Management Accounting summary

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# Chapter 1: Introduction to management accounting

## Video

**Management accounting** vs. Financial accounting

Management accounting: decision-making process
1. Planning process: identifying objectives, search for alternatives, select alternative
2. Control process: compare actual & planned outcomes, respond to divergencies from plan

To complete successfully companies should focus on providing customer satisfaction by concentrating on:

* Cost efficiency
* Quality control
* Time management
* Innovation and continuous improvement

Functions of management accounting

1. Allocate costs between products sold, and fully and partly completed products that are unsold
2. Provide relevant info to help managers make better decisions: profitability analysis, product pricing, make or buy, product mix and discontinuation
3. Provide info for planning, control and performance measurement and continuous improvement: long/short term planning, periodic performance reports for feedback control, performance reports also widely used to evaluate managerial performance 🡪 costs should be assembled in different ways

## Book

Accounting: process of identifying, measuring and communicating economic info to permit informed judgements and decisions

Users of accounting info:
1. Internal users within the organizations for decision-making 🡪 **management accounting**
2. External users outside the organizations such as shareholders 🡪 financial accounting

Differences between the 2:

* Legal requirements
* Focus on individual parts (ma) or segments of the business (fa)
* Generally accepted accounting principles
* Time dimension: past (fa), future (ma)
* Report frequency and less emphasis on precision

Impact of changing business environment on management accounting:

* Global competition
* Changing product life cycles
* Advances in manufacturing technologies
* Impact of info technogoly and digitalization
* Environment & sustainability issues
* Pressures to adopt higher standers of ethical behaviour
* Deregulation and privatization
* Focus on value creation
* Customer orientation

Key terms:

**Benchmarking**: a mechanism for achieving continuous improvement by measuring products, services or activities against those of other best performing organizations

**Cost accounting**: accounting concerned with cost accumulation for inventory valuation to meet the requirements of external reporting and internal profit measurement

**Stakeholders**: interest in organization 🡪 managers, shareholders, employees, creditors, government

# Chapter 2: An introduction to cost terms and concepts

## Video

Cost object: anything for which we want to know the cost, anything for which a separate measurement of cost is required

With one product, it is easy to determine cost of the product

Cost allocations: process of assigning costs to cost objects that involve the use of surrogate rather than direct measures

Cost classifications:
1. **Direct and indirect**: **direct**: easily traceable to product, **indirect** (overhead eg) cannot be specifically and exclusively identified with a given cost object, indirect based on cost allocations (heaviest, …)
🡪 indirect manufacturing overhead (electricity, for benefit of product)) and non-manufacturing overhead (no direct benefit for the product, but for how the company runs)

2**. Period and product costs**: **product** 🡪 attached to the products and included in the stock (inventory valuation), only if the money spent on it actually adds value to the product , **period** costs 🡪 not attached to the product and included in the inventory valuation, doesn’t add value to the product

3. **Fixed and variable costs**: **fixed** 🡪 remains fixed of all levels of activity, **variable** 🡪 all change in line with proportion of activity**, semi-fixed/step-fixed** 🡪 fixed within specified activity levels, they eventually increase/decrease by some constant amount at critical activity levels
the more is sold, the lower the fixed costs per unit

4. **Avoidable and unavoidable costs**: avoidable that can be saved by not adopting a given lternative, unavoidable costs cannot be saved 🡪 relevant/irrelevant

5. **Relevant and irrelevant costs** (and revenues)

6. Incremental and marginal costs: incremental 🡪 additional costs/revenues from the production/sale of a group of additional units, marginal 🡪 represents the additional costs/revenue of one additional unit of output

Financial statements

* **Balance sheet**: certain date, financial condition
assets and liabilities, owns & owes 🡪 positive difference: (shareholders) equity
* **Income statement**: financial performance over a period of time
revenues/sales (number of products sold x selling price) & costs 🡪 profit
costs of goods sold: price the product was at in the inventory

Product costs: money is transferred into products (assets (balance sheet) 🡪 COGS (income statement))
Components of product costs:

* Direct materials
* Direct labour
* Manufacturing overhead

Period costs: expense (income statement)

Operating leverage: tells something about the risk

More fixed costs, more risks, higher possible profits

High level of fixed costs, high earnings volatility

Sunk costs: costs of resources already acquired and are unaffected by the choice between the various alternatives, irrelevant for decision-making

Opportunity costs: a cost that measures the opportunity that is lost or sacrificed when the choice of one course of action requires that an alternative course of action be given up, ‘something that you will not be getting by choosing an alternative’ 🡪 in discussions of decision-making

## Book

Prime cost: consists of all direct manufacturing costs (sum of direct material and direct labour costs)
Conversion cost: sum of direct labour and manufacturing overhead costs, cost of converting raw materials into finished products

When a product is sold, the cost of goods sold is, like a period cost, recorded as an expensive in the profit/loss account in the current accounting period.

