Key Figures 1997-1999	1999	1998	1997
Profitability			
Profit Margin	4,6%	9,9%	11,5%
Asset Turnover	2,0	2,1	1,8
Return on Investment	9,0%	20,4%	20,7%
Return on Equity	9,4%	36,3%	33,1%
Return on Debt	8,8%	10,1%	11,2%
Debt/Equity Ratio	1,9	1,5	1,3
Earnings Capacity Analysis			
Profit Margin	4,6%	9,9%	11,5%
Contribution Margin %	44,0%	47,0%	50,0%
Marketing Margin %	41,6%	45,5%	48,2%
Capacity Ratio	1,66	1,92	1,78
Operating Margin %	14,8%	20,7%	25,4%
Index Numbers			
Turnover	152	140	100
Variable Costs	170	149	100
Rental Expenses	162	156	100
Other Expenses	170	138	100
Salaries and Wages	169	139	100
Total Cash Period Costs	178	153	100
Total Depreciation	112	109	100
Efficiency in the use of Assets			
Total Asset Turnover	2,0	2,1	1,8
Stock Turnover	4,0	5,0	5,0
Debtors Turnover	8,0	8,5	9,0
Creditors Turnover	8,6	7,5	6,1
Investment Turnover	4,1	3,9	3,0

1. The Company and its Environment

1.1 The Case

The managing Director Jan Hansen sees the need for change and based on talks with some of his friends and the new Business Development manager (Janne Schmidt) he is now convinced that he will have to steer the business on to an E-Business Strategy.

He has invited the management team, Bo Iversen, Janne Schmidt, Niels Hatting, the marketing Director, John Dantorp, the R & D director and Poul Henna, the procurement and production manager.

After a brief introduction Jan Hansen explained that he felt the company had reached *its maturity stage* within the current mode of operation and within its existing market coverage. We need to *streamline* operations and from such a new platform we should seek to *expand* our market coverage.

"Our market niche is attractive, but too dependent on the development in a small geographical area. Our size will not allow us to substantially *invest* in automation and in state of the art design and manufacturing equipment".

"I believe that we have the needed capabilities to broaden our base and return to *growth* and *profitability*. I believe the answer is E-Business. We've got to get on the net probably on a country- by-country basis, so that people will be able to buy from us directly and in such a way that we will be able to handle the *logistics*".

He put up a few overhead slides, which showed where the company was at and the latest *Forecast*, which showed that the *Profit* would probably be further depressed.

"So we can weather it out and cut some *costs*. Alternatively we adjust our *strategy*".

"So what do you say, should we get into the E-Business".

People around the table were excited, but also concerned. John Dantorp wanted to know whether any *market research* had been done. "can we rely on the same *taste preferences* and the same *buyer behaviour* if we move away from our *target market*, and what about *competition*".

"Eh, well we've got a lot of work to do, said Jan Hansen".

"How will the customers find us on the net", Paul Henna asked. "Don't you worry about that", said the marketing director, "that is my job".

"We will of course have to study this in detail", said Jan Hansen. "I am putting Janne Schmidt in charge of this programme, and I ask you all to work with her, and all come back in here in one week's time with a summary of issues and a schedule for bringing this one to a conclusion".

After the meeting Janne went back to her office and stared out the window, then smiled: "This is going to be fun, I will have a chat tonight on the phone with some of my old buddies from school, without letting them too much in on the details".

1.2 Introduction – How can Economics and Accounting help in Running the Company

Accounting helps describe a business situation and the implications of change in quantifiable and measurable terms. Economic theory provides the models from where one can pick the one that accurately describes a given business situation against a set of objectives and under a given set of assumptions.

Accounting is divided into Financial Accounting and Management Accounting. Financial Accounting seeks to accurately document and report the implications

of financial events such as purchases and sales over a given period together with the statutory financial reporting requirements typically the Annual Accounts. The Management Accounting has focuses on the capture and reporting of managerially relevant operating and financial information.

The purpose of this book is to develop an understanding of accounting and how it is used in supporting the management activities of the company including the financial management. Accounting gets involved in all aspects of the company and the company's environment including Strategic Planning, Business Planning , Budgeting and the Follow-UP of these plans. Management uses Management Accounting to Direct and Control the activities of the company once the strategy and policies of the company have been set. Typical Management Accounting Tasks are: Material and Resource Management Systems, Stock Management Systems and Sales, Distribution Management Systems and Financial Management.

Management wants to enter attractive markets. Economic theory helps to assess the level of attractiveness of a given opportunity. Management wants to know the chance of success, economic theory helps to assess the expected value generation and to measure the risks. Management wants to avoid the fate of certain other companies, economics provide the models to assess the key economic factors causing the unfortunate situation. Such factors may be competition, tactical decisions such as price, product/service features, promotion, channels of distribution, or maybe it was demographics, trends or general taste.

For looking both back and forward Economic theory and Accounting are powerful tools to aid the decision making in a practical environment.

Exhibit 1.1: Spotting and Recognising Change:

Propeller planes were doing great in the 50s

Drive the change or adapt

Economic fundamentals change businesses. The train provided new economic opportunities at the end of the 19th and beginning of the 20th century, as did the motor vehicle some years later. The telephone and the aeroplane again brought the world much closer together in time. The economic change that was wrought onto businesses from the opportunities generated by these inventions can be modelled, and those that applied the right assumptions in time, were able to see the picture earlier and thereby make the better decisions.

The need to change strategy is driven by economic events. Propeller planes were doing very well in the early 50's . The change of speed brought on by jet engines totally changed that.

Brugsen and Irma fought it out in the 70^{th}'s, now one is owned by the other, neither is making a satisfactory profit, new distribution methods and logistics and value-oriented customers brought the prices down as well as new successful players.

Our hypothetical company Offur A/S realises that times are changing and if it wants to regain momentum, it will have to redefine its business model. The accounting system together with other signals read by the company management provided the warning. The company will need a systematic approach for working through the economic realities and define a route most likely to generate the

results desired by people with a controlling interest in the company.

The typical analysis & Planning topics can be as follows:

1) The Company, its environment, Interest Groups and the identifikation of the key business opportunities.

2) An assessment of the attractiveness of the opportunities envisaged by the company.

3) An assessment of the Company's competitive capabilities for each of the opportunities reviewed.

4) An assessment of the key strengths, key weaknesses, the key opportunities and threats based on the analyses generated under 1), 2) and 3) above leading to a strategic review, where management selects the direction, the goals and the key policies for the company.

5) Given the direction from 4) above, management will need to set measurable targets (objectives), for the company functions and operating units, to be able to prepare a Business Plan laying out both the plans, the actions as well as the financial implications.

6) The fundamental Economic and Management Accounting and control issues and processes needed to support the project/business through to completion and success.

1) to 4) will be reviewed in the following section. The Item 5) and 6) will be defined below and described in more detail later in the book under Management Accounting and Budgeting.

1.3 External and Internal Drivers and Forces

1.3.1 The Legal representation

A company is a legal entity in its own right. The exact structure may vary from a small Single Proprietorship, a company owned by just one person to a large Limited Company with thousand or more shareholders.

The various legal structures common in Denmark will be described below under the Financial Accounting and the Annual Accounts.

A company, owns whatever assets/items it has taken legal possession of such as machinery, stock, a bank account and cash, and the assets are funded by the company from a combination of Owners Equity and Debt.

1.3.2 The Business Concept

Explicitly or implicitly any business is based on an idea, some fundamentals which separate the business from other businesses.

An idea can be very sophisticated like Amazon.com, selling books and many other things on the internet on a global basis within an E-Business Concept, partly from its own warehouses. Or it can be more simple like providing cleaning services for offices in a specific geographical area.

The Concept may be for a product or a combination of a product and a specific market. The product could be cleaning and the market could be dental clinics.

The concept would cover questions like:
What is provided (designed, developed, manufactured, sold, distributed and or serviced)?
To Whom is the **What** provided?
How is the **What** provided and made available to the **Whom?**

1.3.3 The Key Competencies

What are the competencies that make this business unique in making its products or services available.

Unique competencies may be a patent restricting others from manufacturing and selling the product, or it could be a good location, certain skills of the workforce or simply the low cost of manufacturing.

1.3.4 Interest Groups and Contacts

Some use the word Stakeholders, i.e. parties who have a stake in the success of the company. Such Stakeholders can be divided into two groups:

1) Those who directly interact in the activities and the processes of the company i.e. Suppliers, Customers, Employees, Management, the Shareholders, the Bank/Lenders and Public Service Providers.
2) Those who more indirectly have an interest in the company such as the Trade Unions, the Business Associations, Universities and other Educational Institutions as well as the Society in general and the Tax Authorities.

A variation of this theme is shown in below Exhibit 1.2.

Exhibit 1.2: The structure of the key interest groups

Each of these interest groups have an interest in the company and the company has an interest in them. The extent of the interest as well as the influence from the given interest group varies from business to business and over time. An interest group may present an opportunity in one area and a restriction in other areas.

Economics is the study of scarce resources. Labour, raw material and money are scarce resources, otherwise we would all be driving Porsches and Ferraris. In a free economy resources tend to flow towards activities which provide the most value, thereby restraining them in areas where such value (cost) can not be justified.

The interest groups of a company see the opportunities in the company and support it in a way that matches the benefits it receives or expects to receive from the company.

