

## 4P Framework

Divides the competitive means in marketing into four categories: product, place, promotion and price.

## Accounting Liquidity

A company's ability to pay its debt before they become due. Accounting liquidity parameters, such as Current Ratio, compare a company's current assets to its current liabilities (liabilities which become due in the next 12 months).

## Accrual Basis

An accounting principle in an income statement. Expenses are marked in the income statement as a factor of production is received - not when it is paid for. Similarly, an earning is marked in the income statement when the source of income has been delivered to the customer – not when the customer pays for it. Earnings in a financial period are based on expenses and income on an accrual basis.

## Activity

A set of work which consumes time and resources and must be done in a project. Activities can be determined a duration, expenses and resource needs. Activities can often be divided into sub-activities. An activity can be finished, unfinished or it might not have started yet.

## Balance Sheet

A document that describes the financial state of a company at the end of a financial period. The balance sheet specifies the value of the assets of a company as well as the amount of liabilities and equity used to finance the company. A general principle is that the assets must always equal the sum of equity and liabilities.

## Bankruptcy

Treatment of a debtor's all debts where the debtor's assets move into the control of the creditor. The assets are used to cover the debts of the debtor to the creditor. The owners of the company receive that proportion of the assets that was not used to cover the debts

## Batch Production

A form of production which enables the production of different products simultaneously in a production system. At the workstations, the products are worked on as consecutive batches that move into the next workstation through an intermediate storage. Whilst managing a batch production system, scheduling and the time associated with the change in the product which is being worked on are central. Batch production has an intermediate volume and it makes a moderate variation in products possible.

## Bottleneck

That part in a production system that has the lowest maximum capacity, thus defining the maximum capacity of the whole production system. The bottleneck might change according to which product is being produced

## Break-Even Point

A point determined in break-even analysis. It is the amount of production so that the revenue covers both the variable and fixed costs.

## Bullwhip Effect

Even small changes in demand in the downstream of a supply chain multiply as the change in demand spreads upstream in the chain.

## Business Environment

Consists of the external factors affecting a company. Usually, this refers to customers, industry and the immediate players and interest groups in an industry. In a broader sense, business environment covers also the more extensive and indirect societal aspects which can be mapped by conducting a PESTEL-analysis.

## Business Model

Describes the key factors in creating and distributing value for customers. Business model also shows the interlinkages between these factors. Business model can be used in the process of creating a strategy and a business plan.

## Business Model Canvas

A model consisting of nine parts. Describes the business a company is in.

## Business Risks

Risks regarding business and its management: for instance, project management risks which can be. Business risks cannot typically be insured (at least at a reasonable price) whereas operational risks (such as accidents and fires) can be. This is because operational risks can be calculated more easily on a statistical basis.

## Capacity

Describes the production capability of a production system (or a part of it) in quantitative terms. Is typically expressed in the following form: amount of production / a unit of time. The more expensive the acquiring of capacity has been, the more essential it is to enhance the said capacity's utilization.

## Cash and Cash Equivalents

Cash, receivables and other financial assets that might temporarily be in a different form (but are nevertheless easily transformed into cash). Financial assets are marked into the current assets section on the assets side of a balance sheet.

## Cash Basis

An accounting principle where business transactions and the costs and revenue associated with them are marked into books when payments have been done, i.e., a company has received a payment from a good it has delivered to its customer or a company has paid for a factor of production. Cash flow calculations are made on a payment basis.

## Cash Flow from Financing

### Activities

The cash flows from financing the company's activities by the means of either equity or liabilities. These include the cash flows acquired by selling new shares, dividend payments as well as taken and paid off loans. Notice, that paid interests do **not** belong to cash flows from financing activities. Instead, they are taken into account in the cash flow from operating activities. Cash flow from financing activities is one of the three major cash flows presented in a financial statement.

## Cash Flow from Investing

### Activities

Consists of the payments given and received as fixed assets have been bought or sold. Cash flow from investing activities is one of the three major cash flows presented in a financial statement.

## Cash Flow from Operating

### Activities

A company's income subtracted by the company's expenses. Both are accounted in a payment basis. However, income and expenses concerning fixed asset acquirement or selling fixed assets are not taken into account in this cash flow. Cash flow from operating activities is one of the three major cash flows presented in a financial statement.

## Continuous Process Production

A production process type where the production system has been designed to produce efficiently with great volume and remarkably low variety (for instance, an electric power plant, oil refinery). The flow units are not discrete. Rather the flow unit is an amount of continuous material (often in a form a liquid). Process control and utilization rate enhancement are key focus areas.