Semi-variable costs (mixed costs): both fixed and a variable component.

3 purposes for which cost info is required:

1. To allocate costs between cost of goods sold & inventories for internal and external profit reporting and inventory valuation
2. To provide relevant info to help managers make better decisions
3. To provide info for planning, control and performance measurement

Key terms:

Differential (incremental) costs: the difference between the costs of each alternative action under consideration

# Chapter 3: Cost-volume-profit analysis

## Video

Cost-volume-profit analysis

Over time, you need to lower your price in order to sell your product
Total costs raises because at certain point you need more capacity

Linear cost-volume-profit model

1. Constant variable cost and selling price is assumed
2. Only one break-even point and profit increases as volume increases
3. The diagram is not intended to provide an accurate representation for all levels of output. The objective is to provide an accurate representation of cost and revenue behaviour only within the relevant range of output.

Cost are fixed in the short term (relevant range), but can be changed in the longer term

Contribution = revenue – variable costs
amount you have left to pay of fixed costs, and then profit
One can have total contribution, contribution per unit and contribution margin (contribution/sales)

Operating leverage = contribution margin / profit
measure to see how sensitive profits are to changes in sales

Break-even points
Revenue = variable cost + fixed cost

Total contribution margin = fixed cost

 Profit volume ratio = contribution/sales revenue x 100%

Percentage margin of safety = (expected sales – break-even sales)/expected sales

CVP analysis used assumptions, all other variables remain constant, constant sales mix, etc.

High low method use to calculate fixed and variable costs

## Book

CVP analysis examines the relationship between changes in activity and changes in total sales revenue, costs and net profit.

Contribution margin: sales revenue – variable costs

Contribution margin ratio (contribution sales ratio or profit-volume ratio) = contribution / sales

Profit = (sales revenue x cm ratio) – fixed costs

Profit + fixed costs = sales revenue x cm ratio

Margin of safety indicates by how much sales may decrease before a loss occurs.
Percentage margin of safety = (expected sales – break-even sales)/expected sales
Higher margins 🡪 less risky activities

A high fixed costs and lower variable cost structure will result is a greater reduction in profits as sales decrease.
Operating leverage is used as a measure of the sensitivity of profits to changes in sales. The greater the degree of operating leverage, the more that changes in sales activity will affect profits.

Degree of operating leverage = total contribution margin / total profit

An operating leverage of 4 indicates that profits change by 4 times more than the change in sales. Therefore if sales increase/decrease by 10% the profits will increase/decrease by 40%.

Key terms:

Decreasing returns to scale: a situation that arises when unit costs rise as volume increases

# Chapter 4: Measuring relevant costs and revenues for decision-making

## Video

Relevant (incremental/differentia) financial inputs are future cash flows that will differ between the alternatives

Types of decisions:

1. **Special selling price decisions**:
One-time only orders / below the prevailing market price, usually accepting as in short term many fixed costs and temporary excess capacity (so fixed)
irrelevant when the costs don’t differ between the alternatives
as long as the deal covers the variable costs, it doesn’t have to cover all fixed costs

Assumptions: the normal selling price will not be affected, no better opportunities during the period, the resources have no alternative uses, fixed costs are unavoidable for the period

Longer term, spare capacity in the foreseeable future, so an opportunity and because of the long term the capacity can be reduced.
In longer term more costs and revenues are relevant

1. **Product-mix decisions when capacity constraints exist**:
concentrate on the products that yield the largest contribution per limiting factor (constraint)!
contribution per machine hour for example
2. **Decisions on replacement of equipment**:
Depreciation costs (reduction of value of machine in the balance sheet) are not relevant, as when you sell it earlier the total sum will be written off at once, also not cash to pay**.**
3. **Outsourcing (make or buy) decisions**:
Some costs (fixed) don’t change when products are outsourced
4. **Discontinuation decisions**:
When a location is discontinued, fixed costs should be assigned to the other plants