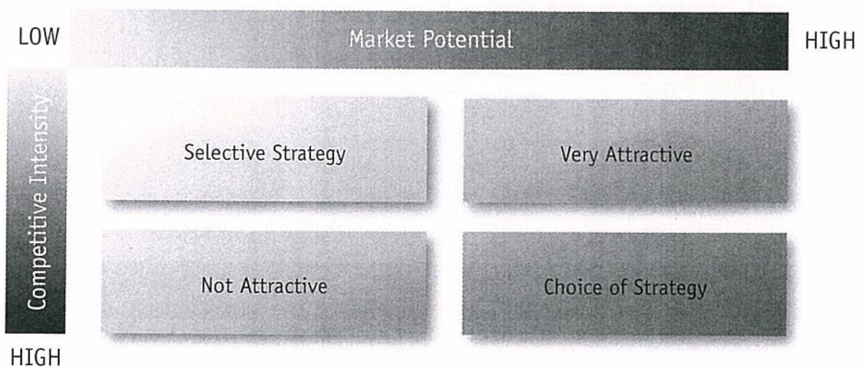
The interest groups are what makes the company possible.

1.3.5 Assessing the Attractiveness of Business Opportunities

If a Business Opportunity for say the addition of a new market or a new product, is not attractive then why do it, and conversely if a market opportunity is attractive then it is worth looking into.. Economics help to assess the attractiveness of Business Opportunities. Attractiveness can be measured in terms of

a) The Business Potential of the opportunity
b) The Competitive Intensity surrounding the business opportunity

Exhibit 1.3: Defining Attractiveness



Large potential combined with low Competitive Intensity signifies high attractiveness.
Low potential combined with high competitive intensity signifies low attractivenes.

This is illustrated in Exhibit 1.3.
Economics also provide several tools to analyse each of the two dimensions:

- **The Business Potential of the opportunity**

1) Market Projections
2) The Product Life Cycle Projection
3) The so-called PEST analysis

Market Projection

For this purpose the interesting issues are:

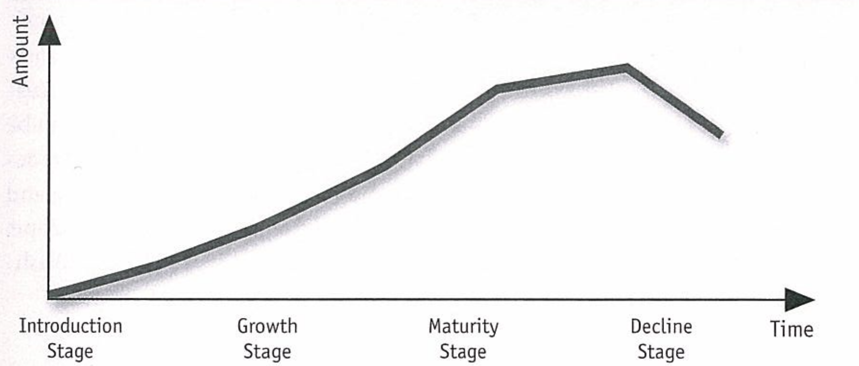
1) an assessment of the market's size, the bigger the more attractive
2) the expected growth of the market.

Again the faster the growth the higher the attractiveness. Various methods can be used to assess both of these issues. It is beyond the scope af this text to go into detail on any such methods. One method, however will be shown below:

The Product Life Cycle (The PLC)

Most products that survive the initial product offering will go through a life cycle along the pattern shown below in Exhibit 1.4.

Exhibit 1.4: The PLC curve, Annual sales Amount



However, the timing of each stage varies from product to product. Most products you buy today in the supermarket were not there in their current packaging or maybe not even from the same supplier five years ago. Some products stay on the market for a very long time, but eventually their sales will stagnate and go into decline.

To evaluate a product opportunity and its growth potential, it is important to know where it is on the PLC. If it is in the growth stage, how far has it gone. What is the likely time until maturity. If the product is already in the maturity stage, how long will it stay there. For this purpose another product can often be used for analogy. A product heading for the growth stage or in the growth stage is considered of high potentiel.

The PEST Analysis Approach

PEST is the initial letters in four headline issues, see Planning Conditions above:
P : Political
E : Economics
S : Society
T : Technology

Using these words as clues one can collect data relevant for the business involved. Typically this approach is used for Business Analysis and Planning. The analysis can be used to analyse an industry to assess which factors have a potential impact on the development of that industry.

Political

Which political initiatives are likely to provide opportunities or threats to the company in the future. Subjects such as the environment, public transport, privatisations, outsourcing or other factors relevant to the company can to be analysed and discussed. As the political agenda is driven more and more from Brussels and Strasbourg issues especially important to the business/industry can be selected and viewed against the political agenda there. In this context lobby activities may well be advised. In addition the political agenda is globalising and taking on new meaning. The rate of Interest may be set in Frankfurt for Europe, but this again may be a reaction of what is being decided in Tokyo and Washington.

Economics

The economic climate influences most companies. Is the economy heading for a period of growth, higher employment and lower interest rates. The company will have to assess which of the many economic factors that may have significance to the development of the industry they are in. The impact likely can be modelled and used for future planning.

Society

The social trends may be of importance to the company/industry in question. Issues here include:
a) Demographics
b) Eating Habits
c) Leisure habits

d) Domestic issues and preferences such as archietecture and Interior decorating.
e) Dress Code
f) Ethical standards and developments etc.

Technology

Technological issues are important, as they provide new opportunities and maybe help drive down the costs. New technology helps provide new services, just look at t the internet and banking. The company will need to assess whether the potential development from these new technologies present an opportunity and/or a threat and review the issues related to a Do-Nothing-Scenario.

1.3.6 The Competitive Intensity surrounding the business opportunity

The competitive intensity of a market can be viewed from the competitive structure or from a broder perspective looking at all the forces setting the stage for the product. This last is gaining significerede with the Porter Five Forces descried later:
The competitive structure is typically viewed in terms of number, strength and size of the players in the market and typically is divided into four groups:

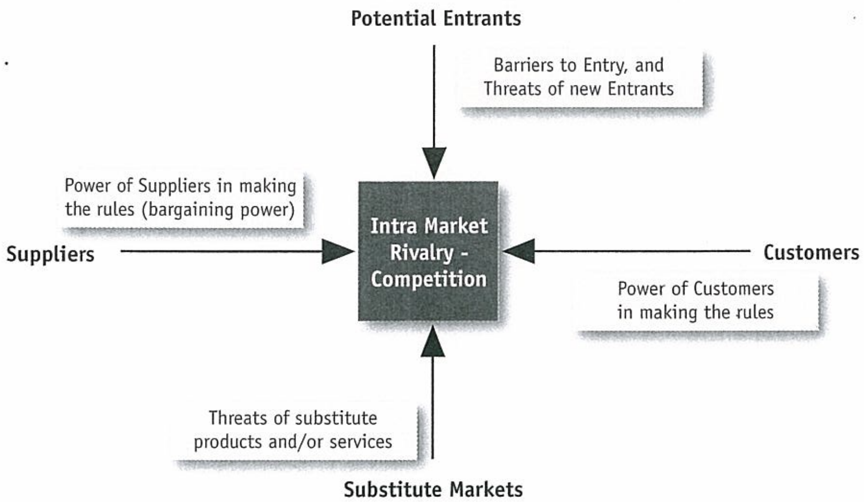
- Monopoly – Prices are controlled by one player
- Perfect Competition – Many players who themselves have no influence on price. The participants have to adjust themselves to the market.
- Oligopoly – Rather few players in the market set their prices in respect to what others may be expected to offer.
- Monopolistc – A market with many players, but with room for differentiation allowing the players to set their own prices within certain boundaries.

From an attractiveness point of view monopoly generally means low Competitive Intensity, putting attractiveness high. Monopoly allows the company to set its own prices enabling the company optimise within the company's own operating conditions. In the perfect competition model the one company wins who has the lowest costs. The lowest cost producer feels the least restricted by the price constraint given by the market. In a monopoly the restraints are mainly internal, whereas the restraints in perfect competition are mainly external. In real life however things are less clear cut. In a monopoly you can set your own prices to customers, but the purchase prices are set by somebody else. If that company is also operating as a monopolist, then he/she will dictate their prices to you. So a monopolist is free to set his own parameters, but the cost of these parameters may be set elsewhere, so a monopolist is not free to set his own profit.

The optimum situation here is defined by the situation where one has the maximum freedom to make ones own decisions, with no constraint placed by other people, allowing the generation of maximum profit.

To assess these issues Michael Porter defined an analysis tool, which looks at the forces facing an industry and restricting the industry in generating profit. In this respect he has defined the key five forces, (the Porter Five Forces, the Porter competitive framework) which should be assessed by any company as it reviews its strategic and tactical options in a given market. The less force, call it Competitive Intensity, placed on the industry from these 5 forces the more attractive the opportunity.

Exhibit 1.5: The Porter Competitive Framework (the five forces)



1.3.7 An assessment of the Company's competitive capabilities for each of the opportunities reviewed

Once the market (segment) has been identified and found attractive it is well advised to assess the company's capabilities in terms of serving the identified mar-

1. Competitive Strategy, Michael Porter, The Free Press.

ket (segment). To do so it is natural to start this by analysing the customer needs in that market and assess the customers' reasons for buying (the customer buying criteria.) "Its the taste" as an advertisement goes. A market survey may reveal the customers key buying criteria. How important is price?. How important is availability? How important are various features? Once the company has profiled its own capabilities against each buying criteria, it can compare this to the ones for the key competitor.

