

**From the
Statement of
Cost of Goods
Manufactured**

Activity-Based Management Model



Functional-Based

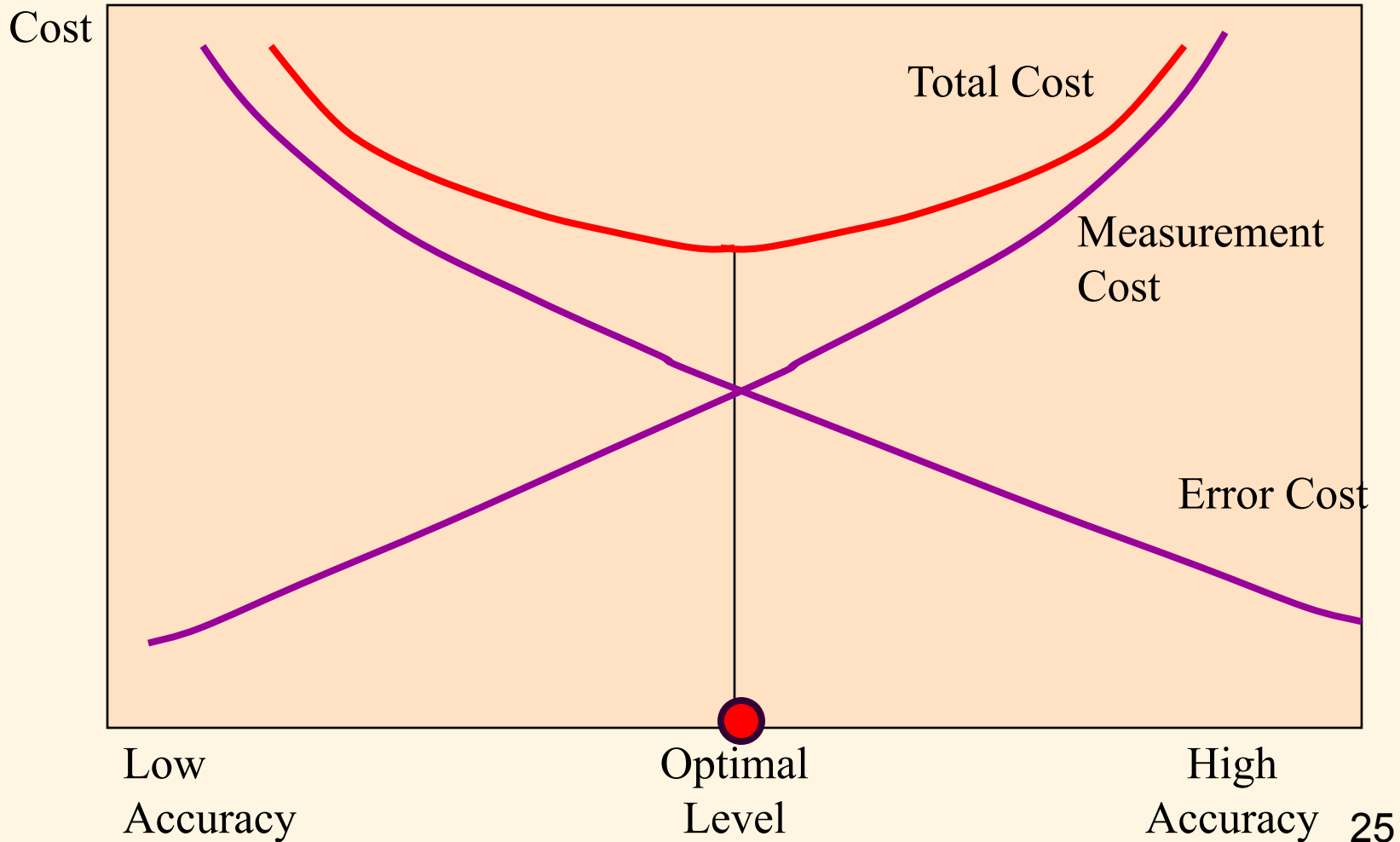
1. Unit-based drivers
2. Allocation-intensive
3. Narrow and rigid product costing
4. Focus on managing costs
5. Sparse activity information
6. Maximization of individual unit performance
7. Uses financial measures of performance