## Core Competency

A skill, capability or (a) piece(s) of knowledge which is important to the customer. In order for a company to call something its core competency, it should be better at it than its competitors. A core competency should not be outsourced.

## Critical Activity

Is an activity that is on the critical path in a project network. Therefore, critical activities determine the total duration of a project. The float of a critical activity is nonexistent and if a critical activity is delayed the whole project will be delayed.

## Critical Path

A chain of critical activities in a project network. It determines the earliest possible moment of time when the project can be finished. If even one part of the critical path is delayed, the whole project will be delayed.

## Customer Value

The value a customer experiences while using and acquiring a product or service contrasted with the costs and sacrifices of acquiring and using the product or service

## Cycle Time

The time it takes to produce a product.

## Deprecation

Fixed assets typically generate incomes for several years until they wear out. Therefore, their investment costs are also distributed for several years into the income statement. These subtractions in the income statement are called depreciations. Deprecation lowers the book value of a fixed asset but causes no cash flow.

## Discounting

A calculating method which makes it possible to compare the values of cash flows which have been generated at different times. Discounting is used, for instance, when the net present value (NPV) is calculated.

## Distribution Channel

A path through which products or services are marketed and distributed from producers to end-users.

## EBIT

Business incomes subtracted with business expenses. It is an essential subtotal in an income statement that can be found in financial reports. In an income statement, interest and taxes are subtracted from this figure. Earnings Before Interest and Taxes

## Economies of Scale

A phenomenon, where the increase in volume leads to decreasing average costs. This is due to the fact that as volume increases, fixed costs are distributed to a greater number of units produced. Economies of scale is especially relevant in a situation where fixed costs are substantially large in contrast with variable costs.

## Enterprise Value (EV)

The market value of business operations in a company. If a company is listed in a stock market, its enterprise value can be calculated as the product of share price and the number shares, summed up with interest-bearing debt. As the last step, cash and equivalents (liquid assets) are subtracted from this sum. Another method is to evaluate the future cash flows of a company and to discount those cash flows into their present value. The sum of these cash flows in their present value is then the enterprise value.

## Equity

The total assets of a company subtracted with its liabilities. Equity describes the proportion of the total value of the company which belongs to the owners of the company. The most important forms of equity seen in the balance sheet are share capital and the earnings generated by the company's business operations (earnings from different years). As a company pays dividends, the value of its equity decreases the same amount as the value of the dividends are.

## Factors of Production

Workforce, capital, materials and knowledge.

## Financial Risks

Risks regarding the financing of a company's activities. Might result from, for instance, mistakes in cost structure estimation.

## Financial Statement Analysis

Is the assessment of a company's financial state based on public documents such as the financial statement and economic indicators calculated from it (e.g., current ratio and debt-equity ratio). This type of analysis is conducted especially by a company's external interest groups. Enhancing the comparability of different financial information is key when several companies are compared as a part of financial statement analysis.

## Fixed Assets

Types of property defined in the Business Tax Act. Fixed assets consist of buildings, equipment, machinery, estate, patents and securities. Fixed assets are in practice the same as non-current assets in the balance sheet.

## Fixed Costs

Expenses which are, in a certain decision-making situation, assumed to remain constant irrespective of the volume produced or the value of the said volume. Fixed costs is a central concept in a break-even analysis which is often used for planning.

## Float

A concept related to project networks. Float is the difference of the earliest and last possible start for an activity in a project network. Similarly, it can also be defined as the difference between the earliest and last possible finish times. Float describes the amount of time during which an activity can be started so that the whole project will not be delayed.

## Free cash flow (FCF)

In principle, FCF is the gross received payments subtracted with expenses regarding production factors as well as with income tax in some timeframe. This is the amount of money that can be used to pay back loans or to pay interests and dividends. Definition wise, free cash flow is not the same thing as the sum of cash flows from operational and investment activities.

## Functional layout

A layout type where similar resources (machines, equipment, competency, functions) are grouped together.

## Gantt chart

A bar chart which depicts the time relationships of different phases in a project. It is used in project planning.

## Gross Margin

Is calculated by subtracting variable costs from sales revenue. Gross margin is one of the main concepts in break-even analysis which is used in planning. It is not a subtotal in an income statement included in official financial statements.

## Income Statement

A calculation included in the financial statements which specify a company's incomes and expenses in a financial period. The calculation begins with revenue ending up in the result of a financial period as a series of subtractions. Operating income is a typical subtotal. Otherwise, the subtotals and their names might differ between income statements. Calculations that are open to the public are not as detailed as the calculations created for internal use.