In summary a survey can be used to collect data outlining:

The Customers' key Buying Criteria
The company's Capabilities in serving each of these Buying criteria
The Competitors capabilities in serving each of the Buying Criteria

The analysis is meant to identify and signify the company's strengths and weaknesses in the light of both customer requirements and its competitive capabilities, and defines the key ingredients in the below SWOT analysis.

The analysis further helps to identify the Critical Success Factors i.e. the key for success in the market place. Such could be a well trained work force, automation, technology etc.

1.3.8 The SWOT

The word "SWOT" represents the first digits in the words:

Strengths
Weaknesses
Opportunities
Threats

The SWOT is a natural output of the Business Analysis described above. The analyses will provide the facts and background to extract the important issues for each headline. The PEST analysis together with the Porter's Five Forces analysis will identify the opportunities and threats . The analysis of competitive Capabilities and the financials will identify both strength and weaknesses. Again such observations should not be a presentation of all ills, but rather specific issues assessed in a competitive sense. The observations are not static, in fact they will have to be reviewed regularly to ensure that actions are prepared to take advantage of the Strengths and the Opportunities and that Weaknesses, and Threats are recognised, eliminated and where possible converted to opportunities.

If After Sales service is the most important success criteria, then how strong is the company in serving this need, and how strong is the benchmark competitor.

An example of a SWOT for a small National Chain of Pizzerias in Denmark is shown below:

Strength	Weaknesses
Local Taste	Local Brand
Low Costs	Poor Systems
Independent Local Management	Marketing Skills
	Lack of a brand

Opportunities	Threats
Large Office Orders	Internet Ordering
Activities for the Young	Rental Cost Escalation
Growth in Retail Centres	Global Life Style Developments

The SWOT analysis summarises the business and strategic analysis of the business and provides the key strategic input for the top management to select the key strategic opportunities and the strategic concerns which have to be addressed by the company to optimise its chances for success.

1.3.9 The Value Added Concept and the Value Chain
The External Value Chain (The Supply Chain)

Hundred years ago one would go to a coach maker to buy a coach (if one could afford it). The coach maker would meet the customer and present various alternatives. When the right coach was found, the coach maker would build it pretty

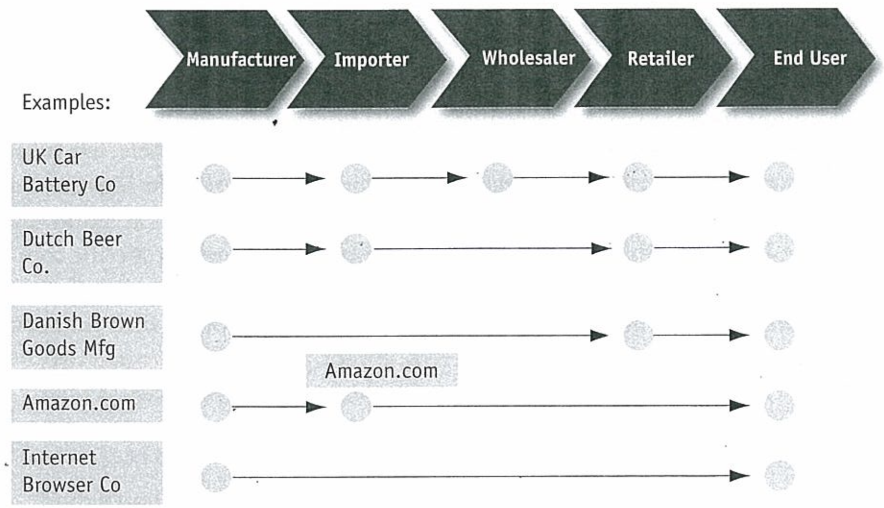
much from raw materials all the way up. When the coach was ready, the customer would bring his horses, pick it up, pay and drive away. The value chain simplified was outlined in the above flow from raw material to end user.
Specialisation and globalisation has changed all that. Today's cars are assembled in typically one location for world wide distribution and sales, but from components and sub-assemblies produced anywhere in the world, selected from companies where the expertise related to the individual item is the highest and the costs/quality combination is the best. No one can be the best at all things. Companies around the world develop core competencies aimed at specific components or combination of components. This enables the development of standards, where components can be used across many brands of the final product, raising the level of production and thereby lowering the costs.
For the car industry, for example, the supply chain can be very long:
Several levels of sub-assembly suppliers and Component manufacturers
Assembly
Transport
Wholesaler
Retailer
Finance House
After Sales Service

Some of the players are paid as sub-contractors, but still provide an important role in bringing the product to the end user. The specialisation is likely to continue to develop in the future.

The development, however, will only take place as long as each link in the chain provides value to the next or prior links, in excess of the costs of performing the task themselves.

With new technology, automation, Information Technology (IT) and the Internet, the map is currently being redrawn. In some cases the manufacturer or wholesaler can bypass some or all of the subsequent links in the chain and address the end user or retailer directly. As you eliminate links in the chain throught improved or simplified processes, costs may come down and communication may become more effective between the operators and the end users.

Example of different value chains are shown below:



Try to consider other companies, their value chain, and possible beneficiary routes to increased or reduced links.

The Internal Value Chain (The Value Added Model)

The costs of items (materials and services) purchased from the outside plus any costs and profit added to such items inside the company constitutes the Internal Value Added. The Value Added can be divided in the below categories:

1) Inbound Logistics – The activities involved in bringing purchased items into the company and making them available for activities within the company.
2) Manufacturing – Converting material and services purchased to a finished product for sale including stocking levels.
3) Marketing – Activities necessary to collect customer orders
4) Distribution – Handling the logistics of bringing the finished product to the customers incl. Stocking levels
5) After Sales Service – The activities necessary to support customers in their use of the products sold

The above activities are called the primary activities. Each of the primary activities are supported by other functions in the company necessary to optimise customer satisfaction and profitability. Typical support activities (functions) are:

a) Market and Product Development, including activities necessary to develop the products for sale, and to identify and prepare the markets the company wants to address.
b) Procurement (purchasing), which include the activities of optimising stocking levels as well as selecting and negotiating terms with suppliers
c) Technology development. Defining the technology mix, machines, automation, processes and people, which will best meet the company's objectives in terms of profitability and customer satisfaction.
d) Human Resources, which includes an outline of the employee competencies required short and long term as well as the recruiting, motivation and development of the company's workforce, administrative personnel and management necessary to meet the company's objectives.
e) The management and business structure defining the vision and infrastructure of the company.

Both primary and support activities are supposed to add value, and should be scrutinised in this respect. Non value added activities are paid for by the company and can not be passed on to the customer base. Costs so paid for by the company itself reduces profit.

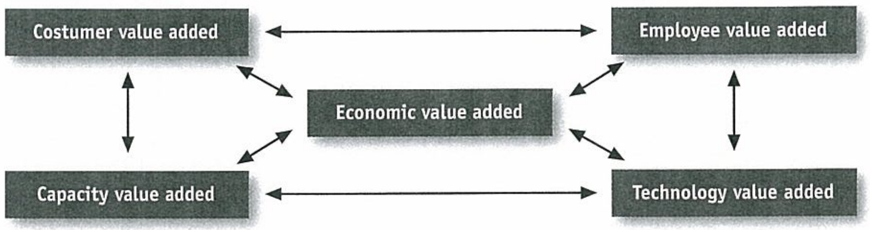
A question like "Why do we do this" – is often answered "We have done this as long as I have been here, and I have been here so and so many years". Who does it benefit?. In what way does the process/cost help to sell the product? Once the benefit has been defined, the benefit can be compared to the cost. Not performing this analysis, is what kills many companies.

It is important to understand that the selling price equals The total Value Added of a product. Therefore only costs which add value for the customer can be added to the price. All costs should have a Value Added Aim.

The Value Added Aim

The aim of the planning process is to constantly address the issue of generating Value. Value may be Profit, Shareholder Value or in Non-Profit organisations – Value(s) described in criterias for Excellence, Quality or otherwise.

It is important to understand this value added aim. The concept describes what Value is created. The Value Added Process can be described as shown next page:



For each value function it is possible to define the value drivers (key performance Indicators CKPI), whereby the company can set the measurements for planning and follow up, as shown below:

<u>Customer Value Added examples</u>
Products on time. Mean time between failure. Speed of delivery etc.

<u>Employee Value Added</u>
Responsive to customer requirements. Knowledge generation. Alert and visible.

<u>Technology Value Added</u>
Flexible to customer needs. User friendly. Real Time. Reliable etc.

<u>Capacity Value Added</u>
Quality, Output, quantity and costs.

<u>Economic Value Added</u>
Profitability, Return on Sales, Return on Assets and Return on Equity.

The double arrows used indicate that success in one area leads to success in the subsequent value added areas.

1.3.10 The Income Parameters

A parameter is defined as a Decision Variable, for which it is up to the company to select the value/Input.
The four P's -(Price, Promotion, Product and Place) Parameters for income generation can be defined at different levels i.e. The Strategic, Tactical and Operational Levels. Examples of each are shown next page:

Exhibit 1.6: Strategic Tactical and Operational Issues

Strategic Decisions	Tactical Decisions	Operational Decisions
Which Markets	Pricing Level for a market	Pricing a specific Order
Which Products	Promotion Plan	Planning a specific Ad Campaign
Quality Policies	Product features	Sales Route Planning
Pricing Policy	Place, from which locations should the products be sold	Controlling selling activities
Promotion Strategy	The Sales Budget	
	The Sales Plan	

The strategic decisions form the framework for tactical and operating decisions. The tactical decisions for the operational decisions. Which markets could be Germany , the product could be computer games. These decisions are made at the top management level. At the local level in Germany most decisions will be at the tactical and operational level. The decisions here will be made to execute the strategy defined by top management and within the policies issued by the strategic top management.