Activity-Based

1. Unit- and nonunit-based drivers
2. Tracing intensive
3. Broad, flexible product costing
4. Focus on managing activities
5. Detailed activity information
6. Systemwide performance maximization
7. Uses both financial and nonfinancial measures of performance

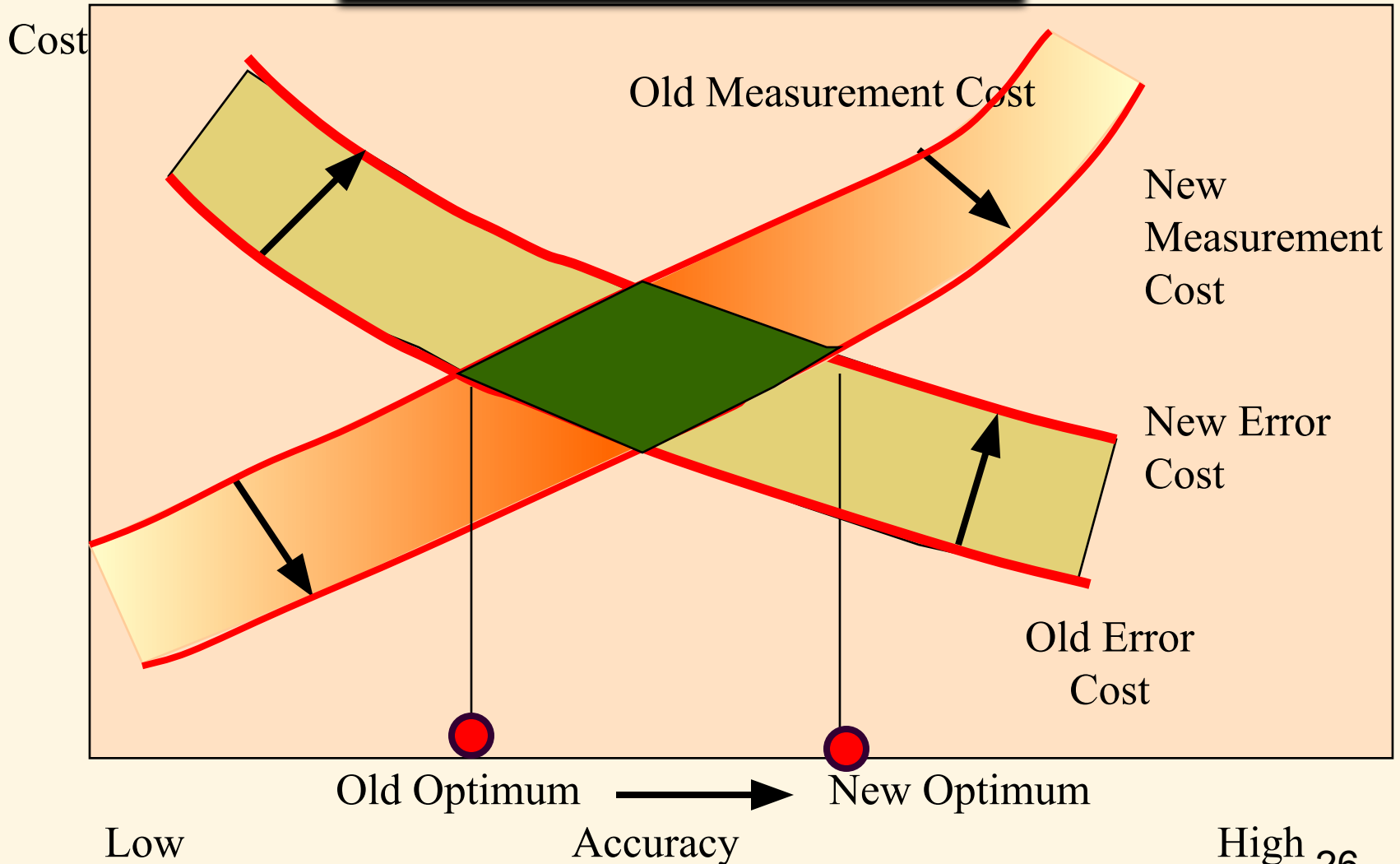
Functional-Based and Activity-Based Cost Management Systems


Trade-Off Between Measurement and Error Costs



Functional-Based and Activity-Based Cost Management Systems

Shifting Costs





End of Chapter 2