Managerial Accounting

MANAGERIAL ACCOUNTING
INTRODUCTION

INTRODUCTION

FIRST THINGS FIRST.

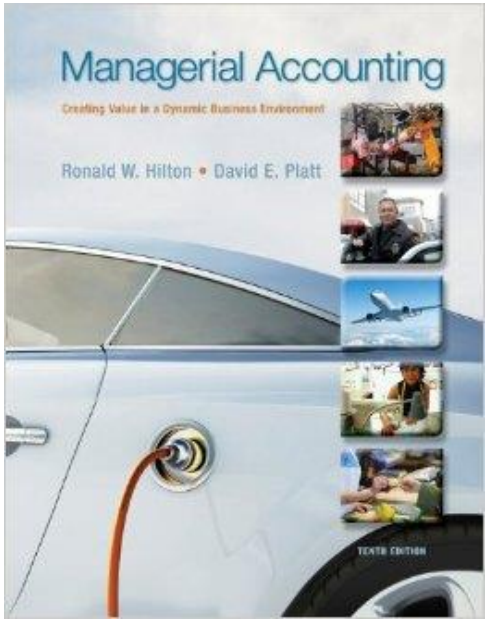
Studying Cost Accounting
is one of the best business investments
a student can make.

Horngren et al. 2015, p. 15

INTRODUCTION

REQUIRED TEXTBOOK

Ronald W. Hilton and David E. Platt, 10th edition



MANAGERIAL ACCOUNTING

- Modern didactic approach
- Easily understandable writing style
- Many real-world company examples
- Less technical details
- More managerial emphasis (decision-making)

INTRODUCTION

REQUIRED TEXTBOOK

- Printed versions in the library
- Your local or any on-line bookstore
- If you want to save money, you can also buy older editions on ebay or elsewhere – the content is sufficiently similar

INTRODUCTION

HELP SESSIONS

TUTORIALS

- 2 sessions per group
- Close to the exam (details to follow)
- Tutors have an excellent knowledge of the subject matter and will be a fruitful resource for you during the semester.

INTRODUCTION

CLASS GUIDELINES

- Lectures cover key points but possibly not everything you will be tested on
- Exercises & problems are key to your success (also the ones not discussed in class but suggested)
- Participation: be engaged, ask questions, offer answers
- Be prepared & on time
- Feel free to contact me in case of questions!

INTRODUCTION

COURSE TOPICS

Session	Topic	Hilton / Platt
1	The Changing Role of Managerial Accounting	Chapter 1
	Basic Cost Management Concepts	Chapter 2
2	Product / Job Costing	Chapter 3
	Transfer Pricing	Chapter 13
3	Cost-Volume-Profit Analysis	Chapter 7
	Inventory Costing (Absorption vs. Variable Costing)	Chapter 8
4	Decision-Making: Relevant Costs and Benefits	Chapter 14
	Responsibility Center, Performance Measures & Controls	(Chapter 12/13)
5	Activity-Based Costing	Chapter 5
6	Activity Analysis, Cost Behavior, and Cost Estimation	Chapter 6
	Budgets – Financial Planning and Analysis	Chapter 9
7	Standard Costing and Direct Cost Variances	Chapter 10
8	Signaling Effects of Incentives	
	Sustainability and Controlling	

INTRODUCTION

COURSE TOPICS

BUSINESS GAME WITH PROF. JÜRGEN STROHHECKER

- Introduction to Business Game
- Simulation Game

PRACTITIONER LECTURES (DETAILS TO FOLLOW)

- 17.09., 17:45h, Matthias Meier, Head of Digitalization Group Controlling, BMW
- 25.09., 17:45h, Nancy Ge, Head of Strategic Controlling, Covestro
- Practitioners lectures will be online and held in English
- Relevant for the exam

INTRODUCTION

GRADING

EXAM (ONLINE, CLOSED BOOK)

- Knowledge and transfer tasks
- As long as topics are not explicitly exclude everything that is covered in class is relevant for the exam
- Similar to the exercises and assignments covered in class

BUSINESS GAME

- Will be handled by Prof. Jürgen Strohhecker (j.strohhecker@fs.de)

Type of examination	Points
Exam	90
Business game	30
Total	**120**

INTRODUCTION

COURSE OVERVIEW

Session	Topic	Hilton / Platt
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CHAPTER 1

THE CHANGING ROLE OF MANAGERIAL ACCOUNTING IN A DYNAMIC BUSINESS ENVIRONMENT

ROLE OF MANAGERIAL ACCOUNTING

ABOUT INFORMATION …

Information is a source of learning. But unless it is organized, processed, and available to the right people in a format for decision making, it is a burden, not a benefit.

William Pollard

PICTUREQUOTES.com

ROLE OF MANAGERIAL ACCOUNTING

DEFINE MANAGERIAL ACCOUNTING!

MANAGERIAL ACCOUNTING IS THE PROCESS OF …

- Identifying
- Measuring
- Analyzing
- Interpreting
- Communicating

… INFORMATION.

ROLE OF MANAGERIAL ACCOUNTING

TYPES OF ORGANIZATIONS

- Manufacturers
- Retailers
- Service providers
- Agribusinesses
- Nonprofit firms

ROLE OF MANAGERIAL ACCOUNTING

DECISION-MAKING

- Think of some of the decisions for the Business School
- Should we add another section to this course?
- Should we admit more students?

ROLE OF MANAGERIAL ACCOUNTING

EXAMPLE

- The Dean's office is trying to decide whether to allow one more student into the Business School. Assume tuition is $12,000 per year. The costs are as follows:

Number of Students	Total Costs
200	$3,000,000
205	$3,030,000
210	$3,060,000
215	$3,090,000

- The current enrollment is 210 students.
- The cost per student is: $3,060,000/210 students = $14,571 per student.

What should the Dean do?

ROLE OF MANAGERIAL ACCOUNTING

SOLUTION

- What does that one extra student cost?

  ($3,090,000 - $3,060,000) / (215-210) = $6,000

- How much revenue does that student bring in?

  $12,000

- What other factors should the administration consider?

ROLE OF MANAGERIAL ACCOUNTING

INFORMATION & DECISION-MAKING

- **Managers** running a company / division / department engage in an organized set of activities to achieve the company's goals.

- Day-to-day work comprises four primary activities
  - Decision-making
  - Planning
  - Directing operational activities
  - Controlling

ROLE OF MANAGERIAL ACCOUNTING

HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

"By capitalizing on big data using business analytics tools, the role of the CFO is moving beyond optimizing the finance function to transforming the enterprise."
(Carlos Passi, IBM)

"Gut feeling has little impact on how decisions are made [at Google!]. In some meetings, people reportedly are not allowed to say 'I think…' but instead must say 'the data suggest….'"
(cited from Bauer & Erdogan)

ROLE OF MANAGERIAL ACCOUNTING

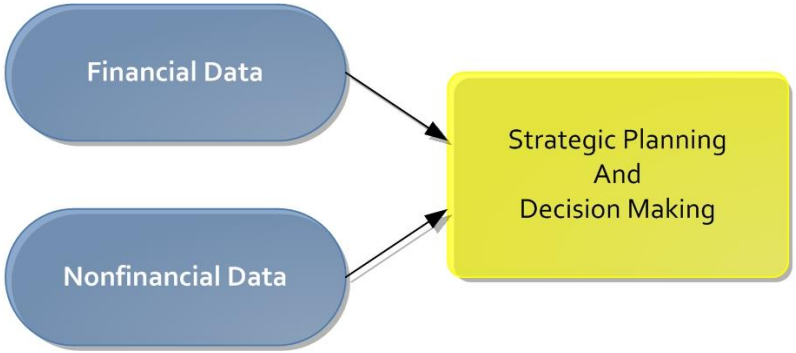
HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

1. Providing information for decision-making and planning.
2. Assisting managers in directing and controlling activities.
3. Motivating managers and other employees towards organization's goals.
4. Measuring performance of subunits, activities, managers, and other employees.
5. Assessing the organization's competitive position.