Management decisions can be divided into:
1) Activity Decisions – Market and product decisions
2) Capacity Decisions – Structure and resource decisions
3) Financial Decisions – Choice of funding, Liquidity management decisions

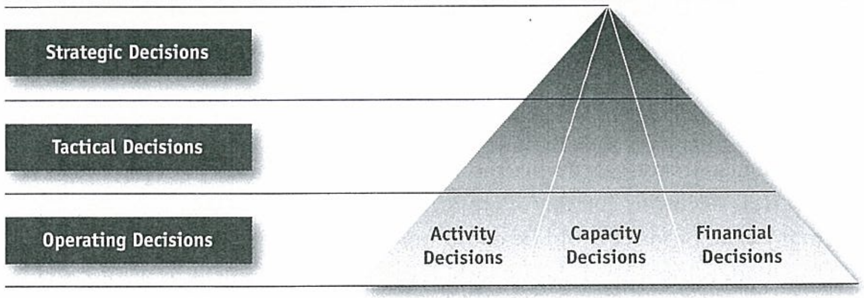
Exhibit 1.7: Activity, Capacity and Financial Decision examples by Strategic Importance The Management Pyramid

	Strategic	Tactical	Operational
Activity	Markets, customer groups export agent, pricing, policy and Quality	Choice of paramenters, currency of exchange, sales planning and activity budgets	Quotations, Sales management, Quality Management, Route planning
Capacity	Location, technology, investments, organisation structure and personnel policy	Analysis of employee requirements, recruitment and the capacity budget	Production plan, repair and maintenance plan, personnel administration and efficiency control
Financial	Equity vs debt, debt structure – domestics vs international loan mix.	Exchange management, funding, credit policy and the liquidity budget.	Exchange contracts, liquidity control, debtors and creditors payment management and cash management.

This can also be analysed in a management Pyramid.

We called this the management pyramid because the decision levels often are viewed as a pyramid, the every day decisions at the lowest level and the strategic (policy) decisions at the top.

Exhibit 1.8: The Management Pyramid



1.4 Cost Definitions and Costing Issues

1.4.1 General

Cost and value are two sides of the same issue. If a cost does not produce value, then why have it. To obtain a certain value you will have to incur certain costs. Value in this context is the income side, cost is the expense side. Income less expenses is profit. A company generally wants to create more value (Income) than the costs needed to generate that value

Income (Total Value Added)	DKK xxxxxx,xx
Less Total Costs	-xxxxx,xx
Profit	xxxxx,xx

1.4.2 Cost Definitions

The general concept of the word cost is straight forward. It is a word used in the everyday language. What did that pair of shoes cost. The answer may be hard to understand, if you are a man, but we would expect to be told what the person actually paid for the shoes.

In accounting the word cost may have many different meanings. What did the widget cost?, What does it cost today? What would it cost to make it? The three questions may produce three or more different answers, like 1) I paid DKK 100 for it 2) Today I would have to pay DKK 110 and 3) It depends: How many; will it be

an extension of current production, or a totally new production; out-of -pocket costs, or total costs including a fair share of the fixed costs operating the factory?

What was a simple question produces a complex answer. This chapter will help structure the issue of cost for accounting and decision purposes.

General definition

In line with the above, cost is a measurement, in monetary terms, of the resources used for a certain purpose.

The purpose of the measurement may be for descriptive or for decision purposes. Only costs relevant to the purpose are included. For accounting reporting like the Annual Accounts, the Historic Costs, based on what was actually paid for the item when purchased irrespective of when it was purchased, is relevant, as one of the purposes of the report is to show what actually has happened. However as you will see later in Financial Accounting there are exceptions.

For decision purposes the relevant costs should include only those that have an impact on the options available to the decision maker. Costs other than that confuse the issue.

1.4.3 The Technical Assumptions

The costs are a function of the resources required to produce the Value Added. This function is called the Production Function which includes the combination of factors necessary to produce the final product or service of the company. In this context production has to be viewed in a broad sense covering the value generation of a manufacturing company as well as any service company such as an auditor or a retail outfit.

As illustrated in Exhibit 1.9, a mix of input factors enters a conversion process as defined and developed by the company leading to the final product/service provided by the company.

1.8 Breakeven Analysis

1.8.1 General

If a company claims they are operating at Breakeven it means they are making zero profit. Total Costs are equal to Total sales Turnover plus miscellaneous income and Financial Income. To keep it simple, below we assume that miscellaneous and financial income is zero.

As described earlier Total Costs consist of Variable costs and Fixed Costs. Under simple conditions Variable costs vary in proportion to sales. The breakeven Sales Turnover = Variable Costs + Fixed Costs. This can be rewritten to:

Sales Turnover – Variable Cost = Fixed Costs. Turnover less Variable Costs is the same as the Contribution Margin, therefore at breakeven the Contribution Margin = Fixed Cost..

The contribution margin can also be defined as Sales Turnover times the Contribution Margin Percent (Contribution Margin *100) /(Sales Turnover) – then the Contribution margin divided by the contribution margin percent is the same as sales turnover.

At breakeven the contribution margin equals Fixed cost, therefore the Breakeven sales can be found by dividing the Fixed Costs by the Contribution Margin %.

$$\frac{\text{Contribution Margin} * 100}{\text{Sales Turnover}} = \text{Contribution Margin \% (CM\%)}$$

Turnover * Contribution Margin % = Contribution Margin

Breakeven Sales * Contribution Margin % = Fixed Cost

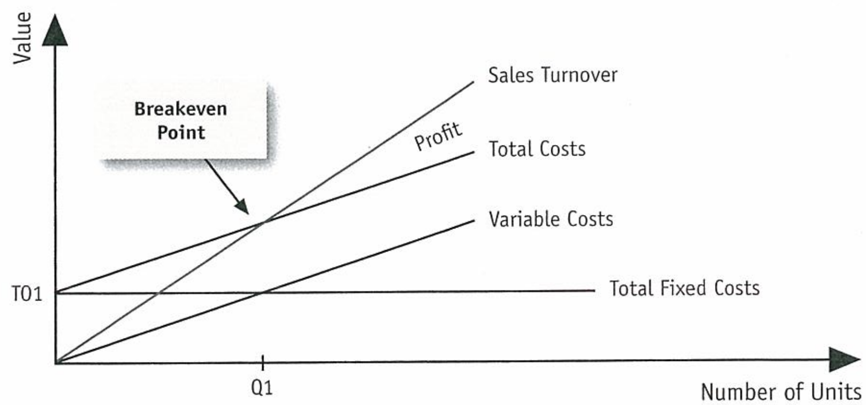
$$\frac{\text{Fixed Costs}}{\text{Contribution Margin \%}} = \text{Breakeven Sales}$$

The breakeven sales figure may be useful for a couple of measurements – The safety margin:

$$\frac{(\text{Actual Sales Turnover} - \text{Breakeven Sales}) * 100}{\text{Breakeven Sales}} = \text{Safety Margin \%}$$

The breakeven concept can also be demonstrated graphically. Using a simplified price and cost scenario, where both the unit price and the variable unit cost are constant, and fixed costs stay fixed for the entire price range. The breakeven point is where the price curve intersect with the variable cost curve as shown in figure 1.1.

Figure 1.1: The Breakeven point demonstrated graphically:



TO1 = Breakeven turnover Q1 = Breakeven Quantity

Until breakeven the company operates at a loss. The contribution margin is positive from the first unit. When sales units goes beyond the breakeven point the company is in profit. The breakeven point can be expressed in units, which can be read off the graph as Q1, or as the Turnover value, which can also be read off the graph as TO1.

1.8.2 Sensitivity (using the Breakeven analysis method to calculate sensitivities)

The Breakeven analysis Method can be used for various sensitivity tests.

Example: The sales manager believes the company will benefit from the introduction of an advertising campaign. He wants to spend DKK 1, 0 Million. How much would the company have to sell more to pay for this campaign, and before it starts to generate a profit? The Contribution Margin for the product in question is 25%. Therefore the company has to sell:

