CHAPTER 13

Performance evaluation for managers

CONTENTS

ADDITIONAL PROBLEMS

Problem 13.1 Departmental accounting

Sandbagger Sporting Goods Store operates two departments – Golf Equipment and Tennis Equipment. The following information was obtained from the store's accounting records for year ended 31 July 2003:

	Golf equipment	Tennis equipment
Inventory, 1 August 2002	$120 000	$ 90 000
Inventory, 31 July 2003	105 000	82 000
Net sales	960 000	740 000
Purchases	568 200	367 200
Purchases returns	8 400	6 100
Freight inwards	1 200	900
Direct operating expenses	180 000	225 000

The store's indirect operating expenses are $138 000 per year.

Required:

A. Prepare a departmental statement of financial performance showing the departmental gross profit for each department and the store's net profit for the year.
B. Calculate the gross profit percentage for each department.
C. Prepare a departmental statement of financial performance that shows the net profit of each department after the indirect operating expenses are allocated on the basis of the space occupied. The store's floor space is occupied as follows:

Golf Equipment Department	576 m^2
Tennis Equipment Department	384 m^2

Solution

SANDBAGGER SPORTING GOODS STORE

A.

Statement of Financial Performance
(Departmental Gross Profit Format)
for the year ended 31 July 2003

	Golf Equipment	Tennis Equipment	Combined Departments
Sales revenue			
Net sales revenue	$960 000	$740 000	$1 700 000
Cost of goods sold			
Beginning inventory	120 000	90 000	210 000
Net purchases	559 800	361 100	920 900
Freight inwards	1 200	900	2 100
Goods available for sale	681 000	452 000	1 133 000
Ending inventory	105 000	82 000	187 000
Cost of goods sold	576 000	370 000	946 000
Gross profit	$384 000	$370 000	$754 000
Operating expenses			
Direct operating expenses			405 000
Indirect operating expenses			138 000
			543 000
Net profit			$211 000

B.

Departmental gross profit percentage	
golf 384/960	40%
Tennis 370/740	50%

C.

Statement of Financial Performance
(Departmental Net Profit Format)
for the year ended 31 July 2003

	Golf Equipment	Tennis Equipment	Combined Departments
Sales revenue			
Net sales revenue	$960 000	$740 000	$1 700 000
Cost of goods sold (A)	576 000	370 000	946 000
Gross profit	384 000	370 000	754 000
Operating expenses			
Direct operating expenses	180 000	225 000	405 000
Indirect operating expenses			
Golf 576/960 (138 000)	82 800		
Tennis 384/960 (138 000)		55 200	138 000
	262 800	280 200	543 000
Operating profit (loss)	$121 200	$89 800	$211 000

Problem 13.2 Indirect expense allocation

Darden's Department Store operates three departments – Whitegoods, Furniture, and Computers. To prepare a departmental statement of financial performance, the store's accountant allocates indirect operating expenses using the following allocation bases:

Indirect expense	Allocation base	Total amount
Rent	Relative value of floor space	$11 520
Personnel department	Number of employees	17 280
Insurance	Value of inventory	8 040
Light and power	Square metres	4 600

The accountant obtained the following data for the three departments:

	Whitegoods	Furniture	Computers
Floor space (m^2)	72	168	96
Number of employees	15	10	15
Value of inventory	$24 000	$30 000	$12 000

The Furniture Department is located on the ground floor and the other two departments are on the first floor. It is assumed that the ground floor is three times as valuable as the first floor for the purposes of the allocation of the rent expense.

Required:
Prepare a schedule allocating the indirect operating expenses to the three departments.

Solution

DARDEN'S DEPARTMENT STORE
Departmental Indirect Expense Allocation Worksheet

			Departments			
Indirect expense	Amount	Allocation base	White goods	Furniture	Computers	Total
Rent	$11 520	Relative value floor space	$1 234	$8 640	$1 646	$11 520
Personnel department	17 280	Number of employees	6 480	4 320	6 480	17 280
Insurance	8 040	Value of inventory	2 924	3 654	1 462	8 040
Light and power	4 600	Floor space (m^2)	986	2 300	1 314	4 600
	$41 440		$11 624	$18 914	$10 902	$41 440

Calculations formulae:
(All calculations rounded to nearest dollar):

Rent	72/672	504/672	96/672
Personnel department	15/40	10/40	15/40
Insurance	24/66	30/66	12/66
Light and power	72/336	168/336	96/336

Problem 13.3 Statement of financial performance with departmental contributions

Young World Emporium Ltd operates two departments – a Children's Clothing Department and a Toy Department. The company's accountant has prepared the following statement of financial performance for the year ending 31 May 2002.