ROLE OF MANAGERIAL ACCOUNTING

HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

1. PROVIDING INFORMATION FOR DECISION MAKING AND PLANNING.



Example:

The decision to establish a new facility would be influenced by estimates of the costs of building and maintaining it. Managers also would rely on managerial accounting data in formulating plans for the facility's operations, e.g., budgets.

ROLE OF MANAGERIAL ACCOUNTING

HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

2. ASSISTING MANAGERS IN DIRECTING AND CONTROLLING ACTIVITIES.

Example:

If electricity costs in the new facility significantly exceed the budget, the data about this fact does not explain the reasons, but directs the manager's attention to the situation and helps framing the decision problem.

ROLE OF MANAGERIAL ACCOUNTING

HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

3. MOTIVATING MANAGERS AND OTHER EMPLOYEES TOWARDS ORGANIZATION'S GOALS.

- The goals of individuals are diverse and do not always match those of the firm.
- Motivation is achieved by communicating plans, measuring plan achievement, and prompting explanations for deviations.

Example: Employee empowerment
= the concept of encouraging and authorizing workers to improve operations, reduce costs, and improve product quality and customer service.

ROLE OF MANAGERIAL ACCOUNTING

HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

4. MEASURING PERFORMANCE OF SUBUNITS, ACTIVITIES, MANAGERS, AND OTHER EMPLOYEES.

Performance measurement can be used …

- … as the basis for rewarding performance
  (one means of motivating people)
- … to evaluate investments / product lines / markets / etc.

Example:
Most large corporations compensate their executives in part on the basis of the profits achieved by the subunits they manage.

ROLE OF MANAGERIAL ACCOUNTING

HOW MANAGERIAL ACCOUNTING BENEFITS AN ORGANIZATION

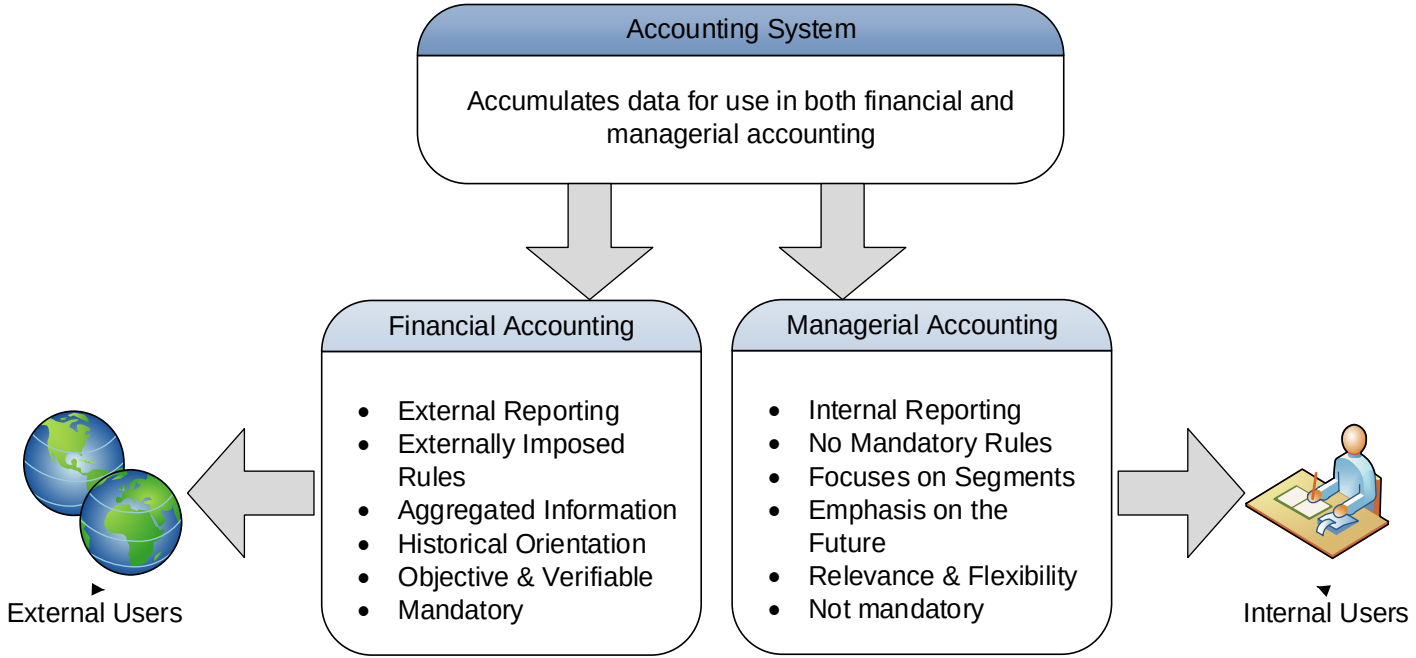
5. ASSESSING THE ORGANIZATION'S COMPETITIVE POSITION WITH RESPECT TO …

- internal operations and business processes
- its customers
- innovation, learning, and continuously improving operations
- financial performance

Example: Balanced Scorecard
= a model of business performance evaluation that balances measures of financial performance, internal operations, innovation / learning, and customer satisfaction.

ROLE OF MANAGERIAL ACCOUNTING

FINANCIAL VS. MANAGERIAL ACCOUNTING



ROLE OF MANAGERIAL ACCOUNTING

FINANCIAL VS. MANAGERIAL ACCOUNTING

INFORMATION TYPE

- Financial: financial measurements
- Managerial: financial & nonfinancial measurements on processes, technologies, suppliers, customers, and competitors

QUALITATIVE CHARACTERISTICS OF INFORMATION

- Financial: historical, regular, auditable, reliable
- Managerial: past-, present- & future-oriented, need-based intervals, not subject to audit, could be more subjective

BREADTH

- Financial: highly aggregated; report on entire organization
- Managerial: disaggregated; informs local decisions and actions

CHAPTER 2
BASIC COST MANAGEMENT CONCEPTS

BASIC COST MANAGEMENT CONCEPTS

CHAPTER 2

WHAT IS A COST?