$$\text{Breakeven Sales} \quad \frac{1.000.000}{25\%} = \text{DKK } 4.000.000$$

2. Financial Accounting

2.1 Introduction

2.1.1 The role and objectives of the accountant

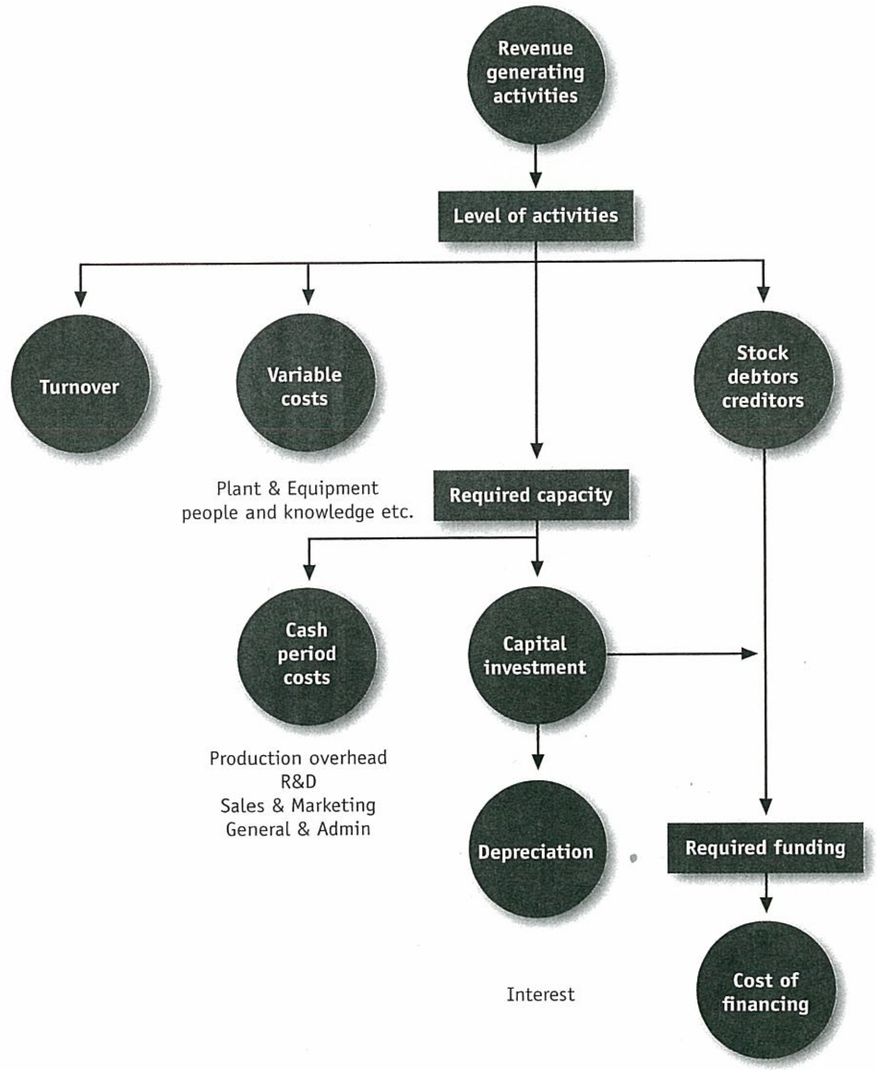
The Accountants provide quantitative information about economic entities. The information is predominantly financial in nature and, based on a study made by H.A. Simon[1], may be divided among the below key objectives:

1. Scorekeeping. Am I Doing OK? The accumulation of data. This accounting issue enables internal and external parties to evaluate the performance of the organisation as well as its general financial position. This will include the reporting to share holders, Tax Authorities, Government and other external parties such as banks, customers and suppliers.
2. Attention Directing and Control. What should I look into? The systematic and consistent method of recording and reporting financial information will assist management to focus on areas of opportunities, growing risk, imperfections and inefficiencies. The information generated here generally play an important role in the ongoing control of the activities carried out by the business, as well as with the analysis needed for the ongoing Business Planning activities.
3. Problem Solving. Which Method is the Best? Accounting data is often the data source needed to address non-recurring issues, situations that require special accounting analysis and reports.

Financial Management can be described within the Economic Structure outlined in Exhibit 2.1.

1. H.A. Simon, Administrative Behaviour, 2nd Edition(New York: The Macmillan Company p.20)

Exhibit 2.1: The Basic Financial Structure of a Company.



Activity
Why does a business have to prepare an annual account ?

There are a lot of reasons for a business to prepare an annual account. Let us mention some of the reasons:
- To determine whether the business has a profit or a loss
- To determine the financial health of the business
- In order to assess the past performance
- To assist the future decision making
- In order to comply with the law
- The annual accounts provide a valuable source of information and are of interest to a number of people

2.1.2 Users of financial information

Exhibit 2.2: Users of financial information

There are a wide range of people and organisations which use accounting information regarding a particular business. The accounting tries to meet the needs of such a wide range of purposes. The most important groups which use accounting information about businesses is shown in Exhibit 2.2.

The different groups need the information for different purposes.

Customers use the information to evaluate the possibilities for the business to stay in business and to fill the needs of the customers.

Suppliers evaluate the ability of the business to pay for the goods and services supplied. For a key supplier also the continued relationship between to two businesses is evaluated.

Government need information about the business for taxation purposes or VAT settlements, and to check that the business follows general rules about the annual accounts.

Owners want to evaluate the business to see if it runs effectively and to evaluate the risk of the business.

Lenders use the information to evaluate the risk of the business to measure the ability of the business to pay back the money.

Employees evaluate the possibilities of the business to continue to be in business so they can get their pay and still have a place to work.

Investors analyse the risk of the business and the opportunities to get a good return on the investment.

Public interests use the information in a variety of ways. For example to evaluate the possibilities to continue business in the local area, a business as a competitor or to provide information about the trends and recent developments of the business and its activities. Also environmental issues and the business impact on the environment.

Managers use the information to evaluate how efficiently the business is running, to be able to manage the company in the right direction in the future.

The purpose of using the information coming from the business can be to manage the company or to evaluate the performance of the company.
Different types of information can be used for different purposes. Different levels of information, different specifications and the length of period are interesting.

2.1.3 Business entity

A business may be owned by one person or by several people. It may be organised in different ways. The most typical types of ownership of businesses in Denmark are sole trader, partnership and limited companies. Other types of ownership exist but these are the most common. A business entity is a business that exists independently of those who own the business. The sole trader and the partnership is *not a separate legal entity*[2], it is merely made up of owners or the partners. But from an accounting point of view the sole trader and the partnership is a separate entity, they have to prepare accounts separate from their personal activities.

If you look at some statistics it transpires that most of the businesses are run as sole traders but the larger businesses will be organised as limited companies. This is shown in Table 2.1 and 2.2.

Table 2.1: Number of companies in Denmark (%) in 1987 and 1997

	1987	1997
Sole trader	72.5	69.3
Partnership	7.1	7.2
Limited companies:		
A/S	4.5	6.3
ApS	10.0	10.2
Amba	0.9	0.9
Others	5.0	6.1
Total	100	100

Table 2.2: Turnover in Danish companies (%) in 1987 and 1997

	1987	1997
Sole trader	16.4	12.3
Partnership	5.3	5.4
Limited companies:		
A/S	51.0	59.5
ApS	10.5	7.9
Amba	11.4	9.7
Others	5.4	5.2
Total	100	100

Source : Danmarks Statistiks ti-årsoversigt 1999

2. Excepted are some special partnerships

Sole trader

One person can own a business. If there are no risk-limitations the business is called a sole trader. Often a person with a good idea will start up a business selling or producing some goods or services. The sole trader may ask banks or other creditors to offer a loan to the business, providing the business with some money to work with. The creditors will earn some interest on the money but the profit will go to the sole traders.

If the business is not a success and the owner cannot meet the obligations of the business then the creditors may take the business to court to authorise them to sell the personal possessions of the sole trader.

The risk for the sole trader consist of all his/her personal possessions, i.e. the private home, boat and so on. On the other hand the sole trader does not have to give so much information to the public about the business. The annual accounts do not have to be open to the public and an auditor is not required. However accounts have to be prepared and information has to be given to the tax authorities.

Partnership

To be able to share the risk with someone a business can be run as a partnership. In a partnership there is more than one person running the business. This may be an efficient way to provide more work, more capital and further ideas. If the business cannot meet its obligations, also in this case the creditors can take the business to court to force them to sell the possessions of the owners. But in this case one partner may be required to meet all the obligations of the partnership if the other partner does not have sufficient means. This is described as joint and several liability.

There are no special regulations for partnerships[3] so therefore it is very important for the partners to make a written agreement before they start the business. This agreement is called a partnership deed. It should state how they share profits, or treat a loss, who will have to work in the business and who will have to pay money to the business and what they should do if they have to close the business or one partner wants to leave the business. All rights and duties belong to the partners. When they start the business they are very often good friends, however it is important that they have rules about how to deal with problems if they should arise.

As for the sole trader, the partnership's accounts are not public for access.

3. Some special partnerships have to public their accounts.

Limited companies

The main risk to the sole trader and the partnership is that they may lose their personal belongings if the business is not a success. On the other hand, their accounts do not have to be open to the public.

There are other ways of organising a business where the liabilities are limited. Limited liability means that if the business fall into financial trouble, the creditors cannot look for repayment beyond the business entity, meaning that the creditors cannot take the owners' personal assets. The shareholders may lose all the money they have invested in the business, but not their personal assets.

In Denmark there are different types of limited companies .The ApS, anpartsselskab, the A/S, aktieselskab, and the amba, andelsselskab. The amba is a cooperative society with limited liability. In the following we will only focus on the ApS and the A/S. The ApS are typically smaller limited companies where the A/S are bigger. There are some differences: the A/S has to provide more information to the public and the capital required for an A/S is more substantial than for an ApS and the management of the ApS can be more simple than for the A/S. There are some exceptions in relation to the size of the company, for example smaller limited companies do not have to give as much information as the bigger ones. Compared with a sole trader or partnerships there are substantially more legal regulations for limited companies.

The owners of limited companies are called shareholders. They share the ownership, the profit and the losses. But once they have paid their share in full they do not have to face further obligations from the creditors.

A limited company may be owned by only one person. An Aps can be run by a manager or a Board of Directors or both. In an A/S the company have both a manager and a director or a Board of Directors. The director or directors are elected by the shareholders. At least once a year the shareholders in an A/S may participate in the General Meeting where they among other things may voice their opinion and vote. In an ApS the shareholders can decide to make decisions about the company in a different way or let the management of the company make the decisions.