## Book

Sunk costs (past costs) 🡪 allocated and future costs that do not differ between the alternatvies, cannot be altered

Opportunity costs: where the choice of one alternative requires that an alternative course of action is given up, the financial benefits that are foregone/sacrificed

When materials are taken from existing inventory, the original purchase price is a sunk costs and is irrelevant. However, if the materials are to be replaced then the decision to use them on an activity will result in additional acquisition costs compared with the situation if the materials were not used. Future replacement cost represents the relevant cost of materials.

Key terms:

Written-down value (book value): the original cost of an asset – depreciation

# Chapter 5: Pricing decisions and profitability analysis

## Video

Role of cost info in pricing decisions

* Price takers: have little control over their prices
* Cost info is of vital importance in deciding on the output and product mix
* Price setters: have influence on prices
* Cost info is of vital importance to price setters in making pricing decisions
* Firms may be price setters and takers

4 situations:

1. **A price-setting firm facing short-run pricing decisions**:
one-time special orders in competition with other suppliers, only the incremental cost of undertaking the order should be taken into account
Capacity should be available, the bid price should not affect future selling prices & not expect repeat business, the order will utilize unused capacity for only a short period and capacity will be released for use on more profitable opportunities
2. **A price-setting firm facing long-run pricing decisions**:
Price setters have stronger grounds for adopting activity-based costing (ABC): provides a better understanding of cost behaviour for negotiating with customers the price/size of orders, allocating indirect costs to the right products
3 scenarios:
	* Pricing customized products using cost-plus pricing: Full cost + mark-up added, allocate costs to product
	* Pricing non-customized products using cost-plus pricing or demand estimates:
	cost-plus pricing: the bigger the sales volume, the lower the unit cost, starts out with a cost related to the volume and how much profit is desired
	demand estimates: start out with potential selling prices and then calculate the profit
	* Pricing non-customized products using target costing: first determine the target price that customers will be prepared to pay for the product, deduct a target profit margin, estimate the actual cost, if estimated actual cost exceeds the target cost investigate ways of driving down the actual cost to the target cost
	most suited to high sales volume products
3. **A price-taking firm facing short-run product mix decisions**:
if short term capacity constraints apply the product mix should be based on maximizing contribution per limiting factor
4. **A price-taking firm facing long-run product mix decisions**:
in the long term a firm can adjust supply of resources, therefore the sales revenue from a product should be sufficient to cover all of the resources that are committed to it

Cost-plus pricing: different cost bases and mark-ups can be used to determine to cost-plus selling price

Target mark-ups seek to provide a contribution to non-assigned costs and profit, they are adjusted to reflect demand, types of products, industry norms, competitive positions

Criticism of cost-plus pricing:

* Ignores of demand
* Does not necessarily ensure that total sales revenue will exceed total cost
* Can lead to wrong decisions if budgeted activity is used to unitize costs
* Circular reasoning: volume estimates are required to estimate unit fixed costs and ultimately price

Pricing policies for price setters

* Price-skimming: after while lower price and so on, so in the end more people buy it, skim all the layers
* Penetration pricing: start with low price and increase when you have a big market share

## Book

Direct costing principles: all costs can be specifically identified with a cost objective at a particular level within the hierarchy of reported profits.
Absorption costing system: the product line and business sustaining fixed costs are allocated to the individual products. Such costs represent indirect costs at the individual product level.

There are different cost bases for cost-plus pricing: direct variable costs, total direct costs and total cost based on an assignment of a share of all organizational costs to the product. Different percentage profit margins are added depending on the cost base.