MANUFACTURING COSTS

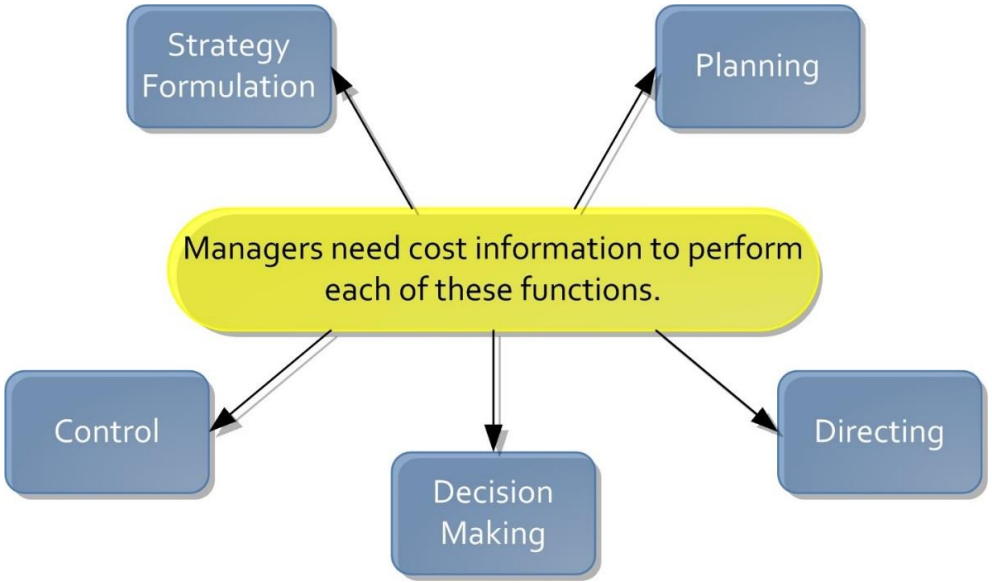
BASIC COST MANAGEMENT CONCEPTS AND COST CLASSIFICATIONS

COSTS AND DECISION MAKING

BASIC COST MANAGEMENT CONCEPTS

COSTS AND THE MANAGEMENT PROCESS

- A cost is the sacrifice made (resource given up) to achieve a particular purpose.



BASIC COST MANAGEMENT CONCEPTS

COSTS AND THE MANAGEMENT PROCESS

- A cost is the sacrifice made (resource given up) to achieve a particular purpose.

- You can have it cheaper, but it also comes with a cost!

BASIC COST MANAGEMENT CONCEPTS

COST TERMS

- An expense is the cost incurred when an asset is used up or sold for the purpose of generating revenue.

PRODUCT (INVENTORIABLE) COSTS

- the costs of goods manufactured or the cost of goods purchased for resale. These costs are inventoried (BS – balance sheet) until the goods are sold. Then they are expensed (IS – income statement) as costs of goods sold.

PERIOD COSTS

- all other non-product costs in an organization (e.g., selling and administrative) incurred during the relevant period. Such costs are not inventoried but are expensed as time passes.

BASIC COST MANAGEMENT CONCEPTS

TYPES OF PRODUCT COSTS

DIRECT COST

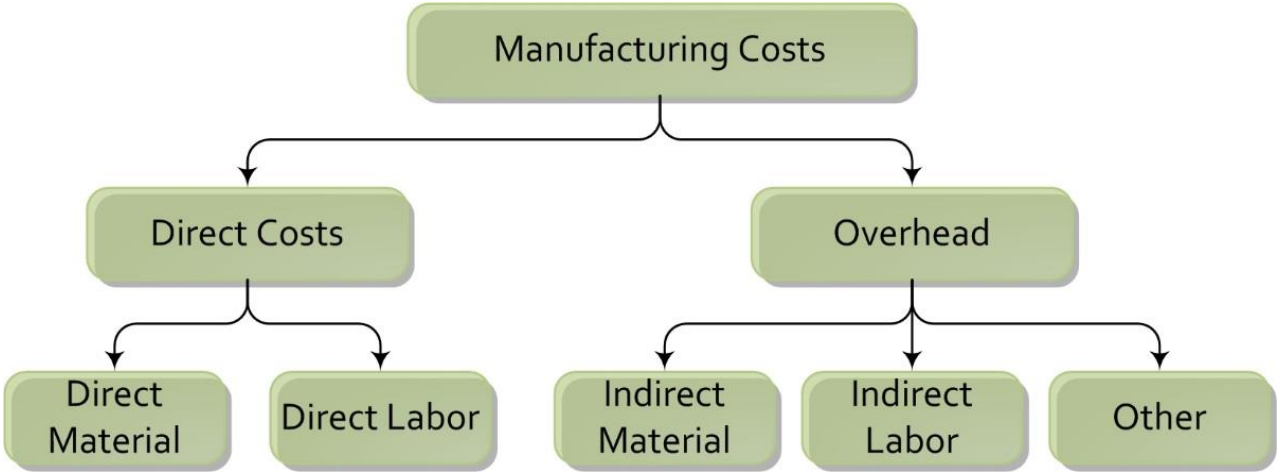
- A cost related to a particular product and can be traced to it in an economically feasible way

INDIRECT COST/OVERHEAD

- A cost related to a particular product but cannot be traced to it in an economically feasible way
- Costs that must be assigned/allocated to products

BASIC COST MANAGEMENT CONCEPTS

TYPES OF MANUFACTURING / PRODUCT COSTS



BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: DIRECT COSTS

DIRECT MATERIAL

- Raw material which is consumed in the manufacturing process and physically incorporated in the finished product
- Example: Steel used to manufacture an automobile

DIRECT LABOR

- Cost of salaries, wages, and fringe benefits for personnel who work directly on manufactured products
- Example: Wages paid to automobile assembly worker

ALL OTHER COSTS OF MANUFACTURING ARE CLASSIFIED AS OVERHEAD

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: INDIRECT COSTS (MANUFACTURING OH)

INDIRECT MATERIAL

- used to support the production process but not part of the finished product
- part of the finished product but insignificant in cost
- Example: work equipment that wears out (drill bits), glue

INDIRECT LABOR

- Personnel who do not work directly on the product, but whose services are necessary for the manufacturing process.
- Example: Maintenance workers, security guards, supervisors

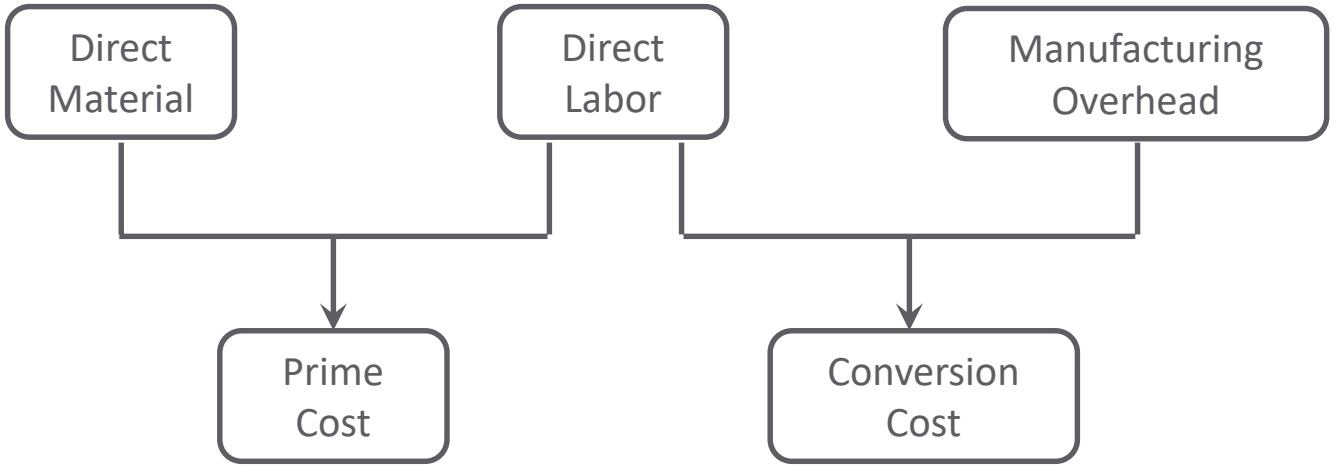
OTHER MANUFACTURING COSTS

- Other manufacturing costs not easily traceable to a finished good
- Example: insurance, depreciation, property taxes, cleaning supplies, overtime, idle time

