Management Accounting

Week 7

Content

- Management Control System
- Transfer Pricing
- Economic measurement
- Strategy Management Accounting

Management Control System

- Gathering information and use information to coordinate process of plan making and control decisions
- Contain (different level, customer level, individual activity level etc.)
- Financial data and non-financial data
- Contain sub systems

Organisational Structure

- Centralisation and Decentralisation
- Benefits of decentralization:
  - More and better information for decision making: business unit managers have direct contact with customers and suppliers
  - Quicker decision making
  - Business unit managers are more motivated when they have more authority
  - In large organizations, it helps in management development
- Cost of decentralization:
  - Suboptimal decision making when business units pursue their own interests
  - Duplication of (support) activities
  - Increased information costs

Responsibility Accounting

- The higher the manager's level in the organisation, the broader responsibility center of the manager
- Cost centre
- Revenue Centre
- Profit Centre
- Investment Centre

Transfer Pricing

- Setting the price of one sub-unit charged for the service/product supplied to another sub-unit of the same organisation
- Similar treatment to direct material
- Record a revenue for selling sub-unit
- Record a cost for buying sub-unit
- Total Profit of sum of the units are the same

Intermediate Product

- Product transferred between the sub-unit of the organisation
- Some of them, they can further processed by the buying sub-unit or sell to the external customers

Transfer Pricing Method

- Market-Based Transfer Pricing (Similiar Product on the Market)
- Cost-Based Transfer Pricing (cost of producing the product)
- Negotiated Transfer Pricing: negotiated between themselves

Two department:
Transportation and refining division

Transporation Department: get crude oil and transports to refining

Refining Devision: process crude oil into petrol

Transportation Division:

Purchase price per barrel of crude oil from the field under a long term contract	€15
Other costs (given)	
Variable Cost of transporting per barrel of crude oil	€2
Fixed Cost of transporting per barrel of crude oil	€3
Total cost per barrel	**€20**

Refining Division:
The external purchase price of crude oil from outside suppliers is €25 per barrel

What is the cost based- transfer price at 112% of full costs?

What is the transfer price at market price?

What is the (probably) negotiated transfer price?

The issue with cost-based pricing

The subunit does not hold incentive for decreasing the cost

Market Based Pricing Purposes

- Goal Congruence: optimize sub-unit performanc, maximise management effort
- Management effort: motivate the managers
- Subunit performance
- Subunit autonomy

General Guideline

Minimum transfer price = relevent costs per unit incurred + Opportunity costs per unit to the selling division

In other words, when there is spare capacity, opportunity cost = 0, transfer pricing should be minimum relevant costs

No spare capacity, there is opportunity cost, transfer pricing should minimally be market price

MarLev Company recently acquired an olive oil processing company that has an annual capacity of 2.000.000 liters. Last year, the olive oil processing company processed and sold 1.400.000 liters last year at a market price of €4,00 per liter. The purpose of the acquisition was to furnish oil for the Spreads Division. The Spreads Division needs 800.000 liters of oil per year. It has been purchasing oil from suppliers at the market price. Production costs at capacity of the olive oil company, now a division of MarLev Company, are as follows:

Direct materials per liter		€	1,00
Direct labor costs per liter		€	0,50
Variable processing overhead		€	0,30
Fixed processing overhead		€	0,40
Total cost per liter		€	2,20

Management is trying to decide what transfer price to use for sales from the newly acquired company to the Spreads Division. The manager of the Olive Oil Division argues that €4,00 per liter, the market price, is appropriate. The manager of the Cooking Division argues that the full cost should be used plus a 10% profit markup, arguing that a 10% margin on sales to outside customers is difficult to achieve for the Cooking Division; therefore, he considers the offer very generous. Any output of the Olive Oil Division not sold to the Cooking Division can be sold to outsiders for €4,00 per liter.

a) Compute the operating income for the Olive Oil Division using a transfer price of €4,00 per liter.

b) Compute the operating income for the Olive Oil Division using a transfer price of full cost plus 10% markup.

Economic Measurement

- Return on Investment (ROI)
- Residual Income (RI)

Return on investment (ROI) = Income ÷ Investment

What is income?

- Some companies use operating profit(EBTI), other companies use net profit or EBITDA

What is investment?