Key terms:

Full cost (long-run cost): the estimated sum of all resources that are committed to a product in the long run

## Lecture

Price setters are usually not efficient, they don’t have to reduce their costs

# Chapter 7: Cost assignment

## Video

Indirect costs has to be allocated
Surrogates known as allocation bases or cost drivers

For accurate cost assignment, allocations bases should be significant determinants of the costs 🡪 cause-and-effect allocations

Arbitrary allocations: allocation bases that are not significant determinants of the costs 🡪 inaccurate

Manufacturing organizations assign costs to product for: inventory valuation & profit measurement and decision-making

For inventory valuation and profit measurement the aim is to allocate costs between cost of goods sold and inventories

For decisions making more accurate product costs are required

Absorption costing systems
the simpler the system, the more arbitrary allocations 🡪 cheap to maintain

High sophisticated system: low cost of error, high levels of accuracy

Plant-wide (blanket) overhead rate: a single overhead rate for the organization as a whole 🡪 only justiefied if all products consume departmental overheads are within the same proportions

Separate departmental rates should be used when there are differences in departments costs and the products
If a diverse range of products are produced consuming departmental resources in different proportions separate departmental rates should be established

Where a department contains a number of different centres and products consume overhead costs for each centre in different proportions, separate overhead rates should be established for each centre within a department

Cost centres/pools: location to which overhead costs are initially assigned 🡪 usually consist of departments but also of smaller segments within departments

Traditional system 🡪 2 stage allocation process: to establish departmental or cost centre overhead

1. Assign overheads initially to cost centres
2. Allocate cost centra overhead to cost objects using second stage allocation bases/cost drivers

In 4 steps:

1. Assigning all manufacturing overhead to production and service cost centres 🡪 stage 1
2. Reallocating the costs assigned to service cost centres to production cost centres 🡪 stage 1
3. Computing separate overhead rate for each production cost centre 🡪 stage 2
4. Assigning cost centre overheads to products or other chosen cost objects 🡪 stage 2

Budgeted overhead rates:

Actual overhead rates are not used because of: delay in product costs if actual annual rate are used & fluctuating overhead rates that will occur if actual monthly rates are used

An estimated normal product cost bases on average long-run activity is required rather than an actual product cost.
Therefore use, estimates of overhead costs and activity over a long-run period to compute overhead rates

Under and over-recovery overheads: if actual activity or overhead spending is different from that used to compute the estimated overhead rates there will be an under- or over-recovery of fixed overheads

Under/over-recoveries are treated as period costs!

Non-manufacturing overheads:

* Only manufacturing overheads should be allocated to products
* Non-manufacturing costs should be assigned to products for decision-making
* Simplistic methods are frequently used as allocation bases with traditional systems
* ,, do not provide a reliable measure of the non-manufacturing overheads consumed by products
* ABC is advocated for providing a more accurate measure of resources consumed by products

## Book

Key terms:

Activity-based costing (ABC): a system of cost allocation that aims to use mainly cause-and-effect cost allocations by assigning costs to activities

## Lecture

2 step process to allocate indirect costs:

Allocation rate = total cost/cost drive activity

Allocated cost = allocation rate x weight of the cost driver activity

No indirect cost when only 1 product is produced

# Chapter 8: Activity-based costing

## Video

ABC (activity-based costing)

* modern way allocating costs
* Costs of support functions are difficult to trace to individual products
* allocates to activities, instead of departments
* Traditional system rely of volume-based cost drivers in 2nd stage,
ABC systems use many 2nd stage cost drivers
* much more complicated, not useful for every company
* First stage: resource cost drivers
Second stage: activity cost drivers
* Number of batches

Activity based management: reorganizing production process to minimize number of activities used by a product.

Designing ABC systems

1. Identify the major activities that take place in an organization 🡪 reasonable level of aggregation
2. Assign costs to cost pools/centres for each activity 🡪 include direct/indirect cost, end point is total cost of product
3. Determine the cost driver for each major activity
4. Assign the costs of activities to products

Cost drivers must be measurable so that it can be identified with individual products

Activity hierarchies

* Unit-level activities
* Batch-related activities 🡪 costs vary with the number of batches made
* Product/service sustaining activities 🡪
* Facility(business)-sustaining activities 🡪 performed to support the organization as a whole

## Book

Non-volume based cost drivers 🡪 used in ABC besides volume-based ones.
more appropriate measure for for example number of setups

Consumption ratios: proportion of each activity consumed by a product

Traditional systems rely too much on volume-based allocations, but many indirect costs aren’t volume based

## Lecture

Traditional system: highest volume highest indirect costs

# Chapter 9: The budgeting process

## Video

The budgeting process why?