BASIC COST MANAGEMENT CONCEPTS

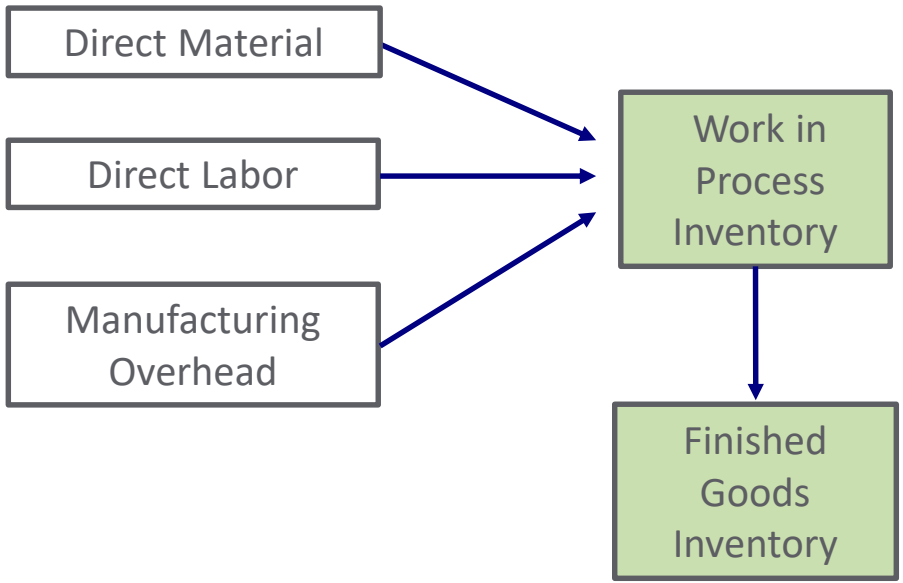
CLASSIFICATION OF MANUFACTURING COSTS

- Manufacturing/product costs are often also classified as follows:



BASIC COST MANAGEMENT CONCEPTS

MANUFACTURING COST FLOWS



BASIC COST MANAGEMENT CONCEPTS

SCHEDULE OF COST OF GOODS MANUFACTURED

Comet Computer Corporation Schedule of Cost of Goods Manufactured	
Raw material used	$ 134,980
Direct labor	50,000
Total manufacturing overhead	230,000
Total manufacturing costs	$ 414,980
Add: Work-in-process inventory, January 1	120
Subtotal	$ 415,100
Deduct: Work-in-process inventory, December 31	100
Cost of goods manufactured	$ 415,000

BASIC COST MANAGEMENT CONCEPTS

SCHEDULE OF COST OF GOODS MANUFACTURED

Comet Computer Corporation Schedule of Cost of Goods Manufactured	
Raw material used	$ 134,980
Direct labor	50,000
Total manufacturing overhead	230,000
	$ 414,980
anuary 1	120
	$ 415,100
y, December 31	100
	$ 415,000

Computation of Cost of Raw Material Used	
Raw-material inventory, January 1	$ 6,000
Add: Purchases of raw materials	134,000
Raw material available for use	140,000
Deduct: Raw material inventory, December 31	5,020
Raw material used	$134,980

BASIC COST MANAGEMENT CONCEPTS

SCHEDULE OF COST OF GOODS MANUFACTURED

Includes all direct labor costs incurred during the current period.

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Raw material used	$ 134,980
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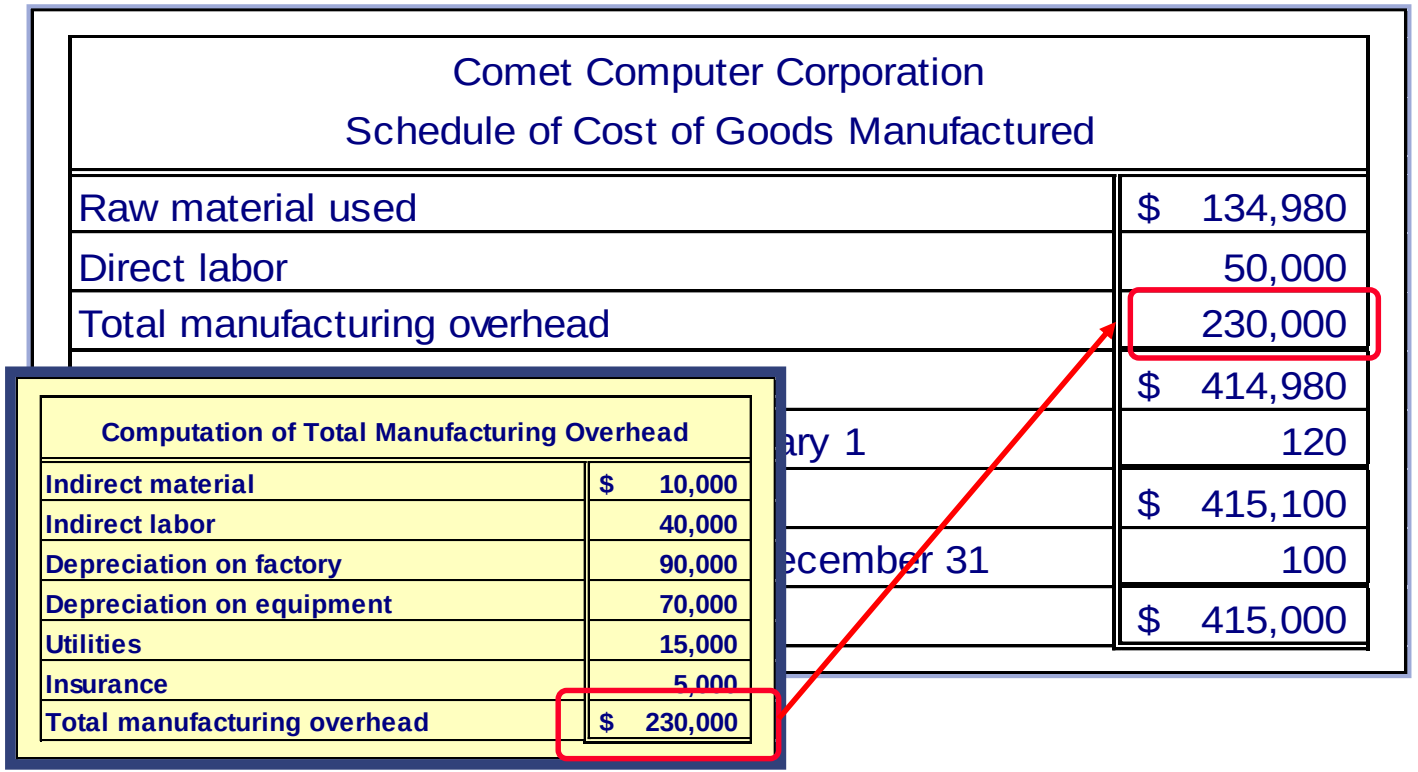
BASIC COST MANAGEMENT CONCEPTS

SCHEDULE OF COST OF GOODS MANUFACTURED



BASIC COST MANAGEMENT CONCEPTS

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Add: Work-in-process inventory, January 1	120
Subtotal	$ 415,100
Deduct: Work-in-process inventory, December 31	100
Cost of goods manufactured	$ 415,000

Beginning work-in-process inventory is carried over from the prior period.