YOUNG WORLD EMPORIUM LTD
Statement of Financial Performance
for the year ended 31 May 2002

Sales		$852 000
Cost of goods sold:		
Beginning inventory	$ 84 000	
Purchases	488 000	
Goods available for sale	572 000	
Ending inventory	73 600	
Cost of goods sold		498 400
GROSS PROFIT		353 600
Operating expenses:		
Salaries	100 000	
Insurance	34 400	
Advertising	36 000	
Depreciation	13 600	
Supplies	20 800	
Interest	28 800	
Total operating expenses		233 600
NET PROFIT		$120 000

The beginning inventory of the Children's Clothing Department was $34 400, and the ending inventory was $30 400. The beginning inventory for the Toy Department was $49 600, and the ending inventory was $43 200.

The company's records indicate that the following percentages of each expense or revenue are directly chargeable to the departments. Any balance left in an expense account is an indirect expense.

Item	Children's Clothing Department (%)	Toy Department (%)
Sales revenue	45	55
Salaries	21	34
Insurance	26	36
Advertising	32	43
Depreciation	23	19
Supplies	33	35
Purchases	47	53

Required:
Prepare a departmental statement of financial performance for the year ended 31 May 2002, showing the departmental contribution for each department.

Solution

YOUNG WORLD EMPORIUM LTD
Departmental Statement of Financial Performance
For the year ended 31 May 2002
(Departmental Contribution Format)

		Children's Clothing Department		Toy Department	Total
Net sales revenue	(45%)	$383 400	(55%)	$468 600	$852 000
Less: Cost of goods sold					
Beginning inventory		34 400		49 600	84 000
Purchases	(47%)	229 360	(53%)	258 640	488 000
Goods available for sale		263 760		308 240	572 000
Ending inventory		30 400		43 200	73 600
Cost of goods sold		233 360		65 040	498 400
Gross profit		150 040		203 560	353 600
Direct operating expenses					
Salaries	(21%)	21 000	(34%)	34 000	55 000
Insurance	(26%)	8 944	(36%)	12 384	21 328
Advertising	(32%)	11 520	(43%)	15 480	27 000
Depreciation	(23%)	3 128	(19%)	2 584	5 712
Supplies	(33%)	6 864	(35%)	7 280	14 144
Total direct expenses		51 456		71 728	123 184
Departmental contribution		$98 584		$131 832	$230 416
Indirect operating expenses					
Salaries	(45%)				45 000
Insurance	(38%)				13 072
Advertising	(25%)				9 000
Depreciation	(58%)				7 888
Supplies	(32%)				6 656
Interest	(100%)				28 800
Total indirect expenses					110 416
Net profit					$120 000

Problem 13.4 Flexible budgets and performance reporting

Andrea's Supplies has prepared the following fixed budget performance report for the production department's operating results during the year ended 30 June 2002:

ANDREA'S SUPPLIES
Fixed Budget Performance Report
for the year ended 30 June 2002

	Budget	Actual	Variance
Units of production	36 000	31 200	4 800 U
Manufacturing costs:			
Direct materials	$324 000	$288 600	$35 400 F
Direct labour	252 000	215 280	36 720 F
Factory overhead:			
Variable costs:			
Indirect labour	18 000	16 380	1 620 F
Supplies	27 000	27 300	300 U
Repairs	13 500	14 040	540 U
Total variable overhead	58 500	57 720	780 F
Fixed costs:			
Depreciation	63 600	63 720	120 U
Insurance	1 200	960	240 F
Rent	6 000	6 000	–
Salaries	8 400	8 640	240 U
Total fixed overhead	79 200	79 320	120 U
Total factory overhead	137 700	137 040	660 F
Total manufacturing costs	$713 700	$640 920	$72 780 F

Required:

A. Should the production department manager be rewarded for the significantly large favourable variance reported for the year? Explain.

B. Prepare a flexible budget performance report for the company's operating results. Comment on the manager's performance.

Solution

ANDREA'S SUPPLIES

A.
The actual level of activity was less than that used to prepare the fixed (static) budget by 4 800 units.

Logically it can be anticipated that prime costs will register favourable variances against the static budget ($35 400 + 36 720) = $72 120 which accounts almost entirely for the favourable total variance of $72 880.

B.

