

SMA

WEEK 6_WS_3

Activity based Management

Prof. M. Contrafatto

ORZAN MANUFACTURING COMPANY: DATA (1)

The sales division of Orzan 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 is responsible for the profit generated by sales of the 3 products (A, B, C) into the three regions (Metropolis, Middle Reach and Outer Kingdom) into which the country is divided. The three regions have different characteristics:

- Metropolis (M): is a large conurbation area in which 50% of the country's population live;
- Middle Reach (MR): is the hinterland to Metropolis where most of the country's manufacturing is undertaken;
- Outer kingdom (OK): is sparsely populated area.

ORZAN MANUFACTURING COMPANY: DATA (2)

The sales division has 7 salespersons. Two of them 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 made a request of using an activity-based approach to assess the profitability of each regions. The following data which are referred to the most recent trading period are provided (see tables next slides).

Required:

- A) Prepare a statement, for the sales director, to show the amount of profit generated in total and by each region;**
- B) Using your answer to part a), discuss some of the courses of actions available to the division.**

ORZAN COMPANY: DATA (1)

PRODUCT DATA		A	B	C
SELLING PRICE		10	8	12
TRANSFER PRICE		8	5	11
AVERAGE UNIT W		3	4	6
SALES VOLUME				
	M	195000	105000	36000
	MR	45000	90000	54000
	OT	60000	45000	90000
N° of sales orders				
	M	150	100	50
	MR	80	150	120
	OT	180	120	250

ORZAN COMPANY: DATA (2)

COST POOLS		
SELLING		280
ADVERTISING		150
WAREHOUSING-DISTRIBUTION		450
ORDER AND INVOICE ADMI		370

ORZAN COMPANY: SOLUTION (1)

1° FIRST: CALCULATE CONTRIBUTION FOR EACH REGIONS

		M	MR	OT
CMu product= (SP-TP)	A: 10-8= 2 B: 8-5= 3 C: 12-11= 1			
CMt= (CMu*SV)		A:195000*2 B: 105000*3 C: 36000*1	A: 45000*2 B:90000*3 C: 54000*1	A: 60000*2 B:45000*3 C: 90000*1
TOTAL REGION		741000	414000	345000

ORZAN COMPANY: SOLUTION (1)

2°: CALCULATE SELLING COST FOR EACH REGIONS

	M	MR	OT
SELLING COST	$2/7*280=80$	$2/7*280=80$	$3/7*280=120$
TOTAL REGION	80	80	120

Sales director has suggested that the selling cost is related to the number of salespersons

ORZAN COMPANY: SOLUTION (1)

3°: CALCULATE ADVERTISING FOR EACH REGIONS

	M	MR	OT
SALES REVENUE	A:10*195000 B:8*105000 C: 12*36000	A:10*45000 B:8*90000 C: 12*54000	A:10*60000 B:8*45000 C: 12*90000
SALES REVENUE TOTAL	3,222,000	1,818,000	2,040,000
SHARE OF ADV COST	$(3222000/7080000)*150=68.26$	$(1818000/7080000)*150=38.51$	$(2040000/7080000)*150=43.22$

Sales director has suggested that the advertising cost is related to the value of sales

ORZAN COMPANY: SOLUTION (1)

4°: CALCULATE WAHEHOUSING FOR EACH REGIONS

	M	MR	OT
WEIGHT	A:3*195000 B:4*105000 C: 6*36000	A:3*45000 B:4*90000 C: 6*54000	A:3*60000 B:4*45000 C: 6*90000
WEIGHT TOTAL	1215000	819000	900000
SHARE OF WARE DISTR	$(1215/2934)*450$ =186.34	$(819/2934)*450$ =125.61	$(900/2934)*450$ =138.03

Sales director has suggested that the warehousing and distribution cost is related to the weight of products sold

ORZAN COMPANY: SOLUTION (1)

5°: CALCULATE ORDER ADMINISTRATION FOR EACH REGIONS

	M	MR	OT
N of orders	A: 150 B:100 C: 50	A:80 B:150 C: 120	A:180 B:120 C: 250
WEIGHT TOTAL	300	350	550
SHARE OF WARE DISTR	$(300/1200)*370$ =92.5	$(350/1200)*370$ =107.91	$(550/1200)*370$ =169.58

Sales director has suggested that the order and invoice cost is related to the number of sales orders processed.

ORZAN COMPANY: SOLUTION (1)

6°: CALCULATE PROFITABILITY FOR EACH REGIONS

	M	MR	OT
CONTRIBUTION	741000	414000	345000
SELLING COST	80000	80000	120000
ADVERTISING	68260	38510	43220
WAREHOUSING	186340	125610	138030
ADMINISTRATION	92500	107910	169580
PROFIT	313900	61970	-125830