1. To aid the planning of actual operations
2. To coordinate the activities of the organization
3. To communicate plans to various responsibility centre managers
4. To motivate managers to achieve organizational goals: by focusing on participation / providing a challenge/target
5. To control activities: by comparison of actual with budget
6. To evaluate the performance of managers

Stages in budgeting process

1. Communicate details of budget policy/guidelines to the people responsible for preparing the budget
2. Determine the factor that restricts output
3. Preparation of the sales budget
4. Initial preparation of budgets
5. Negotiation of budgets with higher management
6. Coordination and review of budgets
7. Final acceptance of budgets
8. Ongoing review of budgets

Activity-based budgeting (ABB)

* Conventional budgeting is inappropriate for the activities where the consumption of resources does not vary proportionately with the volume of products
* ABB aims to authorize only the supply of resources needed to perform activities to meet the budgeted sales volumes

ABB process (reverse of ABC)

1. Budgeted output of cost objects
2. Determine necessary activities
3. Determine the resources required for the budget period

Stages

1. Estimate the production & sales volume
2. Estimate the demand
3. Determine the resources required
4. Estimate for each resources the quantity
5. Take action to adjust the capacity of resources to match the projected supply

Not optimal for total company, each manager does what’s best for them 🡪 base on the lowest targets so it is easy to reach the targets
Divides the departments to reach own success
Budget only focuses on money

When a asset is transported to the customer, revenue is included 🡪 customer had not paid yet
So no cash yet, but revenue!

Sales budget: showing expected sales for the coming periods & cash receipts

Sales 🡪 cash sales & sales on account (balance sheet)

Income statement: total budgeted sales (everything added)

Examples in this video!!!

Don’t include deprecation in statement of cash flows

## Book

Corporate objectives relate to the organization as a whole
Unit objectives relate to the specific objectives of individual units within the organization

Budgeting is concerned with the implementation of the long-term plan for the year ahead, because of shorter planning horizon budgets are more precise/detailed.

When all the budgets have been prepared they are summarized into a master budget consisting of a budgeted profit and loss account, balance sheet and cash budget statement.

ZBB (zero-based budgeting)/priority-based budgeting: method of budgeting that is mainly used in non-profit organizations by working from the premise that projected expenditure for existing programmes should start from base zero, with each years budgets being compiled as if the programmes were being launched for the first time

Activity-based costing takes cost objects as the starting point, determines the necessary activities and then estimates the resources required.

Key terms:

Discretionary costs: costs such as advertising/research where management has some discretion as to the amount it will budget

Incremental budgeting: the current budgeted allowance is taken as starting point for preparing the next annual budget and then adjusted for anticipated changes

## Lecture

Functions of budgets: planning, coordinating, communicate plans, motivate managers, control activities, evaluate performance of managers

S & A 🡪 selling & administrative

Possessions: cash / accounts receivable (debiteuren)

Cost of goods sold: income statement

Accounts payable (crediteuren)

# Chapter 10: Management control systems

## Video

How we can use the budget systems etc.

Types of controls:

* Action controls: behavioural constraints, preaction reviews, action accountability
* Personnel, cultural & social controls: involve selection of people who have been socialized into adopting particular norms of behaviour, built on employees natural tendencies to control themselves
* Results / output controls (budgets): the focus is on reporting info about the outcomes of work effort
1. Establishing performance measures for the activities that the organization wishes to monitor
2. establishing performance targets
3. measuring performance
4. providing rewards/punishment

Harmful side-effects of controls:
Occurs when controls motivate employees to engage in behaviour that is not organizationally desirable

* Results controls: encourages individuals to focus only on what is measured, regardless of whether it is organizationally desirable,
* Action controls: may discourage creativity/innovation
* Cultural controls: lack of goal congruence where group goals don’t coincide with firm goals

We want to have overlapping: organizational goals, formal performance measurement system & individual manager’s goals

Management accounting control systems (MACS): tend to be the predominant controls in most organizations 🡪 2 elements:

1. Formal planning processes for establishing performance expectations
2. Responsibility accounting: assign differences from the performance target to the individual that is accountable for the responsibility centre

Responsibility centres 4 types

1. Cost/expense centres (standard & discretionary)
2. Revenue centres
3. Profit centres
4. Investment centres

Applying controllability principle:

* Price & quantity of service controllable 🡪 controllable expense
* Quantity controllable but not price 🡪 managers accountable for difference between (actual quantity x budgeted price) and (budgeted quantity x budgeted price)
* Hold managers accountable for performance areas you want them to pay attention to