The annual accounts for a limited company have to be public and there are regulations and guidelines for preparing the annual accounts.

The limited company can often attract investors to the company. It is easy to

transfer the ownership. The shares of the company can be sold and resold among present or potential owners. In contrast to the sole trader and the partnership, limited companies may raise ownership capital more easily from hundreds or thousands of shareholders by selling shares or expanding the share capital.

Exhibit 2.3: Characteristic of sole traders, partnerships and limited companies

	Sole traders	Partnerships	Limited companies
Liability	unlimited several	unlimited joint and several	limited
Accounting Information	closed to the public	closed to the public	open to the public
Capital Requirements	none	none	ApS: 125,000 DKK A/S: 500,000 DKK
Profit or loss	to the sole trader	as partnership deed or share 50-50	shared related to the ownership
Auditor	not required	not required	required

2.1.4 Different purposes of the annual accounts

The statutory Annual Accounts

The submission of the Annual Accounts of a company organised as a Limited Liability Company, such as a Danish A/S or ApS (Aktieselskab and Anpartsselskab), is mandatory in Denmark. The accounts properly audited and signed by the Company Board of Directors and the Managing Director, and presented to the General Assembly (Shareholders) have to be submitted to Erhvervs & Selskabsstyrelsen (also called Company House in England) no later than 30 days after the Annual General Assembly, and 6 months after the end of the accounting year.

The Statutory Accounts consist as a minimum of a Profit and Loss Report, a Balance Sheet and Notes. Furthermore a director's Report is prepared together with a signed Auditors Opinion (small companies do not have to prepare the director's report).

Tax Accounting and the Tax Return

The tax assessment by the state is based on the Tax Return. The tax return is prepared from the same data as the Annual Accounts. But as certain accounts may have been prepared for the Annual Accounts using a generally accepted accounting principle such as the prudence and consistency principle, this may not be directly in line with the tax law. The tax law may be very specific on the topic and even change from time to time. Such changes may be introduced to influence the investment behaviour or otherwise of the company into a desired direction.

Typical differences (call it timing difference) may be various provisions set up by management to provide against specifically identified risks, or it may be differences in depreciation rules concerning intangible or fixed assets etc.

Therefore the accountant will provide both a set of the Annual Accounts and the tax return to the tax authorities, together with a letter that reconciles the two documents.

The rules of how to prepare the taxable income are outside the scope of this book.

2.1.5 Danish accounting legislation and other regulations about accounting

The internationalisation of business has led to a degree of international harmonisation of accounting rules. This has led to the need for international accounting standards and the International Accounting Standards Committee (IASC). This committee has issued a number of standards which have been designed to promote international harmonisation. Despite of the internationalisation concerning the accounting rules each country has special standards and accounting principles.

In the following we will focus on the Danish accounting regulations and guidelines. They are changing in these years and are becoming more international.

Here are some of the most important regulations for preparing financial information in Denmark:

- Statutory order on the accounting act. Act no 1006 of 23 December 1998 (bogføringsloven)
- Statutory order on the accounting, annual accounts and preservation of accounting records of commercial undertakings (bogføringsbekendtgørelsen)
- The Danish Company Accounts Act no 526 of 17 June 1996 with changes of 17 December 1998 (the Annual Accounts Act) (Årsregnskabsloven)
- Statutory Order relating to the format of annual accounts and preparation of group accounts. No 788 of 29 August 1996 (Årsregnskabsbekendtgørelsen)
- Statutory order for reporting material and annual accounts for taxation purposes. No 1068 of 17 December 1999 (mindstekravsbekendtgørelsen)
- Standards from the International accounting standards Committee IASC (IAS)
- Standards from the organisation of state authorised auditors in Denmark FSR (RVL)

General rules concerning all businesses

The first two mentioned should be followed by everybody who has a business no matter how the business is organised. They state that the business has to keep accounting records and do it in accordance with good book keeping practice. It explains how to do that. It also states that the business has to prepare an annual account comprising a profit and loss account and a balance sheet. Also some general rules for preparing the annual accounts. These statutory orders also operate with some rules for preservation of accounting records.

Rules for limited companies

The Annual Accounts Act and the statutory order relating to the format have to be followed by limited companies and the rules which have to be followed are much more specific than the two first mentioned. In practice the Annual Accounts Act is also followed by many businesses even though they are not limited companies.

Rules for material for taxation

The statutory order for taxation purposes has to be followed by all Danish firms. Legislation and rules for taxation will not be covered in this book. There is a lot of legislation concerning the taxation and it will be too much to cover in this book.

In this chapter we will mainly cover the rules for limited companies.

Some references will be made to this legislation in this chapter. **If nothing else is mentioned the reference is to the Annual Accounts Act (www.eogs.dk).**

2.1.6 Accounting concepts

Generally accepted accounting principles

To be able to understand the basic approach to accounting you need to know something about the generally accepted accounting principles.

Why do we need to have these principles ? Comparison and evaluation of a company's performance are difficult if companies are free to adopt any policy it desire. The rules could then be set up so all the companies had to follow exactly the same rules. But it is decided to allow the companies a degree of flexibility to interpret the concepts in a way suitable to them. The concepts involve subjective judgements for the company preparing the annual account. As we will see later this allows two companies to report different profit figures, simply because of the way they have interpreted the accounting policies.

Generally accepted accounting principles may be described as broad rules adopted by the accounting profession as guidelines used for the measurement, recording and reporting of the financial affairs and activities of a business. These principles are reflected in the Annual Accounts Act, which governs the framework under which the accounts should be prepared by the individual firm.

The legislation has set up general concepts in the Annual Accounts Act section 26 and in section 4.

Here are 7 concepts which have to be followed:

Going concern

Section 26 ,1. *The company is presumed to continue to be in business as a going concern.*

This concept states that you should threat your accounts as if the business will continue in operational existence for the foreseeable future. The importance of this is that some of your assets may have a value in a continuing business, but very little value if you have to sell the assets. On a forced sale of a business, very little is obtained for the sale of assets. If it is anticipated that the business will

have to close, the assets have to be evaluated at market value (the net realisable value) and it has to be clear that it is no longer a going concern.

Consistency

Section 26 , 2 and 6. *The methods of valuation must not be changed from one year to another.*

This means that matters within the accounts should be treated consistently from one year to the next. This concept should prevent manipulation of reported results, and facilitate comparisons within the company over different accounting periods. Consistency can, of course, never overrule the requirements of proper and useful reporting.

Accruals

Section 26, *4 Income and expenses related to the year to which the annual accounts relate must be taken into account irrespective of the date of payments.*

This concept aims to match the income earned in an accounting period with the expenses incurred in earning that income. The company can include only the costs and income which are consumed or earned in the current period. When the company year ends the company has to make adjustments for prepaid costs and many other adjustment. We will focus on this in a later section.

Prudence

Section 26,3 Valuations must in all cases be made on a prudent basis, and in particular:

a) *only profit realised before the balance sheet date may be recognised ;*
b) *all foreseeable risks and contingent losses, which have arisen during the financial year to which the annual accounts relate, or during a prior financial year, must be considered even if these risks or losses first become known during the period between the balance sheet date and the date on which the annual accounts are prepared; and*
b) *any deterioration in value must be considered, irrespective of whether the annual accounts show a loss or a profit.*

This means that you have to be prudent when you prepare the annual account. Do not assume a profit until it is actually earned and on the other hand if there is doubt about a debt being paid, the profit should not be anticipated.

Valuation of each component individually

Section 26,5 *The components of the assets and liabilities must be valued individually.*

This means that they have to be valued individually and may not be set off against the other components.

Substance over form

Section 26 subsection 2 *Deviation from these general concepts is permitted in exceptional cases.*

This means that the information is accounted for and presented in accordance with their substance and economic reality and not merely their legal form.

True and fair view

Section 4. *The annual accounts must be drawn up in a clear manner in accordance with this act and by the rules in accordance to the act.*

This means that the presentation and content of the annual accounts must show the important facts. The public interest would expect that this concept would always be followed so it should not be necessary to have this concept. But since there are several judgements to be made when the companies prepare the annual accounts. Therefore the 'true and fair' tend to override any other requirements. It is not defined in the law but it could be reasonable to say that accounts show a true and fair view when they seem *unlikely to mislead anyone reading them into gaining a false impression of the company.*

In a later chapter we will see some of the consequences of these concepts. For example when we have to make a valuation of the assets and also when we have to decide if a cost can be related to one year or the other.

2.2 Annual accounts

2.2.1 The basic parts of the annual accounts

Businesses have to prepare annual accounts. They have to determine the profit and loss for the period and determine the financial health of the company. This can be done in the annual accounts.

The basic parts of the annual accounts are the profit and loss account where the company can see how they have performed in the past period and in the balance sheet where they can see the financial health of the company. Later when we come to the presentation of the annual accounts we will look at other parts of the annual accounts, including the notes and the annual report.

2.2.2 The profit and loss account

The businesses have to measure and report how much profit or loss the businesses have generated over a period, for example a year.

Some users of the profit and loss account will only concentrate on the final net figure 'the bottom line'. Although the net profit is a primary measure of performance the profit and loss account contains other information which should be of interest.

The measurement of the net profit requires that the firm calculates the total revenues of the business generated during a particular period and the expenses incurred in this period.

The net profit has to be measured *for a period of time* for example from1 January to 31 December:

1 January ↓ ——————————— ↓ 31 December

Different forms of enterprises will generate different forms of *revenue* i.e.

