Management Accounting

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Practical Class #13

Agenda

01

Theoretical Recap

Multi-Product CVP Analysis

02

Exercise 35 3) and 4)

The Vinho Espirituoso Company

03

Theoretical Recap

Relevant and Irrelevant Costs

02

Exercise 43

The MaxiPesca Company

01

Theoretical Recap

Multi-Product CVP Analysis

Multi Product Cost–Volume–Profit Analysis

Our analysis so far has assumed a single-product setting. However, most firms produce and sell many products or services .

We can have two situations:

1. Company has **direct fixed costs** to each product but has no **common fixed costs between** both products. In this situation, we only need to **calculate two BEPs** as we did before
2. Company has **common fixed costs**. In this situation, we need to calculate a **weighted contribution margin** based on **sales volume (most common situation)**

$$\text{BEP} = \frac{\text{Fixed Costs}}{\text{Unit CM}_x * x\% + \text{Unit CM}_y * (1 - x)\%}$$

- $x\% = \text{Sales Mix of Product X (in quantities)}$

- Example: FC (150.000€), Unit CM x (12€), Unit CM y (16€), Sales Mix: 25% of X and 75% of Y

$$\text{BEP} = \frac{150.000}{12 * 25\% + 16 * 75\%} = 10000 \text{ units (2500 of X and 7500 of Y)}$$

02

Exercise 35

The Vinho Espirituoso Company

03

Theoretical Recap

Relevant vs Irrelevant Costs

Different Costs Classifications

- Manufacturing vs Non-Manufacturing (Business Function)
- Period vs Product (Inventory Valuation)
- Direct vs Indirect (Assignment to Cost Object)
- Fixed vs Variable (Cost behaviour in relation to Output)
- **Relevant vs Irrelevant (Costs in relation to a specific decision)**

Relevant vs Irrelevant Costs

Relevant costs (and revenues) are those future costs (and revenues) that will be changed by a decision

- **Opportunity Costs** (lost contribution to profits arising from the best alternative given up)
- **Avoidable Costs** (Costs that can be saved by not adopting a given alternative)
- **Future Outlay Costs** (Future costs that vary with the decision)

Irrelevant costs (and revenues) are those that will not be changed by a decision

- **Past/Historic/Sunk Cost** (Costs that have already been incurred. They do not affect any future cost and cannot be changed by any current or future action)
- **Unavoidable Costs** (Costs that cannot be saved by not adopting a given alternative)
- **Committed Costs** (These are future costs that have been committed prior to a decision point and will not change upon the decision)

To be RELEVANT a cost must meet these conditions:

- **Must DIFFER from one possible decision outcome to the next**
- **Must relate to the FUTURE**
- **Have an effect on the wealth (cash flow) of the business.**

04

Exercise 43

The MaxiPesca Company