BASIC COST MANAGEMENT CONCEPTS

SCHEDULE OF COST OF GOODS MANUFACTURED

Comet Computer Corporation Schedule of Cost of Goods Manufactured		
Raw material used		$ 134,980
Direct labor		50,000
		230,000
		$ 414,980
	1	120
		$ 415,100
Deduct: Work-in-process inventory, December 31		100
Cost of goods manufactured		$ 415,000

Ending work-in-process inventory contains the cost of unfinished goods, and is reported in the current assets section of the balance sheet.

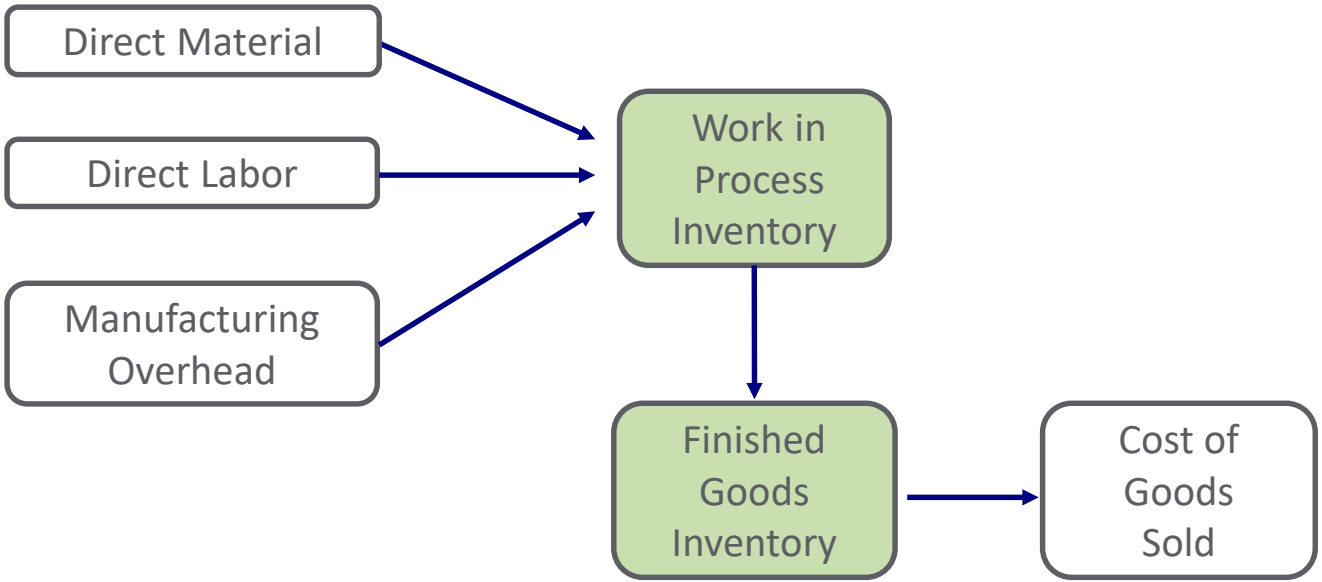
BASIC COST MANAGEMENT CONCEPTS

COST OF GOODS MANUFACTURED (COGM)

COGM = Beginning Inventory Work in Process + Direct Material Used + Direct Labor + Total Manufacturing Overhead - Ending Inventory Work in Process

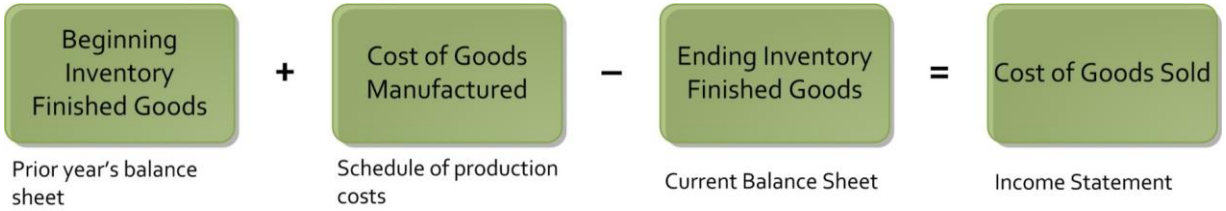
BASIC COST MANAGEMENT CONCEPTS

MANUFACTURING COST FLOWS



BASIC COST MANAGEMENT CONCEPTS

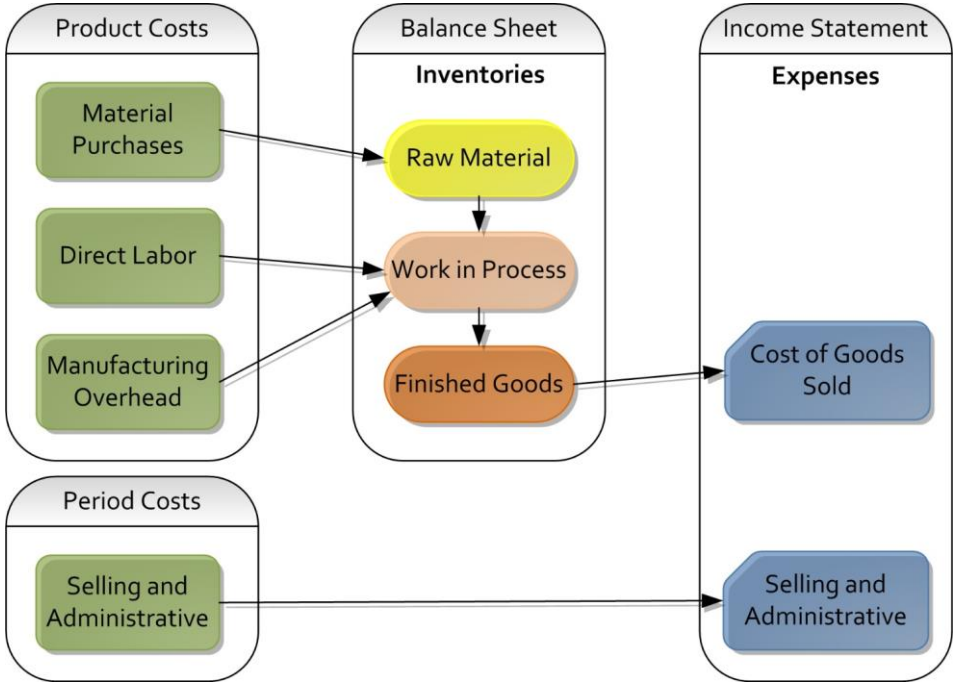
COST OF GOODS SOLD (COGS)