## Internal rate of return (IRR)

IRR is the discounting rate which results, when applied, in a net present value of zero for an investment. IRR is used in investment profitability assessment.

## Inventories

Inventories are goods which are supposed to be distributed or consumed, or further refined and then distributed or consumed.

Inventories consist, for instance, of material inventories, finished goods inventories and work-in-progress inventories. In the balance sheet, inventories are marked as current assets.

## Job shop

A process type where various production resources are utilized to produce a broad variety of products with relatively low volume. The products might be heavily customized according to customers' demands. A carpenter's workshop serves as an example.

## Kaizen

A Japanese word and philosophy which refers to continuous improvement in efficiency and quality in a production system.

## Kanban

A visual indicator used in production control. These indicators transfer the demand upstream, i.e., kanbans are used in pull control production systems. Originates from the Toyota production system.

## Kraljic Matrix

A tool that is used in defining fit procurement methods and objectives for different procurements. The dimensions in the matrix are supply risk and profit impact.

## Layout

The layout is the physical arrangement of workstations in a production system. It affects the path that flow units take in the system.

## Lean

Originally a Japanese production philosophy that emphasizes the elimination of waste through continuous improvement. The term "Just-In-Time" is heavily affiliated with lean.

## Liabilities

A row in a balance sheet that consists of all the liabilities (financing that must be paid back) of the company. Can, e.g., consist of the following: bank loans, unpaid material shipments, unpaid salaries and unpaid taxes.

## Marketing

Is an activity which aims to initiate, maintain or intensify economic transactions between different parties.

## Mass Production

A production process for which a large volume and limited variety are characteristic (e.g. a production line in an automobile factory). Enhancing the flow of production and minimizing the differences between outputs are essential in managing mass production operations.

## Milestone

A point during a project which is somehow significant for the project but does not have a duration and requires no resources. A

milestone tells something about the progress of a project. An event describing a milestone is binary – a milestone either was fulfilled, or it was not. Milestones can be marked into project networks.

### Mission

A company's business idea condensed into a few sentences.

### Net Present Value

Net present value (NPV) is an indicator of the profitability of an investment. NPV is the sum of the future and present cash flows an investment generates. Before these cash flows are added up, the future cash flows are discounted into their present value. NPV describes how much an investment increases or decreases the enterprise value of an investing company.

### Operational Risks

Operational risks are abrupt accidents and mistakes which clearly either happen or so not happen. It is usually possible to insure for operational risks if needed. Typically, the probability of an operational risk coming true is low but its negative impacts can be substantial.

### Order penetration point (OPP)

A point in a production or product design where a product is attached to a customer's order. Delivery time is heavily associated with how close to the customer the order penetration point is situated.

### Organizational Culture

Collective beliefs and courses of action born from shared experiences. The stages of organizational culture are:

- 1) Visible structures and courses of action
- 2) Values and norms
- 3) The most fundamental basic assumptions which guide the activities in an organization

### Organizational Structure

Dictates how distribution of work, coordination and supervision are arranged in

an organization in order to achieve set goals. It includes, e.g., interactions and authority relationships between people and different functions.

### Outsourcing

To outsource is to transfer an activity from the inside of a company to an external party.

### Payback Period

A period of time by the end of which the cumulative free cash flow of an investment is zero. This means that all the cash flows generated by the investment after the initial investment equal the initial investment.

### PESTEL-analysis

An analysis framework by which six different macro economical business environmental perspectives are specified and assessed. These perspectives are the following: political, economic, social, technological, environmental and legal.

### Porter's Five Forces

A framework by which the attractiveness of an industry is assessed. The five forces are the following: competitive rivalry, new entrants, substituting products or services, bargaining power of customers and bargaining power of suppliers.

### Porter's Generic Strategies

A framework which divides all strategies into four categories according to whether a strategy pursues cost leadership or differentiation, and whether a strategy is aimed at a narrow market or a mass market.

### Positioning

Positioning concerns how customer value is generated towards a chosen target segment (or segments) and how a product or service is different from competitors' product or service.

### Process Layout

A process layout where the consecutive process steps are in a specific order and a flow unit moves straightforward.

## Production

Production is the transformation of factors of production into products and services.

## Profit for the financial year

The last row in an income statement, i.e., the profit or loss that is left as all the expenses of a financial period (including taxes and interest) have been subtracted from revenue. If the result is positive, equity in the balance sheet is increased, and if negative, equity is decreased.

## Profitability

A concept which describes the ability of a business to expand the wealth of its owners. Is typically stated as a ratio where, for example, EBIT is compared to either revenue or the capital a business has tied up.

