

# Strategic Management Accounting

Week 7\_3

Activity based budgeting

## **RAVEN MANUFACTURING COMPANY: DATA (1)**

The Raven produces a electric guitars that are sold under a variety of names: Kender, Tibson and Moon. The company produces four models but, by using a variety of labels and finishes, a wide range of apparently different products is sold. The company has operated an activity based costing system for a few years. The company wishes now to introduce an activity based approach to its 2000/1 budget, using the experience it had gained through activity based costing. This approach will replace the incremental approach to budgeting which company has used for more than a decade. The following data for the 1999/2000 budget year has been collected.

## RAVEN COMPANY: DATA (2)

ACTIVITY	1999/2000 cost driver rate
ASSEMBLY	£ 4.50 per direct labour hour (DLH)
MATERIAL HANDLING	£ 25 per batch of material received
DESPATCH	£ 50 per batch of products despacted
PRODUCTION PLANNING	£ 150 per production order
MARKETING AND SALES	£ 4.75 per instrument sold
ADMINISTRATION AND GENERAL	15% of total of other overhead costs

## RAVEN COMPANY: DATA (2)

EXPENSE TYPE ANALYSIS			
COST POOL	WAGE	OCCUP.	OTHER
ASSEMBLY	65%	20%	15%
MATERIAL HANDLING	50%	25%	25%
DESPATCH	40%	20%	40%
PRODUCTION PLANNING	75%	10%	15%
MARKETING AND SALES	55%	10%	35%
ADMINISTRATION AND GENERAL	50%	10%	40%

# RAVEN COMPANY: DATA (2)

OTHER INFORMATION				
PRODUCT	MODEL A	MODEL B	MODEL C	MODEL D
N° of Bought in parts per unity	6	8	12	15
N° of DHL per unity	2.5	3.0	4.2	5.5
INFORMATION 2000/2001				
Prod/sales volume	120,000	50,000	20,000	10,000
Average produc order	2,000	2,000	500	200
N° despatch product. Ord	10	25	50	50
<ul style="list-style-type: none"> <li>• Each production order is produced as a batch, with appropriate batches of the required parts being bought in</li> </ul>				
<ul style="list-style-type: none"> <li>• The 1999/2000 cost driver rates are to be used as the basis for calculating the 2000/1 overhead budget</li> </ul>				

# RAVEN COMPANY: REQUIREMENTS

## **REQUIRED**

A) Using the above assumption, calculate the company's 2000/2001 total overhead budget analysed by expense type

B) Comment on the budget calculated in part a), discussing in particular the validity of the assumption used

# RAVEN COMPANY: SOLUTION A

TOTAL OVERHEAD BUDGET				
ACTIVITY	TOTAL COST	WAGE	OCCUP.	OTHER
ASSEMBLY (120,000*2.5+50,000*3+20,000*4.2+10,000*45.5)*4.50=	2,650,500	1,722,825 (65%)	530,000 (20%)	397,575 (15%)
MATERIAL HANDLING [(120,000/2000)*6+(50000/2000)*8+(20000/500)*12+(10000/200)*15]*25	44,750	22,375 (50%)	11,187 (25%)	11,188 (25%)

## RAVEN COMPANY: SOLUTION A

TOTAL OVERHEAD BUDGET				
ACTIVITY	TOTAL COST	WAGE	OCCUP.	OTHER
DESPATCH $[(120,000/2000) * 10 + (50000/2000) * 25 + (20000/500) * 50 + (10000/200) * 50]$	286,250	114,500 (40%)	57,250 (20%)	114,500 (40%)
PRODUCTION PLANNING $[(120,000/2000) + (50000/2000) + (20000/500) + (10000/200)] * 150$	26,250	19,688 (75%)	2,625 (10%)	3,937 (15%)

# RAVEN COMPANY: SOLUTION A

TOTAL OVERHEAD BUDGET				
ACTIVITY	TOTAL COST	WAGE	OCCUP.	OTHER
MARKETING AND SALES (120,000+50,000+20,000+10,000)*4.75	950,000	522,500 (55%)	95,000 (10%)	332,500 (35%)
Sub total	3,957,750	2,401,888	696,162	859,700
ADMIN GENERAL (3,957,750 *15%)	593,663	296,832 50%	59,366 10%	237,465 40%
<b>TOTAL</b>	<b>4,551,413</b>	<b>2,698,720</b>	<b>755,528</b>	<b>1,097,165</b>