Comet Computer Corporation Schedule of Cost of Goods Sold For the Year Ended December 31, 20X2	
Finished-goods inventory, Jan. 1	$ 200
Add: Cost of goods manufactured	415,000
Cost of goods available for sale	415,200
Deduct Finished-goods inventory, Dec. 31	190
Cost of goods sold	$ 415,010

BASIC COST MANAGEMENT CONCEPTS

MANUFACTURING COST FLOWS



BASIC COST MANAGEMENT CONCEPTS

EXAMPLE

Consolidated Financial Statements

Bayer Group Consolidated Income Statements

	2015	2016
	€ million	€ million
Net sales	**46,085**	**46,769**
Cost of goods sold	(21,040)	(20,295)
Gross profit	**25,045**	**26,474**
Selling expenses	(12,272)	(12,474)
Research and development expenses	(4,274)	(4,666)
General administration expenses	(2,092)	(2,256)
Other operating income	1,109	898
Other operating expenses	(1,275)	(934)
EBIT[1]	**6,241**	**7,042**
Financial result	**(1,005)**	**(1,155)**
Income before income taxes	**5,236**	**5,887**
Income taxes	(1,223)	(1,329)
Income from continuing operations after income taxes	**4,013**	**4,558**
Income from discontinued operations after income taxes	**85**	**268**
Income after income taxes	**4,098**	**4,826**

Source: http://www.annualreport2016.bayer.com/financial-statements/bayer-group-consolidated-income-statements.html

BASIC COST MANAGEMENT CONCEPTS

E2-25 – FILL OUT THE BLANKS

	Case 1	Case 2	Case 3
Beginning inventory of FG	?	$ 18,000	$ 3,500
Cost of goods manufactured	$104,750	$ 142,500	?
Ending inventory of FG	$ 24,500	$ 12,000	$ 10,500
Cost of goods sold	$ 101,250	?	$ 152,000

BASIC COST MANAGEMENT CONCEPTS

- One of the most important cost classifications is the way in which costs change in relation to changes in organizational activities.

COST DRIVERS

VARIABLE AND FIXED COSTS

CONTROLLABLE AND UNCONTROLLABLE COSTS

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: COST DRIVERS

COST DRIVER

- A cost driver is a characteristic of an activity or event that causes costs to be incurred.

- Understanding cost drivers helps us understand how costs are generated and where the best control points may be.
- Identifying cost drivers is critical: Correlation between cost and driver is key – the higher the better.
- Cost-benefit trade-off: accuracy vs. cost of identifying & measuring cost drivers.

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: EXAMPLES OF COST DRIVERS

Activity	Cost Driver
Machine Maintenance	Machine hours
Machine Setup	# of production runs
Inspection	Pieces inspected
Purchasing	Purchase orders

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: VARIABLE / FIXED

YOUR MONTHLY TELEPHONE BILL

- National calls ($20 / month): Fixed or variable?
- International calls (5 cents / minute): Fixed or variable?

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: VARIABLE / FIXED

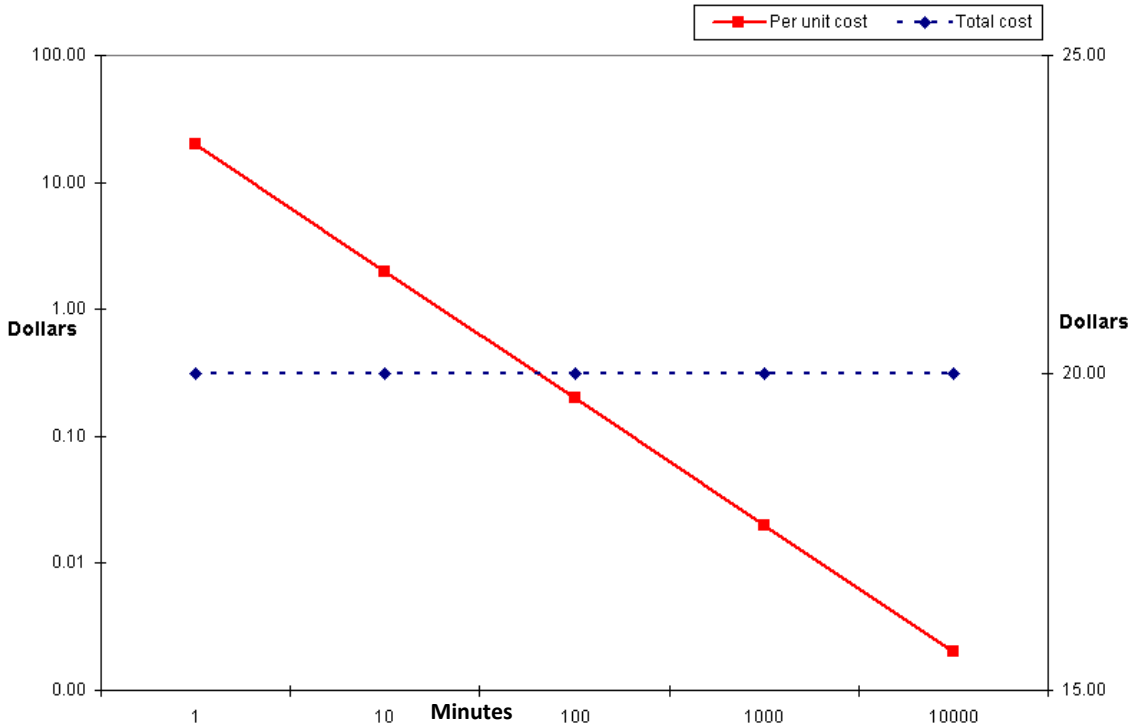
NATIONAL CALLS

National call minutes	Total monthly bill	Rate per minute
1	$20.00	$20.00
10	$20.00	$2.00
100	$20.00	$.20
1,000	$20.00	$.02
10,000	$20.00	Tiny