## Project

A unique ensemble of several complicated and interconnected tasks. A project aims to a predefined goal and is restricted by time, extent and costs. A project can be a part of production or the development of production.

## Project Network

Depicts the connections between different tasks in a project and thus dictates their order of fulfillment. The tasks in a project network are often depicted as boxes and the connections between tasks as arrows.

## Project Production

A production process type where the product produced is typically unique. The production of a single unit might take a lot of time and resources (e.g. a cruise ship). Compared to other production process types, characteristic of project production is the great extent of product customization and design for individual customers.

## Pull Control

Production is based on real customer orders.

## Push Control

Production that is controlled based on demand forecasts.

## Regional Risks

Risks dealing with micro and macroeconomic phenomena in an area (e.g., political risks, corruption, risk of earthquakes, floods and other natural phenomena).

## Resource

An economic concept which refers to the capabilities and strengths of a unit and the means and opportunities by which it can achieve its objectives.

## Revenue

A company's sales income subtracted with discounts, value-added tax and other taxes immediately dependent on the amount of sales. Revenue is calculated on an accrual basis. Revenue is the first row in an income statement.

## Risk

Risk is a scenario that has a defined probability to come true and an impact on a project's schedule, costs or extent. This definition of risk does not take into account whether a risk has a positive or negative impact. Therefore, a risk can also be an opportunity. This notion is important in managing a project since project management should not solely be concentrated on protecting the project from negative scenarios. Management should also consider gathering benefits from opportunities.

## Risk Management

Risk management is a controlled activity where the project's risks are identified and evaluated. Measures in taking risks and the avoidance of some risks are planned and executed.

## Segmentation

The grouping of customers according to, for instance, geographic, psychographic and demographic features.

## Service

Service is a good where the creation of value is based on a transformation in some material or immaterial entity in collaboration with a customer. (change of state is intangible)

## Solvency

Describes the possibilities of a company to manage economic liabilities in the long-term. Capital structure is a central concept describing solvency. The capital structure measures the relationship between equity and liabilities (and their amounts) in a company with various indicators.

## Standardizing

In a standardized production system, every phase of production is executed the same way each time and the work methods are documented precisely. Standard is a normative model which tells how something is done.

## Strategy

A plan concerning the inner development of a company. A strategy aims to formulate (a) competitive advantage(s). A strategy can also be comprehended as a general developmental long-term direction for a company.

## Supply Chain

Consists of all the parties needed in the distribution of an end-product to a customer. Material, information and cash all flow in a supply chain.

## Targeting

Focusing business activities to a chosen market segment.

## The Four V's of Operations

### Management

A model describing the characteristics of a production system. Consists of four V's which are: Volume, Variety (in products and services), Variation (in demand) and Visibility (to the customer). The same kind of characteristics leads to similar problems in the management of production even if the production systems compared operate in different industries.

### Throughput Time

The duration of manufacturing a product from the start of the first work phase to the end of the last phase. The possible waiting times between work phases are included in throughput time.

### Transaction

A single instance and its arrangement where something is bought or sold.

### Transformation

The production of items, services or knowledge. The change of state happens in a process.

### Trend

A clear developmental direction happening during some time interval. Trends are often related to demand. In economics, trends typically concern longer time intervals as in marketing.

### Utilization Rate

The relationship between maximum theoretical capacity and utilized capacity in a production system. Is often expressed as a percentage that has been calculated by dividing utilized capacity with theoretical maximum capacity.

### Variable Costs

Costs that are assumed to change linearly in a decision-making point as a function of produced volume or the value of the production. It is one of the key concepts in a decision supporting break-even analysis.

## Vertical Integration

Expansion of a company's business by acquiring operations (or whole businesses) from upstream (currently supply operations) or downstream (currently operations done by customers) in its supply chain.

## Vision

A term which describes what a company wants to do or achieve in the future. It is expressed in a few sentences in a compact form.

## Weighted Average Cost of Capital

A minimum return requirement for invested capital. It is a combined figure, drawn from the return requirements for both equity and external capital (liabilities in the balance sheet). It is used in discounting free cash flows, e.g., while calculating the Net Present Value (NPV) for an investment.

## Work Breakdown Structure (WBS)

Dividing different tasks into smaller tasks in a project. These smaller tasks might then be divisible into even smaller tasks.

## Working Capital

Working capital is money that has been tied up into the everyday running of a business. The root cause for the existence of working capital is the fact that companies have to pay for the resources they have acquired before they receive any income from their customers. Working capital is a significant concept when the cash flows from operating activities or free cash flow are calculated on the basis of earnings before interest and taxes (income statement).