

## WEEK 6\_WS\_3: Activity Based Management

Prepare answers to the following questions and to discuss them with your classmates.

### Question 1: Orzan Manufacturing Company

The sales division of the Orzan Manufacturing Company is treated as a profit centre. The company's products are sold to the sales division at a transfer price set by senior management. The sales director, the overall manager of the sales division, is held responsible for the profit generated by sales of the three products (Akran, Beldar and Cinrop) into the three regions into which the country is divided. The three regions have different characteristics. Metropolis is a large urban conurbation in which nearly 50% of the country's population live. Middle Reach is the hinterland to Metropolis where most of the country's manufacturing is undertaken. Outer Kingdom is a sparsely populated area in which most of the country's agricultural, mineral extraction and energy generation activities take place. Two of the division's seven salespersons are allocated to Metropolis, two to Middle Reach and three to Outer Kingdom.

The sales director has a feeling that the regions are not equally profitable for the division and has requested that an activity-based approach be used to assess the profitability of each of the regions. The following data refer to the most recent trading period for the division.

	<b>Akran</b>	<b>Beldar</b>	<b>Cinrop</b>
<b>Product data</b>			
Selling price (£)	10	8	12
Transfer price (£)	8	5	11
Average unit weight (kg)	3	4	6
<b>Sales volumes</b>			
	<b>Akran</b>	<b>Beldar</b>	<b>Cinrop</b>
Metropolis	195 000	105 000	36 000
Middle Reach	45 000	90 000	54 000
Outer Kingdom	60 000	45 000	90 000
<b>No of sales orders processed</b>			
	<b>Akran</b>	<b>Beldar</b>	<b>Cinrop</b>
Metropolis	150	100	50
Middle Reach	80	150	120
Outer Kingdom	180	120	250
<b>Cost pools (£000)</b>			
Selling	280		
Advertising	150		
Warehousing and distribution	450		
Order and invoice administration	370		

The sales director has suggested that the selling cost is related to the number of salespersons, advertising is related to the value of sales, warehousing and distribution is related to the weight of product sold and administration is related to the number of sales orders processed.

### Required

- Prepare a statement, for the sales director, to show how the amount of profit generated in total and by each region.

- b) Using your answer to part a), briefly discuss some of the courses of actions available to the divisi
- c) on.

### Question 2: Duck Ltd

Duck hat Ltd manufactures and sells components to a number of regular customers in the construction industry. The company is profitable, but senior management are concerned that some of its customers may be less profitable than others. To provide better information on the profits earned from its individual customers, the company has decided to adopt activity-based costing. The following data have been gathered for the company's latest trading period.

#### Overhead costs in £000

Accounts payable department	90
Accounts receivable department	190
Delivery vehicles costs	560
Despatch department	150
Finished goods warehouse	300
Marketing department	150
Production operations	3 600
Purchasing department	220
Raw material stores	410
Sales department	500
<b>Total overheads</b>	<b>6 170</b>

#### Other data

Number of sales orders	3 200
Total value of material purchased (£)	14 400 000
Number of direct labour hours produced	600 000
Number of despatches	5 050

An activity analysis has shown that the company's processes can be grouped into the following four activities:

- Sales order acquisition and sales invoice processing
- Purchasing and storage of raw materials
- Production of the products
- Distribution of the products

Ana analysis of the period's record has revealed that Shilling The Builder Limited placed a total of 85 orders for a total of 5000 units of product A and 12000 units of product B. Shilling received these units in a total of 190 deliveries. Also during the period, Krown Konstructors PLC placed 170 orders for a total of 24000 units of product A and 10000 of product B. A total of 450 deliveries were made to Krown Konstructors. Unit data for the relevant products is shown below:

	<u>Product A</u>	<u>Product B</u>
Material cost (£)	7.20	15
Direct labour hours (at £8/hour)	0.5	1.5
Selling price (£)	16.00	45.00

#### Required:

- a) Using an activity based approach, calculate the profit or loss which Duck Hat Limited earned on the transactions with each of Shilling he Builder and Krown Konstructors.

- b) Discuss briefly how the management of Duck Hat Limited might respond to the information obtained in part a).