## Book

Feed-forward control: predictions are compared to the desired states and control actions are take that will minimize these differences

Controls can lead to a lack of goal congruence when employees seek to achieve the performance targets in a way that isn’t organizationally desirable

Key terms:

Bottom-up budget setting: allowing individuals to participate in the setting of budgets and targets

## Lecture

Action, results & personnel cultural and social controls

# Chapter 11: Standard costing and variance analysis

## Video

Standard costs: target costs for each operation that can be built up to produce a product standard costs

A budget relates to the cost for the total activity, whereas standard relates to a cost per unit of activity

Standard costing system: most suited to a series of common/repetitive organizations
Works with responsibility centres
Variances are traced to the ^

Compare standard costs of actual output recorded for each responsibility centre and actual costs traced to each responsibility centre, variances are analysed/reported 🡪 investigated & corrective action taken

Price effect & quantity effect

Fewer than the standard hours produced 🡪 efficient

Balance sheet 🡪 standard cost!!

Material price variance: (SP(standard price)-AP(actual price)) x AQ (actual quantity 🡪 quantity purchased!) = (SP-AP) x (AQ)

Material usage variance: (SQ (standard quantity) – AQ) x SP = (SQ – AQ) x SP

Joint price/usage variance (SP – AP) x (AQ – SQ)

Total material variance = SC – AC

(price variance) Wage rate variance: (SR – AR) x AH
(usage variance) Labour efficiency variance: (SH – AH) x SR

(price variance) Flexed budget allowance = (AH (actual hours) x SR – actual cost
(usage variance) Variable overhead efficiency variance = (SH – AH) x SR (standard rate
Fixed overhead expenditure variance: BFO (budgeted fixed overheads) – AFO (actual fixed overheads)

Sales margin price = (ASP (actual selling price) – SSP (standard selling price)) x ASV (actual sales volume)
Sales margin volume = (ASV – BSV) x SM (standard contribution margin)

A 🡪 negative (adverse)
F 🡪 positive (favourable)

## Book

Summary of formulae for variances p. 332

# Chapter 12: Divisional financial performance measures

## Video

Functional structure: all activities of a similar type are placed under the control of a departmental head
Only 1st level only investment centre
managers in functional structure tend to have less independence

**Divisionalized structure**: divided into separate investment/profit centres, functional structure applies below this level 🡪 generally lead to a decentralization of the decision-making
2nd level also investment centres

2 measures of divisional profitability: managerial performance & economic performance of the division

Controllable profit: most appropriate measure of a divisional manager’s profit performance (relative to budget performance)

Divisional profit contribution: incremental short-term contribution
Divisional net profit before taxes: estimate of longer-term contribution

Ideally focus should be on relative measures rather than absolute measures of profit
Relative profitability measures:

* Return on investment (ROI)
ROI = profit / assets (investment)
the higher the better
ROI may motivate mangers to make the incorrect asset disposal decisions / reject very profitable projects because it might reduce the ROI

Cost of capital: rate of profit a company must earn before generating value (interest rates etc.)
Return on project – cost of capital = pure profit!, if positive accept project!

ROI does not include cost of capital, no measure of risk

* Residual income (RI)
Controllable residual income: controllable profit – a cost of capital charge on the investment controllable by the manager
RI = controllable profit – cost of capital charge
the higher the better, if positive 🡪 accept
* Economic value added (EVA)
EVA = conventional divisional profit based on GAAP +- accounting adjustments – cost of capital charge on divisional assets

Non-financial measures 🡪 more long-term

## Book

Functional organizational structure: all activities of a similar type within a company are placed under the control of the appropriate departmental head

Divisionalized organizational structure: split up into divisions in accordance with the products made

## Lecture

Disadvantages of divisionalization: suboptimization and may promote a lack of goal congruence, more costly to operate, loss of control by top management

Cost of capital: cost of using other people’s capital, interests & dividends

Bolts: obligaties

RI (residual income) = profit – cost of capital charge on investment
positive RI always do it, because investors are carrying the risk

# Chapter 14: Strategic performance management

## Video

The performance management framework:

1. Central key objectives
2. What strategies/plans has the organizations adopted / processes and activities / how does it assess and measure the performance of these activities
3. What level of performance does the organization need to achieve this 🡪 performance targets
4. Rewards for employees?

