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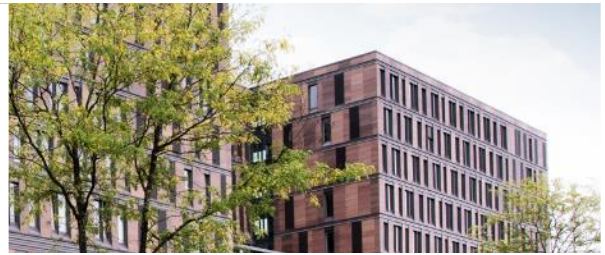
Timo Vogelsang

MANAGERIAL ACCOUNTING (WINTER 2023)



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SESSION 1

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

E2-25 – FILL OUT THE BLANKS

	Case 1	Case 2	Case 3
Beginning inventory of FG	**21.000**	$ 18,000	$ 3,500
Cost of goods manufactured	$104,750	$ 142,500	**159.000**
Ending inventory of FG	$ 24,500	$ 12,000	$ 10,500
Cost of goods sold	$ 101,250	**148.500**	$ 152,000

EXERCISE 2-24

- Advertising costs: Period cost, fixed
- Straight-line depreciation: Product cost, fixed, manufacturing overhead
- Wages of assembly-line personnel: Product cost, variable, direct labor
- Delivery costs on customer shipments: Period cost, variable
- Newsprint consumed: Product cost, variable, direct material
- Plant insurance: Product cost, fixed, manufacturing overhead
- Glass costs: Product cost, variable, direct material
- Tire costs: Product cost, variable, direct material
- Sales commissions: Period cost, variable
- Wood glue: Product cost, variable, either direct material or manufacturing overhead (i.e., indirect material) depending on how significant the cost is
- Wages of security guards: Product cost, variable, manufacturing overhead
- Salary of financial vice-president: Period cost, fixed

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?

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.

CLASSIFY THE COST!

1. Opportunity costs
2. Differential costs
3. Out-of-Pocket costs
4. Marginal costs
5. Average costs
6. Marginal costs
7. Sunk costs

SESSION 2

E3-23: JOB ORDER OR PROCESS COSTING SYSTEM?

1. Manufacturing of household cleaning solutions
2. Manufacturing of custom hot tubs and spas
3. Architectural firm
4. Manufacturing of ceramic tiles
5. Producer of yogurt
6. Manufacturing of custom backyard tool sheds
7. Manufacturing of paper clips
8. Engineering consulting firm
9. Manufacturing of balloons
10. Manufacturing of custom sailboats

E3-23: JOB ORDER OR PROCESS COSTING SYSTEM?

1. Process
2. Job
3. Job
4. Process
5. Process
6. Job
7. Process
8. Job
9. Process
10. Job

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P3-54

- Biloxi Billiards Company uses normal costing. Manufacturing OH is applied based on machine hours.

  Total budgeted manufacturing overhead: $306,000

  Total budgeted machine hours: 51,000 h

- During January, the firm began production jobs.

  M07: 1,200 machine hours T28: 3,000 machine hours B19: 1,800 machine hours

- There is no beginning inventory for WIP. Actual manufacturing OH incurred in January: $38,000.

1. POHR?
2. OH applied in January?
3. Over- or underapplied?
4. Close into COGS

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P3-54

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1. 306.000/51.000 = $6/h
2. 6.000h * $6/h = $36,000
3. $2.000 underapplied

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E3-33

- Aquarius Hotel Supply Co. for year ended:

Budgeted sales revenue	$945,000
Budgeted mfg. O/H	$650,000
Budgeted mach. Hours	20,000
Budgeted DL hours	25,000
Budgeted DL rate per hour	$13
Actual mfg. O/H	$690,000
Actual machine hours	22,000
Actual DL hours	26,000
Actual DL rate per hour	$14

$ 350,000 supervisor salaries
$ 200,000 machine depreciation
$ 100,000 factory cleaning

1. Compute POHR using machine hours, DL hours, DL dollars.
2. Compute over/underapplied OH for each cost driver.
3. Generally, what is the cause of over-/underapplied overhead?

