

Management Accounting

Week 5

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Content

- Activity Based Costing
- Pricing Decision
- Customer Profitability Analysis

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Problem of Single Cost Allocation base (also called traditional system sometimes)

- Some are under-allocated, and some are over-allocated
- Wrong decision making

- Cost smoothing : use broader averages to uniformly assigned the cost to cost object
 - Product undercosting
 - Product overcosting

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Activity Based Costing (Refine costing system)

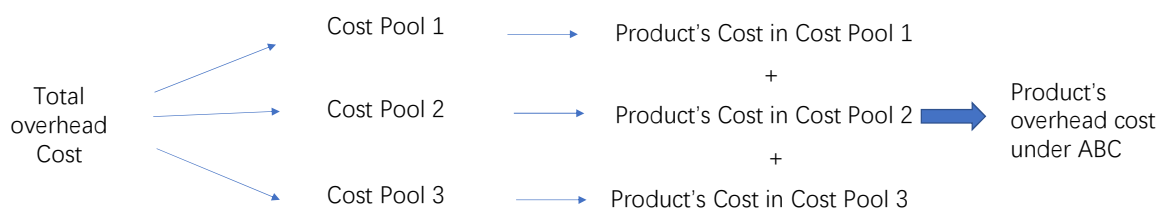
- Direct Cost tracing: identify as many of direct costs as possible
- Indirect Cost Pools: expand the number of cost pools and each pool is homogenous

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Activities Based Accounting Steps

1. Separate the original indirect cost into several costs pools (always given by the exam)
2. Identify each cost driver (allocation base) for each cost pool (always given)
3. Allocate each cost pool by its own cost driver and identify the product's cost in each cost pool
4. The sum of the cost in each cost pool will be the new indirect cost for this product

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Cost hierarchy

- Categorisation of cost into cost pools based on the same allocation base and the relationship
- Four types of allocation bases
 - Output unit level (energy)
 - Batch level (Set-up hours)
 - Product-sustaining (design costs)
 - Facility-sustaining cost (General administration e.g. rent)

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IGN is not happy with the allocation of IT costs. As IT is key to the bank, it wants more insights into the drivers of IT costs. It has therefore hired an ABC consultant; after several meetings with employees and managers, the ABC consultant comes up with the following information (all amounts in thousands):

- A first activity within the IT department is transaction processing. This relates to the number of transaction hours that are used for handling all customer transactions. Total costs for transaction processing are €900.000, with 1.500 hours to Wholesale Banking and 3.000 hours in Retail Banking;
- A second activity relates to customer requests on IT-related issues. Total costs for customer support in this area is €1.455.000, with 7.500 requests from customers from the Wholesale Banking Division and 22.500 requests from customers from the Retail Banking Division;
- Finally, the IT department provides desk top or laptop support for the employees within IGN. Total costs associated with this activity is €2.820.000. This relates to 7.500 desktops/laptops in the Wholesale Banking division, and 8.500 in the Retail Banking Division.

The table below summarizes the data:

Activity	Costs in cost pool (in € 1.000)	Cost driver	Wholesale Banking	Retail Banking
Transaction processing	€ 900.000	Processing hours (in thousands)	1.500	3.000
Customer support	€ 1.455.000	Customer requests (thousands)	7.500	22.500
Desk top/lap top support	€ 2.820.000	Number of desk tops/lap tops supported	7.500	8.500

Compute the cost driver rates for transaction processing, customer support and desk top/lap top support.

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Using the ABC method, what amount of IT department costs will be allocated to the Wholesale Banking Division respectively the Retail Banking division?

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Brilliant Accents Company manufactures and sells three styles of Kitchen faucets: Brass, Chrome and White. Production takes 25, 25 and 10 machine hours to manufacture 1000-unit batches of brass, chrome and white faucets, respectively. The following additional data apply:

			Brass	Chrome	White
Projected sales in units			30.000	50.000	40.000
Per unit data					
Sales price		€	400	€ 200	€ 300
Direct materials		€	80	€ 40	€ 80
Direct labor		€	150	€ 30	€ 90
Overhead cost based on direct labor hours (traditional system)		€	120	€ 30	€ 90

a) Using the traditional system, determine the operating profit per unit for the Brass faucets

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Hours per batch of	1.000 units	Brass	Chrome	White
Direct labor hours		40	10	30
Machine hours		25	25	10
Setup hours		10,0	5,0	10,0
Inspection hours		30	20	20

Total overhead costs and activity levels for the year are estimated as follows:

Activity	Overhead costs	Activity levels
Direct labor hours	NR	2900 hours
Machine hours	NR	2400 hours
Setups	€ 4.655.000	950 hours
Inspections	€ 4.050.000	2700 hours

Using the ABC system, compute the operating profit per unit for the Brass faucets (hint: calculate the cost driver rates first).

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Short and long term pricing decision

- In short-term decisions, relevant costs are typically equal to variable costs plus any opportunity costs of accepting an order
- In the long run, all costs are relevant
 - Invest in new machines, expand capacity, lay off workers

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Cost-based vs Market based Approach

Cost-based:

Price is set at cost plus a profit margin or 'mark-up'

Quick Calculation:

the costs are 400 euro per unit, and the profit is 25% on top of the cost, what should be my sales price per unit.

Cost-Based Pricing by giving a profit margin

What will be the sale price for the product, if the cost of the product is 500 and the profit margin is 20%.

Market Based Approach

- The market determines the price

Target Costing:

$$\text{Target Costing} = \text{Target Sales Price} - \text{Target profit}$$

So our customer is willing to pay 500 euro and our target profit margin is 20 percent, what should be our target costing

$$\text{Target Costing} = 500 - 500 \cdot 0.2 = 400$$

- Many costs are determined early in the development of a product or service
 - Buying machines, expanding service capacity, training staff: this all fixes the costs
 - Locked-in costs: HBDR p 359

Customer Profitability Analysis

Customer profitability analysis refers to the reporting and analysis of customer revenues and customer costs. Managers need to ensure that customers contributing sizably to the profitability of an organisation receive a comparable level of attention from the organisation.

- Customer revenues are inflows of assets from customers received in exchange for products or services being provided to those customers.
- A key concern here is price discounting, which is the reduction of selling prices below listed levels in order to encourage an increase in purchases by customers

Customer Cost

- Customer output-unit-level costs
- Customer batch-level costs
- Customer-sustaining costs
- Distribution-channel costs
- Corporate-sustaining costs

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Using CPA numbers: discounts to change customer behavior

- A supplier delivers soft drinks with an average contribution margin of 50%
- Logistics costs per order are € 80, fully variable
- Customer administration costs per order are € 40, consisting of allocated costs
- A customer has current yearly revenues of € 10,000 from 24 orders
- Proposal: customer orders once per month instead of twice, and gets a discount of 5%

	Current	New	Difference
Revenues			
Product costs			
Logistics costs			
Customer administration			
Net effect			

Customer administration represents allocated indirect costs, these do not disappear unless the firm takes additional actions

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