Since then alternative PMF’s 🡪 balanced scorecard

Balanced scorecard:

* Greater emphasis to incorporating non-financial measures into the formal reporting system
* Result was a proliferation of performance measures
* To integrate financial/non-financial measures the balanced scorecard emerged
* BSC seeks to link performance measures to an organization’s strategy

4 different perspectives

1. Customer perspective 🡪 how do customers see us?
2. Internal business process perspective 🡪 what must we excel at?
3. Learning and growth perspective 🡪 can we continue to improve and create value?
4. Financial perspective 🡪 how do we look to shareholders?

BSC consists of 2 types of performance measures:
lagging (financial measures, lags behind non-financial)
leading measures 🡪 if you perform well here lagging measures will be good in the future

Financial measures 🡪 already happened in the past
BSC 🡪 things you still can change, as there is a delay between non-financial events and the financial consequences

There needs to be a connections between perspectives and financial outcomes 🡪 strategy maps with cause-and-effect relationships

## Book

* Cost leadership strategy: aims for lowest cost
* Differentiation strategy: seeks to offer products/services that are considered superior/unique
* Focusing strategy: seeking competitive advantage by focusing on a narrow segment with special needs that are poorly served by competitors

Strategic postioning related to the choice of the optimal mix of the 3 general strategies

Defender strategies: great deal of stability in external environment & concentrate on a narrow/limited mix of products/customers, compete on price, quality and customer service, engage little in product/market development

Prospector strategies: high uncertainty, searching new market opportunities, compete through new product innovations and market development

Balanced scorecard is a strategic management technique for communication and evaluating the achievement of the mission/ strategy of the organization

Lagging measures are outcome measures mostly financial and are results of past actions, do not incorporate the effect of decisions when they are made, they show the impact of past decisions

Lead measures are generally non-financial measures that are the drivers of future financial performance

## Lecture

Balanced Score-Card:

1. Relation with strategy & vision,
2. 4 elements related to this ^ , ¾ leading measures (non-financial) 🡪 tells about the future

# Chapter 15: Strategic cost management and value creation

## Video

Traditional management accounting: cost containment, routinely applied
Cost management: cost reduction, applied on an ad hoc basis

Many of cost management approaches don’t rely exclusively on accounting techniques

The value chain is the linked set of value-creating activities from supplier to customer
Objective is to perform value chain activities more efficiently and at a lower cost than the competitors, focus should be on each link in the chain from the customer’s perspective

Traditional management accounting start too late and finishes too soon in the value chain

Life-Cycle Cost management (LCM)

Total cost of value chain, what is cost of a product if we take all the stages of its life cycle in to account

Cost management can be most effectively exercised during the planning/design stage

Cost incurred: when the costs actually emerge
Costs might be committed very early in the process, only become visible in a later stage
Large part of the costs are committed during the design, there make decisions on costs

Target costing: managing costs during a products planning and design phase
Decide selling price and then estimate the target costs

It’s important that target costing is supported by an accurate costing system using appropriate cause-and-effect cost drivers

Activity-based management (ABM) stages:

1. Identifying the major activities that take place in an organization
2. Assigning costs to cost pools/centres for each activity
3. Determining the cost driver for each major activity

ABM focuses on managing the business on the basis of the acitivites that make up the organization, by managing the activities costs are managed in the long term
In contrast to traditional control reports, ABM analyses costs by activities instead of types of expenses for each responsibility centre

Design for fewer activities 🡪 cheaper product costs
Activities: value-added or non-value-added

Activity-based systems can also be used to manage costs at the design stag
if have ABC system, this is beneficial, otherwise the system is very expensive and doesn’t save any money

Benchmarking:

* Objective is to improve key activities/processes
* Compares these with world-class best practices
* Can result in dysfunctional consequences

🡪

Business process re-engineering (BPR)

* A business process consists of a collection of activities that are linked together in a coordinated manner to achieve a specific objective
* BPR involved examining business processes and making substantial changes to how the organization operates by focusing on: cost reduction, simplification, improved quality & enhanced customer satisfaction

Just-in-Time Systems (JIT) 🡪 example of BPR
based on the idea you want to do everything right the first time, only get inventories when you need them
major features: rearrangement production process 🡪 production cells consisting of different types of equipment for a product, reducing set-up times, increased emphasis on total quality management, training cell workers to multi-task, delivery of supplies immediately preceded demand or use, elimination of non-value added activities