- sales of goods
- fees for services

The total *expenses* relating to the period must also be calculated. The nature of the business will again determine the type of expenses which have been incurred.

Examples of some of the more common types of expenses are:

- the cost of purchaed goods which are subsequently sold- known as "cost of sales" or "cost of goods sold."
- salaries and wages
- rent
- motor vehicle running expenses
- insurance
- heat and light
- telephone

The profit and loss account for a period simply shows the total revenue generated during a particular period and deducts the total expenses incurred in generating that revenue. The difference between the total revenue and total expenses will represent either profit (if revenue exceeds expenses) or loss (if expenses exceed revenues).

Thus, we have:
Profit(loss) for the period = Total revenue less Total expenses incurred in generating the revenue.

In order to provide a better interpretation of the performance of the business there will be some subtotals in the profit and loss account.

The format of the profit and loss account

The format of the profit and loss account vary according to the type of business to which it relates and the structure of the business.

We will look at the profit and loss account for a limited company where there are some statutory rules which dictate the classification of various items appearing in reports for external purposes. In Denmark there are two main formats: One mainly used for a trading company and one mainly for a manufacturing company.

We will first look at the profit and loss account for the **trading also called a merchandising company.**

Exhibit 2.4: Structure of profit and loss for a merchandising company
Net turnover
- cost of sales
Gross profit
- Staff cost
- Other external charges
Operating profit
- Depreciation
Profit before financial items
-/+ Financial items
Profit before extraordinary items
-/+ Extraordinary items
Profit before taxes
- Taxes
Profit of the year

Net turnover is another expression for revenue.

Other external costs can for example be:
Promotional costs – Premises cost – Cars operating cost – Carriage cost

Administration

For the **manufacturing** company the profit and loss account is as follows:

Exhibit 2.5: Structure of profit and loss account for a manufacturing company
Net turnover
- production cost
Gross profit
- Distribution and selling expenses
- Administration expenses
Profit before financial items
-/+ Financial items
Profit before extraordinary items
-/+ Extraordinary items
Profit before taxes
-Taxes
Profit of the year

Production cost will be the **cost related to the production** and can for example be:

Material – Labour – Premises cost – Salaries – Repair and maintenance – Depreciation

Distribution and selling expenses will be cost-related to that function such as:

Sales commission – Promotion expenses – Premises costs – Salaries – Vehicles operation cost – Travel Expenses – Depreciation

Administration could for example be:

Premises cost – Salaries – Depreciation

You will notice that for example depreciation, salaries and premises costs are a part of all the cost groups. The costs are divided according to the *function of the cost* and not the type of the expenditure.

The difference between the two formats is related to the classification of the costs. In the format used by a trading company the cost are classified by the nature of the costs and in the manufacturing company the costs are classified by the purpose of the costs.

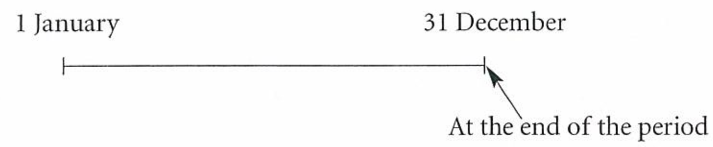
The reporting period

For the annual account the reporting period will of course be a period of one year. It can be from January 1 to December 31 or another period of 12 months. The businesses are free to choose the reporting period. Many businesses choose a different period for their financial year, like from November 1 to October 31.

Some businesses will provide a half-yearly or interim financial statements to provide more frequent feedback on progress. Thus it is quite common for profit and loss accounts to be prepared on a quarterly or monthly basis in order to show the progress made during the year.

2.2.3 The balance sheet

The balance sheet shows the economic resources of the business and how these resources are financed. It gives the financial situation at a specific point in time, that is at the end of the reporting period, for example December 31 whereas the profit and loss is for a period.



Information about the resources is given on the assets side of the balance sheet and about the financing on the other side called the liabilities.

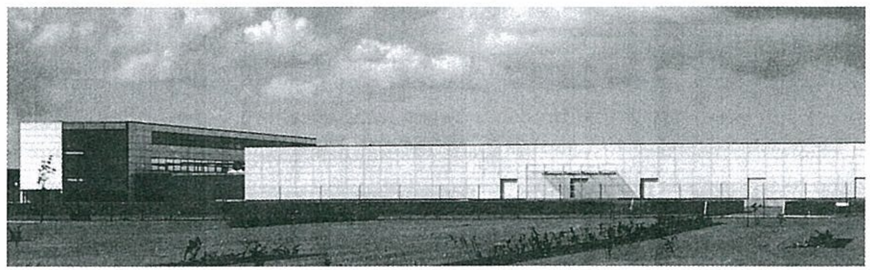
The assets are the items which are owned by the business. They are set off against a list of claims on these assets, its liabilities. The balance sheet can be likened to a photograph, a snapshot, of a financial state of the business showing, one the one hand, what the business has and, on the other hand, where the money came from to acquire those assets.

The balance sheet will always balance so that assets equal liabilities. This is because of the dual aspect rule and the fact that every debit has a credit. If a balance sheet does not balance, then an error has been made.

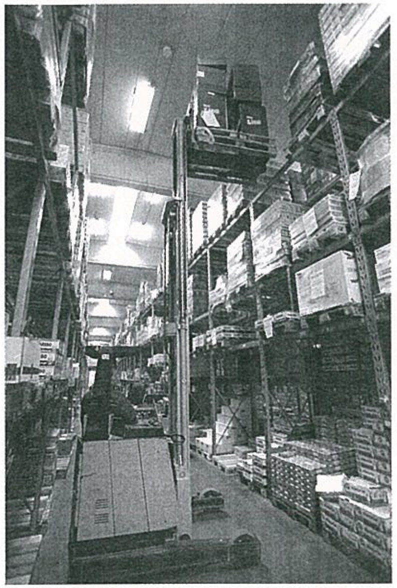
Assets

Assets are things owned or a list of resources which are under the control of the business. The balance sheet does not simply list the assets but displays them in a logical order. The order will be in accordance with increasing liquidity. They are subtotalling in fixed assets and current assets. Conventionally, the distinction between fixed and current assets has been one year. Thus, if the assets are expected to remain in the business for more than one year, they are classified as fixed assets. Otherwise they are classed as current assets.

Exhibit 2.6: Examples of assets



Building



Stock

Bonds

Money

Liabilities

Liabilities are the sources of finance, where the money comes from funding the assets. The company can get the money from the owners of the company or borrow the money.

The liabilities can be claims regarded as a list of claims on resources. The business will have to settle these claims so the liabilities can therefore be regarded as amounts due to others. Liabilities also have to be listed in increasing liquidity order. It is necessary to distinguish between long-term and short-term liabilities. The short term liabilities are called current liabilities. A general one-year rule is used to separate them.

The liability is divided into capital, provision and creditors. The capital is the difference between assets and creditors plus provision.

The format of the balance sheet

In the Annual Accounts Act, section 5, it is required that the balance sheet shall be drawn up in a schematic format. The company can choose between two ways: the horizontal or the vertical format. In the horizontal format assets and liabilities are separated. In the vertical format assets and liabilities are mixed. The most common layout for the balance sheet for Danish companies is the horizontal format.The other form, the vertical form, will not be described here since it is seldom used by Danish companies.

The horizontal format for the balance sheet is shown in Exhibit 2.7.

Exhibit 2.7: Structure of the Balance sheet

Balance sheet	
Assets	**Liabilities**
Fixed assets	*Capital and reserves*
Intangible fixed assets	Company capital
Tangible fixed assets	Reserves
Financial fixed assets	Retained profit
Total fixed assets	*Capital and reserves total*
Current assets	*Provisions*
Stocks	Provision for deferred tax
Debtors	Other provisions
Cash	*Provisions total*
Total current assets	*Creditors*
	Long term
	Current
	Creditors total
Assets total	**Liabilities total**

Headings and subtotals are used in the balance sheet to make it more useful for the reader.

Assets

As seen above the assets are divided into fixed and current assets.

Fixed assets

Fixed assets are assets which are intended for permanent ownership or for continued use within the company (section 16).

They can be divided in 3 categories:
- Intangible fixed assets
- Tangible fixed assets
- Financial fixed assets

Intangible fixed assets have no physical substance but still they represent values for the company. It can for example be goodwill, research and development, patents, licences or trademarks or other rights. They have no physical substance but a future value and a limited useful life.

Tangible fixed assets have a physical substance. Examples of this can be land and buildings, technical plants and machinery, equipment or the like.

Financial fixed assets can be shares in affiliated or associated undertakings or other shares or parts where it is expected to be a long-term investment.

Current assets

Current assets are assets which are not fixed assets – section 16.

So they are assets which are not intended for permanent use in the company. A current asset is an asset likely to change its form, i.e. they are acquired or developed in order to be sold and are connected with that function, usually within a year.

Examples are stock, debtors, and cash.

Liabilities

As shown above the liabilities can be divided into 3 sections.
Capital, provisions and creditors.

Capital

The capital will look different for a sole trader and a limited company.

For a *sole trader* the capital will normally be:
Capital beginning of the year
+ – profit or loss of the year
– drawings
Capital by the end of the year

Drawings is a withdrawal of cash or other assets by the owner of the firm, for their own personal use.

For the *limited company* the capital consists of the share capital, reserves and profit carried forward.

The share capital represents the basic units of ownership of the company. The nominal value of the shares in the company.

The reserves are profits and gains which have been made by the company and have not been paid to the shareholders. The reserves can be divided into different subsections. Profit carried forward is part of the profit which can be used for dividend in future periods.