- Some companies use total assets, other use total assets – current liabilities

Normally, it will be specified by the question

Residual income (RI) is an accounting measure of profit minus a required monetary unit (e.g. €, £) return on an accounting measure of investment.

Residual profit (RI) =
Income − (Required rate of return × Investment)

Management has now settled the transfer pricing issue above, and has set the planned operating results for 2019 as provided below:

Operating income				€ 3.500.000
Investment				€ 17.500.000
Required rate of return				12%

The company is planning an expansion, which is requiring the Olive Oil Division to increase its investments by €3.000.000 and its income by €500.000.

c) Compute the planned ROI for the Olive Oil Division.
d) Compute the planned Residual Income for the Olive Oil Division.
e) Assuming that the managers are evaluated and rewarded on ROI, will the manager be happy with the new investment? Would that be different using RI? Explain your answer.

Strategy Management Accounting

- Long term plan
- A boarder view
- Market and competitor development
- Non-financial information

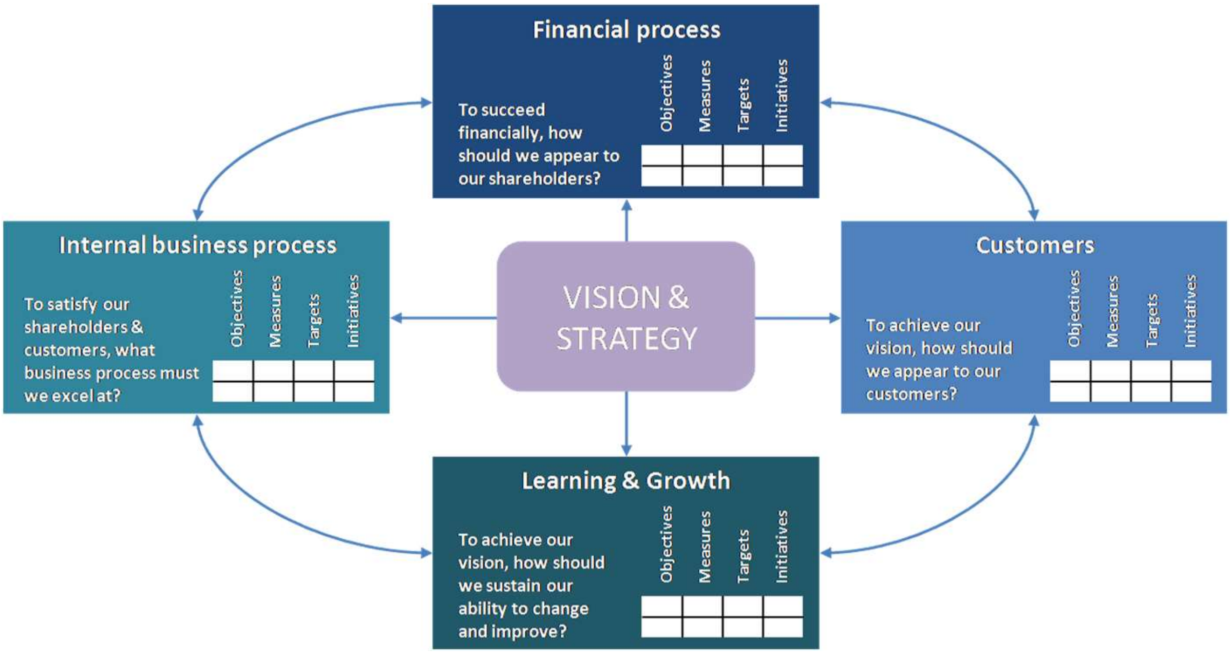
Financial and Non-financial measures

- Financial measures, profits, revenue, etc
- Non-financial measures: customer satisfaction rate, retention rate,etc
- Financial measures always look back (lagging)
- Non-financial measures can be leading indicators

Balanced scorecard – linking non financial information to strategy – Four perspectives

- Financial (like revenue growth, cost reduction, ROI,etc)
- Customer (customer retention rate, customer satisfaction, etc)
- Internal business process (product development time, delivery time, customer serivce time)
- Learning and growth (Employees skills and education)

Set indicators in these four perspectives and evaluating the performance using these measures



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Question e (5 points)

Explain what the four perspectives of the Balanced Scorecard are, and give a relevant measure for each perspective which could be used by the Memory Chips division.

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