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E3-33

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  - Budgeted mach. Hours 20,000
  - Budgeted DL hours 25,000
  - Budgeted DL rate per hour $13
  - Actual mfg. O/H $690,000
  - Actual machine hours 22,000
  - Actual DL hours 26,000
  - Actual DL rate per hour $14

$ 350,000 supervisor salaries
$ 200,000 machine depreciation
$ 100,000 factory cleaning

1. Machine hours: 650.000 $ / 20.000 h = 32,50 $ / h

   DL hours: 650.000 $ / 25.000 h = 26,00 $ / h

   DL dollars: 650.000 $ / (25.000 h * 13 $ / h) = 2,00 $ / h

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E3-33

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  - Actual mfg. O/H $690,000
  - Actual machine hours 22,000
  - Actual DL hours 26,000
  - Actual DL rate per hour $14

$ 350,000 supervisor salaries
$ 200,000 machine depreciation
$ 100,000 factory cleaning

2. Machine hours: 690.000 $ - 715.000 $ = -25.000 $ (overapplied)

   DL hours: : 690.000 $ - 676.000 $ = 14.000 $ (underapplied)

   DL dollars: 690.000 $ - 728.000 $ = -38.000 $ (overapplied)

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P2-44

- The following taken from 20X1 accounting records of Surgical Products:

Raw material purchases	$ 350,000
Direct labor	$ 508,000
Indirect labor	$ 218,000
Selling and admin salaries	$ 266,000
Building depreciation	$ 160,000
Other selling and admin expenses	$ 380,000
Other factory costs	$ 688,000
Sales revenue ($260/unit)	$ 2,990,000

- 75% of building used in production, 25% in sales

1. What was total manufacturing overhead in the year?

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P2-44

1. What was total manufacturing overhead in the year?

– Indirect labor	$ 218,000
– Building deprec (75%)	120,000
– Other factory costs	688,000
– Total	$1,026,000

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P2-44 PARTS 2 - 3

- Additional information regarding inventory:

	Jan. 1	Dec. 31
Raw materials	$ 31,600	$ 36,400
WIP	$ 71,400	$124,200
Finished goods	$222,200	$195,800

Beg. and end inventory of finished goods in units is 1,350 and 1,190, respectively.

2. What is COGM?
3. What is COGS?
4. Net income assuming 40% tax rate?
5. Number of completed units in the year?

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P2-44 PART 2 SOLUTION

Direct material:		
Raw-material inventory, Jan. 1……	$ 31,600	
Add: Purchases of raw material……..	350,000	
Raw material available for use……..	$381,600	
Deduct: Raw-material inventory, Dec. 31….	36,400	
Raw material used……..		$ 345,200

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P2-44 PART 2 SOLUTION

Direct material:		
Raw-material inventory, Jan. 1……	$ 31,600	
Add: Purchases of raw material……..	350,000	
Raw material available for use……..	$381,600	
Deduct: Raw-material inventory, Dec. 31….	36,400	
Raw material used……..		$ 345,200
Direct labor……..		508,000
Manufacturing overhead……..		1,026,000
Total manufacturing costs……..		$1,879,200
Add: Work-in-process inventory, Jan. 1…….		71,400
Subtotal……..		$1,950,600
Deduct: Work-in-process inventory, Dec. 31….		124,200
Cost of goods manufactured……..		$1,826,400

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P2-44 PART 3 SOLUTION

Finished-goods inventory, Jan. 1……..	$ 222,200
Add: Cost of goods manufactured……	1,826,400
Cost of goods available for sale…….	$2,048,600
Deduct: Finished-goods inventory, Dec. 31…	195,800
Cost of goods sold……..	$1,852,800

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P2-44 PART 4 SOLUTION

Sales revenue……..		$2,990,000
Less: Cost of goods sold…….		1,852,800
Gross margin……....		$1,137,200
Selling and administrative expenses:		
Salaries……....	$266,000	
Building depreciation ($160,000 x 25%)…...	40,000	
Other……	380,000	686,000
Income before taxes……..		$ 451,200
Income tax expense ($451,200 x 40%)…….		180,480
Net income……....		$ 270,720

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P2-44 PART 5 SOLUTION

- Number of units sold (sales / unit sales price) = $2,990,000 / $260 = 11,500 units
- We know finished goods ending inventory went down by 160 units (1,350 to 1,190), therefore, production was 160 units less than sold → 11,340 units.

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P3-48

Golden State Enterprises provides consulting services and uses a job-order costing system to accumulate the costs of client projects.

- Traceable costs: charged directly to clients
- Other costs charged to client via POHR
- Clients are billed for directly traceable costs, OH + Markup

P3-48

- The following costs are anticipated for the upcoming year:

	Total Cost	Percent Traceable	Traceable Cost
Professional staff salaries	$3,750,000	80%	$3,000,000
Administrative support staff	450,000	60%	270,000
Photocopying	75,000	90%	67,500
Travel	375,000	90%	337,500
Other operating costs	150,000	50%	75,000
Total	$4,800,000		$3,750,000

- Target Profit of the firm: $ 960,000

P3-48

QUESTIONS

1. Determine total anticipated overhead costs
2. Calculate POHR based on traceable costs
3. What percentage of costs will be added to achieve the profit target?

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P3-48

1. total anticipated overhead costs: 4,8 Mio. – 3,75 Mio. = 1,05 Mio.
2. 1.050.000/3.750.000 = 28%
3. 960.000/4.800.000=20%