The share capital, the reserves and the profit carried forward are the shareholders' claim, or owners equity as it is called.

Provisions

Under the item provision we find amounts assesed necessary to cover specific losses, commitments or costs relating to the current or prior financial years on the balance sheet date. They are likely or certain to be incurred, but are uncertain as regards the amount or time of settlement. Section 20.

So the provision will occur when there is uncertainty concerning the creditor, the exact amount or the time for the settlement.

Examples of provisions are pensions and deferred taxes.

Creditors

Creditors can be divided into long-term and short-term creditors.

Long-term creditors will be creditors due more than a year from the balance sheet date. This could be a mortgage loan or a bank loan.

Short-term creditors are creditors which are likely to be settled within a year. Examples are overdrafts, trade creditors, dividend, taxes, VAT and other creditors like amounts due to the auditor, employees and so on.

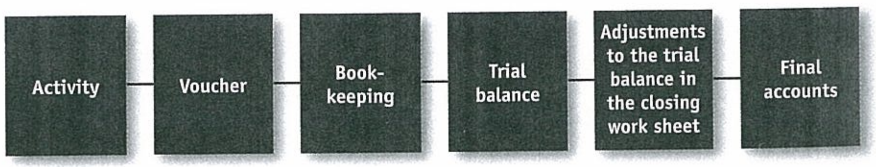
2.3 From the activities in the company to the annual account

2.3.1 The procedure

How do you prepare an annual account? What is the procedure from the company's activities until the final annual accounts are prepared? The short and simplified procedure can be described here.

There are many activities in the company selling goods, buying goods, buying equipment and so on. For every financial activity – transaction- in the company there has to be a voucher. Vouchers can be invoices, payroll records, bank statements etc. During the year all the vouchers have to be registered in the accounts. By the end of the year the bookkeeping can be summarised in the trial balance and different corrections can be made as adjustments to the trial balance in the closing work sheet. In the closing work sheet different items can be separated into items related to the profit and loss account and to the balance sheet. From the trial balance the profit and loss account and balance sheet can be prepared in text and figures. The final annual account has to be completed with specifications and further information in the notes for the annual account.

The procedure can be illustrated like this:



2.3.2 Recording transactions

Business papers / accounting documentation

Business papers, such as invoices to customers or from suppliers, loan agreements and interest charges etc, provide evidence of transactions completed and they are the basis for accounting entries. Invoices to customers reflect the delivery of goods or services sold on cash or credit. Invoices from suppliers reflect the receipt of goods or service again on the basis of cash or credit.

Such documents are processed in the accounting department. Invoices are matched against proof of delivery, a dispatch report signed by the customer verifying that the goods or service have been received, or an internal receiving report, signed by the person, authorised to take receipt of items purchased. The accounting department will also verify that the prices are as agreed, when the contract was made with the customer or supplier of the goods or service.

In this context the responsibilities within the company should be clearly stated. This is often carried out through a Delegation Of Authority, which clearly states for all individuals in the company the extent to which they can sign on behalf of the company, and thereby legally commit the company to their side of a transaction.

A fundamental principle of internal control requires that the person, who is responsible for an asset, including the signing of a receipt for goods or services, should not be the one who also maintains the accounting records.

A Typical Voucher Control System

A voucher system helps gain control over cash disbursements, and it links the flow from the point where an authorised person commits the company to purchase a piece of goods or a service, till the item is received and paid for. Exhibit 2.8 outlines such a flow.

Exhibit 2.8: A Typical principle of Purchasing Procedure

Business Document	Prepared by the –	Sent to the –
1 Purchase Requisition	Department that wants the item purchased	Purchasing Department
2 Purchase Order	Purchasing Department	Supplier
3 Receiving Report	Receiving Department	Accountant
4 Supplier Invoice	Company selling the bought item	Accounting Department
5 Payment Order	Accountant	Cashier
6 Cash Disbursements	Cashier	Accountant

Purchasing Requisition
A Form issued and signed by an authorised person in a given department of the company defining exactly what the issuer requires and for what purpose.

Purchase Order
A form issued by the purchasing department to a vendor defining the items required including number of units and price per unit. The form replaces a business letter. It authorises the supplier to deliver the described items.

Receiving Report
As the items are received by the receiving department and checked against a copy of the purchasing order verifying that the required quantity and quality are as described on the purchase order, the department prepares a receiving report signing for what has been accepted. This clears the way for payment.

Supplier Invoice
An invoice is a an itemised statement of goods and services bought or sold. The invoice should reflect what has been shipped and the amount to be paid. The invoice will further show the agreed payment terms i.e. cash, Net 30 days, Current Month Plus 30 days etc.

Payment Order
An instruction from the accountant that an amount due to the supplier (creditor) can now be processed for payment.

Cash Disbursements
A summary from the cashier of what has been paid in reference to an instruction to pay, to whom, how much and from which source – cash, bank account or otherwise.

2.4 Bookkeeping

2.4.1 The double entry bookkeeping system

The Account definition and the T-Accounts

The accounting system is built around the double entry bookkeeping system allowing the simultaneous recording of both the Income/Expense effect and the Liquidity effect. To allow this, transactions are picked up in relevant Accounts. The accounts are set up in four major groups:

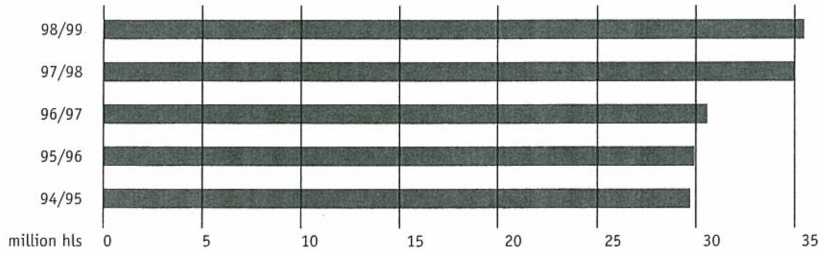
1) Income – Turnover & Other Income Accounts (Income from Sales activities, Interest Income etc.)
2) Expense Accounts (Costs related to generating the sales, and other cost items related to operating the business)
3) Asset Accounts (Accounts defining what the company owns including Buildings, Machinery, Stock and Debtors etc)
4) Liability Accounts (Accounts holding items of credit and loans provided to the company from external parties).

In its most simple form the Account looks like a "T", and is called a T-Account. The name of the account is put on top of the T, and the amounts (entries) are shown below the upper line of the T. All increases to an asset account are shown on the left side of the T indicating a Debit (plus). All increases to a Short Term and Long Term Debt account as well as to the Owners' Equity are shown on the right side of the T, indicating a Credit (minus). Expenses are shown as a debit (on the left side). Income entries are shown as a credit (on the right side of the T).

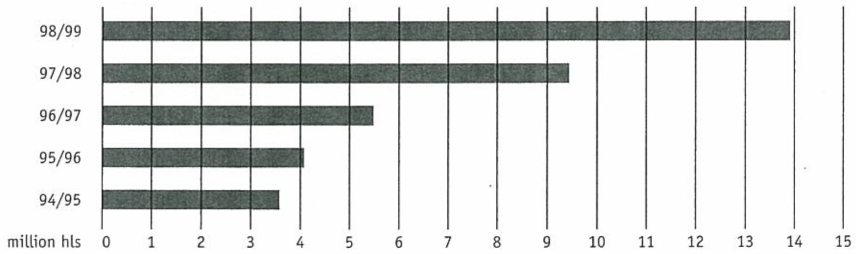
(Name of the Account)	
(left side) – debit	(right side) – credit

An example may be useful – The company sell goods for DKK 100,000 , and the sales are paid in cash.

Sales of beer total



Sales of soft drinks in Denmark



2.8 The auditors' report

The shareholders of limited companies have to appoint an auditor who as an independent person reassures the shareholders about the contents of the annual accounts. Usually a firm of accountants will be the auditor for the company. The auditors have to audit the company's financial records and give an opinion on the truth and fairness of the financial information presented in the annual report. They have to examine the transactions, the internal control system of the company and generally try to confirm that there are no material errors in the annual accounts.

This does not mean that the auditors have to look through all the papers. They are not expected to be totally certain in their opinion and they are only looking for errors and fraud which are material. They only have to take samples of a population and they have to follow the code of practice for auditors. The code of practice includes some procedures which are set up in the legislation and some standards from their organisations.

The auditors have to prepare the auditors' report on the annual report. They should give the shareholders and external parties an impression of the extent to which they can consider the accounting statements prepared by the directors to be reliable. They should report whether the directors have fulfilled their statutory duty to prepare accounts which show 'a true and fair view' of the company's performance and position.

The report can be clean – unqualified – or it can be a qualified report.
The report can be *qualified* if

- The annual account does not give a true and fair view of the company's position
- There are errors and faults in the annual accounts
- The account is prepared as an going concern and the auditor finds that the company will not continue in business next year
- If there is a lack of information in the accounts
- The auditor cannot reach a conclusion about the account
- The account is not prepared in accordance with the legislation or other requirements regarding the annual accounts.

An excerpt of a qualified audit opinion could be:
"We found that the company has made no provision for doubtful debts, despite circumstances which indicate that such provision is necessary."

"In our opinion the accounts do not give a true and fair view."

The auditors can give a *clean* – unqualified – report if the annual account in their opinion is right and here is an example of wording of a typical auditors' report. In Exhibit 2.29 is the auditors' report for Carlsberg .