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: VARIABLE / FIXED

NATIONAL CALLS



BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: VARIABLE / FIXED

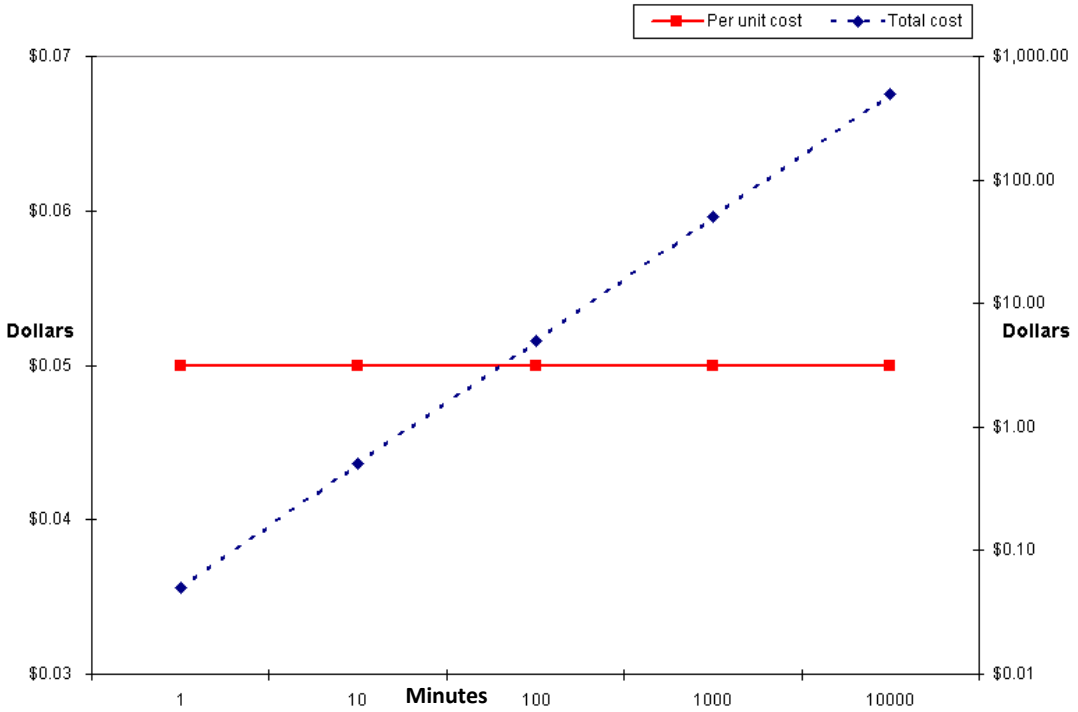
INTERNATIONAL CALLS

Long distance minutes	Rate per minute	Total monthly bill
1	$.05	$.05
10	$.05	$.50
100	$.05	$5.00
1,000	$.05	$50.00
10,000	$.05	$500.00

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: VARIABLE / FIXED

INTERNATIONAL CALLS



COST CLASSIFICATIONS: VARIABLE / FIXED

SUMMARY OF VARIABLE & FIXED COST BEHAVIOUR

Cost	in total	per unit
Variable	Total variable cost changes as activity level changes.	Variable cost per unit remains the same over wide ranges of activity.
Fixed	Total fixed cost remains constant when the activity level changes.	Fixed cost per unit decreases as activity level increases.

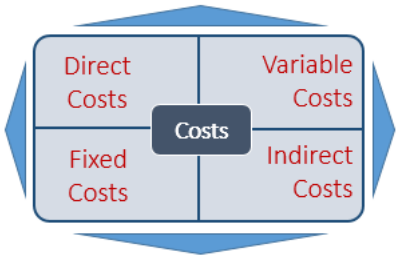
BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS: VARIABLE / FIXED

Are “direct costs = variable costs” and are “indirect = fixed costs”?

Variable & direct:
e.g., iPhone components
- *Direct:* we know which screen an iPhone needs and what it costs
- *Variable:* making one more iPhone requires one more screen

Direct & fixed:
e.g., Supervisor production of Samsung Galaxy S
- *Direct:* production of Galaxy S, not of Galaxy Note
- *Fixed:* spending is pre-committed, doesn’t change with # phones



Variable & indirect:
e.g., machine power of plant that makes several car types
- *Indirect:* electricity costs are metered to plant, not to product line
- *Variable:* producing one car less leads to less power usage

Fixed & indirect:
e.g., insurance of plant for Samsung production
- *Fixed:* insurance spending is pre-committed, doesn’t change with # phones
- *Indirect:* Insurance benefits several Samsung models

BASIC COST MANAGEMENT CONCEPTS

E2-24 COST TYPES (PRODUCT/PERIOD, DM/DL/OH, VARIABLE/FIXED)

DETERMINE THE COST TYPE!

- Advertising costs of Nike
- Straight line depreciation on factory equipment of Airbus
- Wages of assembly line personnel
- Delivery costs on customer shipments of ice cream
- Newsprint consumed in printing newspapers
- Production plant insurance costs
- Glass cost in production of light bulbs
- Tire costs by car company
- Sales commissions to own salespeople
- Glue used in manufacturing of furniture
- Hourly wages of security guards at refinery
- Salary of the VP of finance

BASIC COST MANAGEMENT CONCEPTS

COST CLASSIFICATIONS

CONTROLLABLE AND UNCONTROLLABLE COSTS

- A cost that can be significantly influenced by a manager is a controllable cost.

WHAT ABOUT …

- Cost of national advertising for a manager at a McDonald's restaurant?
- Cost of a consulting project for a manager at a consulting firm?

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

OPPORTUNITY COSTS

OUT-OF-POCKET COSTS

SUNK COSTS

DIFFERENTIAL COSTS

MARGINAL COSTS

AVERAGE COSTS

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

OPPORTUNITY COSTS

- The potential benefit that is given up when one alternative is selected over another.
  - Taking an extra table waiting shift vs. renovating the apartment
  - Going to the movies vs. learning for the exam

OUT-OF-POCKET COSTS

- A cost that requires a cash outlay
  - Upfront advertising costs
  - Costs associated with a special order

Equivalent from an economic perspective

COSTS AND DECISION-MAKING

OPPORTUNITY AND OUT-OF-POCKET COSTS

- A firm producing basketballs receives a special order for footballs. Due to capacity constraints, accepting the special order implies that less basketballs will be produced.

Special Order Footballs	
Revenue	10,000
Costs	8,000
Profit	2,000

Out-of-pocket costs

Foregone Profit Basketballs	
Revenue	10,000
Costs	7,500
Profit	2,500

Opportunity costs

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

OPPORTUNITY AND OUT-OF-POCKET COSTS

- Both costs need to be considered in the decision to accept or reject the special order:

$$\$10{,}000 - 8{,}000 - 2{,}500 = -\,500$$

Special Order Footballs	
Revenue	10,000
Costs	8,000
Profit	2,000

Out-of-pocket costs

Foregone Profit Basketballs	
Revenue	10,000
Costs	7,500
Profit	2,500

Opportunity costs

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

OPPORTUNITY AND OUT-OF-POCKET COSTS

- In making decisions which involve alternatives, you …
  - … must know your out-of-pocket costs for each alternative
  - … must know your opportunity costs for each alternative
  - … need to combine the two to make a fully informed decision

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

SUNK COSTS

- All costs incurred in the past that cannot be changed by any decision made now or in the future.
- Sunk costs should not be considered in decisions.
  - Purchased equipment for $50,000
  - Change in production process which does not use machine any longer

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

DIFFERENTIAL COSTS

- The net difference in cost between two alternative courses of action.

- Example: You can earn $1,500 per month in your hometown or $2,000 per month in a nearby city. Your commuting costs are $50 per month in your hometown and $300 per month to the city.

What is your differential cost?

$300 - $50 = $250

BASIC COST MANAGEMENT CONCEPTS

COSTS AND DECISION-MAKING

MARGINAL COST

- The additional cost needed to produce an additional product – not simply variable costs
- 100 units: $200; 101 units: $205
- Marginal cost: $5 (increase entails variable costs and potentially new fixed costs, marginal costs typically differ across different ranges of production quantities)

AVERAGE COST

- Cost per unit: Total cost divided by total units

BASIC COST MANAGEMENT CONCEPTS

COSTS AND BENEFITS

- (Managerial) Accountants' task is to weigh the benefits of providing information against the costs of generating, communicating, and using that information.
- The goal is to use information effectively and avoid information overload.