Strive for maximum efficiency, minimum waste

Quality cost management: quality is now one of the key competitive variables, emphasis on the provision of info relating to the cost of quality

Cost of quality reports: prevention costs, appraisal costs (inspection, testing and quality audits), internal failure costs (scrap, rework), external failure costs (returns, complaints)
Continuous improvement with the aim of 0 defects
Non-financial measures and statistical quality control tools key role

These new techniques 🡪 looking at more things, focusing more on sustainability

## Book

Reverse engineering: examining a competitor’s product in order to identify opportunities for product improvement/cost reduction

Key terms:

Appraisal costs: costs incurred to ensure that materials, products and services meet quality conformance standards

Kaizen costing: making improvements to a process during the manufacturing phase of a project life cycle through small incremental amounts, rather than through large innovations

# Chapter 16: Challenges for the future

## Video

Management accounting criticism / development:

* **Environmental/sustainability issues**: increasing emphasis to environmental cost management
Environmental cost report: environmental protection costs, appraisal costs, internal failure costs & external failure costs (similar to quality cost report)
* **Focus on ethical behaviour**
* **Information technology and digitalization**: wide use of enterprise resource planning systems, emergence of cloud computing & impact of big data
* **Globalization and Management Accounting International Practices**
* **Intellectual capital and knowledge base economy**: intangible benefits accessible by a firm from its workforce/established relationships with customers, suppliers & competitors, intangible benefits need to be considered in order to provide a greater understanding of the process of value creation
At present there is no consensus as to what represents a recommended approach to managing/reporting intellectual capital.
* **Integrated reporting**: aims to provide info on performance in a single document, showing relationships between financial/non-financial performance and how there inter-related dimensions are creating/destroying value for shareholders/stakeholder
Integrated external corporate reporting has many similarities with the BSC approach that is used for internal performance management.

## Book

Key terms:

Shared value: policies/operating practices that enhance the competitiveness of a company while simultaneously advancing economic/social conditions in the communities in which it operates.

## Last lecture (overall summary)

Product (asset 🡪 COGS, balance sheet to income statement) cost

Period (directly into income statement 🡪 expense) cost

Direct / indirect (overhead) cost

Indirect 🡪 cannot be easily traced to a product, is assigned to a product

Cost allocation simple/traditional method 🡪 1 allocation rate distribute over the products with volume driver (e.g. labor hours)

Fixed/variable cost (behaviour)

Operating leverage: a measure of the extent to which fixed costs are being used in an organization
Operating leverage is greatest in companies that have high proportion of fixed costs in relation to variable costs. 🡪 high risk if high proportion of fixed costs

Relevant costs 🡪 only the costs that differ between the alternatives
for decision making

Maximize contribution of the constraining factor of production

Depreciation (costs reflecting the lower value of smt)

Price takers 🡪 little control over the prices
🡪 cost information is of vital importance in deciding on the output and mix of products

Price setters 🡪 some discretion over the setting of selling prices
🡪 cost information is of vital importance to price setters in making pricing decisions

Short-run / long-run 🡪 importance to relevance, longer period more relevant costs

Allocate indirect costs to cost objects
Activity-Based Costing (ABC) 🡪 activity based cost drivers to improve product costing
New products get higher indirect costs in this system
1. Assign costs to pools according to activities
2. Allocate costs in the activity pools to products

Unit/batch/product/facility level activities (hierarchy)

Operating budgets: sales budget 🡪 inventory purchases budget 🡪 S & A expense budget 🡪 cash budget

Action / results/ personnel, cultural & social controls 🡪 basis of the budget

Materials and usage variances

Master budget 🡪 standard cost

Flexible budget 🡪 budget for different quantities (actual quantity) at standard cost

Actual cost column: actual quantity used x actual price per pound
Variance dividing column: actual quantity used x standard price per pound
Standard cost column: standard quantity x standard price per pound

Measuring divisional profitability:

* Return on investment (ROI)
* Residual income (RI) 🡪 NI – CoC x I > 0 accept deal
* Economics value added (EVA)

Balanced scorecard 🡪 long term and also non-financial measurements

Leading / lagging (financial)