Flexible Budget Performance Report
For the year ended 30 June 2002

		Budget	Actual	Variance	
Production units		31 200	31 200	–	
Variable costs:	Per unit				
Direct materials	$ 9.00	$280 800	$288 600	7 800	U
Direct labour	7.00	218 400	215 280	3 120	F
Indirect labour	0.50	15 600	16 380	780	U
Supplies	0.75	23 400	27 300	3 900	U
Repairs	0.375	11 700	14 040	2 340	U
Total variable costs	$17.625	549 900	561 600	11 700	U
Fixed costs:					
Depreciation		63 600	63 720	120	U
Insurance		1 200	960	240	F
Rent		6 000	6 000	–	
Salaries		8 400	8 640	240	U
Total fixed costs		79 200	79 320	120	U
Total manufacturing costs		$629 100	$640 920	$11 820	U

In contrast to the static/actual comparisons the comparison between the flexible budget and actual reveals a more realistic performance evaluation.

Static/actual	$72 880	F variance
Flexible/actual	$11 820	U variance

Problem 13.5 Responsibility accounting

Anderson Autos Pty Ltd is a dealership operating in rural Victoria. In recent years, the company has experienced unsatisfactory profit results because of declining sales in the area. At the suggestion of the company's public accountant, responsibility accounting was implemented at the beginning of 2002. The following departments were organised as profit centres:

1. new car sales
2. used car sales
3. service – mechanical
4. service – body shop
5. parts and accessories.

Monthly reports are prepared showing the profit results of each of the five departments. On 20 April 2002, the parts and accessories manager and the used car manager requested a meeting with the company's general manager, Sandra Anderson, to discuss the way responsibility accounting was being applied. In particular, they are protesting against two policies that currently are in effect:

1. The parts and accessories department must transfer all parts and accessories internally to other departments at their original invoice cost.
2. The used car sales department is charged the full dollar amount allowed by the new car sales department on a used car traded in for a new car. In many cases, this amount exceeds the ultimate selling price of the used car. The used car sales manager tells the general manager about a recent case that is typical. A vehicle with a wholesale market value of $8000 was traded in on a new car with a list price of $20 400 and a dealer cost of $16 320. A trade-in allowance of $10 880 was given on the used car to promote the deal and the customer paid cash of $9520. Consequently, a profit of $4080 ($10 880 + $9520 – $16 320) was recognised by the new car sales department.

   The retail market value of the used car was $9200 and it was sold at that price 2 weeks later. Since the used car sales department was charged $10 880 when the used car was added to the inventory, it incurred a loss of $1680 on the ultimate sale.

Both managers (parts and accessories and used car) are upset by what they consider unfair practices and violation of the basic premise of responsibility accounting.

Required:

A. Do you agree or disagree with the two managers?
B. What would you do to improve the situation, if anything?

Solution

ANDERSON AUTOS PTY LTD

A.
Yes, one would have to agree that this is a bad application of responsibility accounting. Neither department in question is being treated within the context of controllability as it is used in a proper application of responsibility accounting. The two departments cannot control the factors that contribute to profit so they should not be profit centres. At best, they might be cost centres unless different policies are adopted. For example, the parts and accessories department cannot make the items up to include a profit margin for internal transfers. Also, the used car sales department must record used cars acquired at a cost that is inflated because of the amount of trade-in allowance required to sell a new car.

B.
The two deficiencies discussed in part A should be eliminated and the two departments should be allowed to operate as true profit centres. The parts and accessories department should make up all items transferred internally to other departments by a fair amount. In many dealerships, this is accomplished by adding a certain gross profit percentage to the cost of the interdepartmental transfers, thereby enabling the parts and accessories department to earn a profit.

Used cars should be added to inventory at the wholesale market value that can be easily determined from a number of objective sources published regularly. When the used cars are sold, profit or loss is measured by the difference between the selling price and the inventory cost, which is the same treatment as in other retailing activities. As such, the used car sales manager is responsible for earning a profit on the department's operation. In the situation discussed in this case, the department would have an inventory cost of $8 000 which would be matched with ultimate selling price of $9 200 so the profit on the used car would be $1 200. Consequently, the profit recognised on the new car also would have been $1 200 ($9 520 + $8 000 − $16 320). Note that the assignment of the actual profit on the new car and old car combined is the basic issue. As reported, the new car sales department had a profit of $4 080 and the used car sales department a loss of $1 680. The difference between the two is $2 400, the actual profit on the two sales. The alternative treatment suggested above provided the proper profit incentive for both departments, rather than for the new car sales department alone.