BASIC COST MANAGEMENT CONCEPTS

CLASSIFY THE COST!

1. The management of a high-rise office building uses 3,000 square feet of space in the building for its own administrative functions. This space could be rented for $30,000. What economic term describes this $30,000 of lost rental revenue?
2. The cost of building an automated assembly line in a factory is $700,000; a manually operated assembly line would cost $450,000. What economic term is used to describe the $250,000 difference between these two amounts?
3. What economic term is used to describe the $700,000 cost of building the assembly line?

BASIC COST MANAGEMENT CONCEPTS

CLASSIFY THE COST!

4. The costs of producing one more unit of a product.
5. The cost of feeding 300 children in a public school cafeteria is $450 per day, or $1.50 per child per day. What economic term describes this $1.50 cost?
6. The cost of including one extra child in a day-care center.
7. The cost of merchandise inventory purchased five years ago. The goods are now obsolete.

BASIC COST MANAGEMENT CONCEPTS

P2-28

Alhambra Aluminum Company, a manufacturer of recyclable soda cans, had the following inventory balances at the beginning and end of 20x1.

Inventory Classification	January 1, 20x1	December 31, 20x1
Raw material	$ 55,000	$ 75,000
Work in process	110,000	125,000
Finished goods	160,000	155,000

During 20x1, the company purchased $240,000 of raw material and spent $420,000 for direct labor.

Manufacturing overhead costs were as follows:

Indirect material	$ 12,000
Indirect labor	22,000
Depreciation on plant and equipment	110,000
Utilities	23,000
Other	35,000

Sales revenue was $1,210,000 for the year. Selling and administrative expenses for the year amounted to $105,000. The firm's tax rate is 35 percent.

BASIC COST MANAGEMENT CONCEPTS

P2-28

1. Prepare a schedule of cost of goods manufactured.

2. Prepare a schedule of cost of goods sold.

3. Prepare an income statement.

BASIC COST MANAGEMENT CONCEPTS

P2-37

The following cost data for the year just ended pertain to Heartstrings, Inc., a greeting card manufacturer:

Service department costs *	$ 50,000
Direct labor: wages	242,500
Direct labor: fringe benefits	47,500
Indirect labor: fringe benefits	15,000
Fringe benefits for production supervisor	4,500
Total overtime premiums paid	27,500
Cost of idle time: production employees §	20,000
Administrative costs	75,000
Rental of office space for sales personnel †	7,500
Sales commissions	2,500
Product promotion costs	5,000
Direct material used	1,050,000
Advertising expense	49,500
Depreciation on factory building	57,500
Cost of finished-goods inventory at year-end	57,500
Indirect labor: wages	70,000
Production supervisor's salary	22,500

*All services are provided to manufacturing departments.

§ Cost of idle item is an overhead item; it is not included in direct-labor wages given above.

† The rental of sales space was made necessary when the sales offices were converted to storage space for raw material.

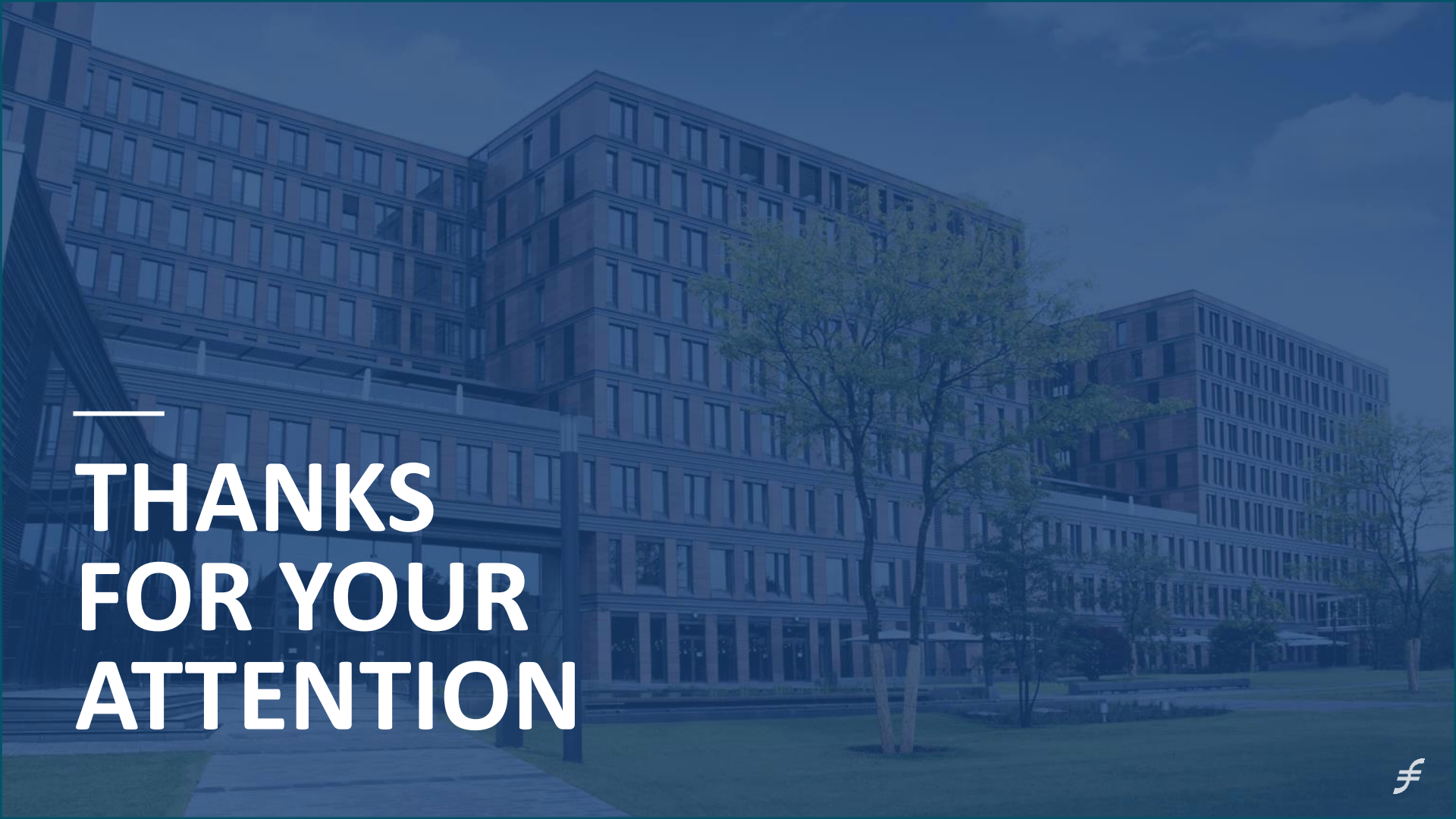
BASIC COST MANAGEMENT CONCEPTS

P2-37

1. Compute each of the following costs for the year just ended:

(*a*) total product costs, and

(*b*) total period costs.


THANKS
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