MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Ternopil Ivan Pul'uj National Technical University

Department of Management in production

Lecture and workshop

on discipline

«Project analysis»

for students of all learning

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<u>Module 1. Determinants, methodology and tools of project analysis</u>

Chapter 1. Basic provisions project analysis

Topic 1. The essence and content of project analysis. The concept of the project and its life cycle.

1.1. Content of project and project management
1.2. Characteristics of project
1.3. Classification of Project
1.4. Project selection process
1.5. Project life cycle
1.6. Project report (business plan)
1.7. Project appraisal

1.1. CONCEPT OF PROJECT AND PROJECT MANAGEMENT

The term project has a wider meaning. A project is accomplished by performing a set of activities. For example, construction of a house is a project. The construction of a house consists of many activities like digging of foundation pits, construction of foundation, construction of walls, construction of roof, fixing of doors and windows, fixing of sanitary fitting, wiring etc. Another aspect of project is the non-routine nature of activities. Each project is unique in the sense that the activities of a project are unique and non routine. A project consumes resources. The resources required for completing a project are men, material, money and time. Thus, we can define a project as an organized programme of pre determined group of activities that are non-routine in nature and that must be completed using the available resources within the given time limit.

Let us now consider some definitions of 'project'. Newman et. al define that "a project typically has a distinct mission that it is designed to achieve and a clear termination point the achievement of the mission".

Gillinger defines "project" as the whole complex of activities involved in using resources to gain benefits. Project management institute, USA defined project as "a system involving the co-ordination of a number of separate department entities throughout organization, in a way it must be completed with prescribed schedules and time constraints".

According to the encyclopedia of management, "project is an organized unit dedicated to the attainment of goal, the successful completion of a development project on time, within budget, in conformance with predetermined programme specification."

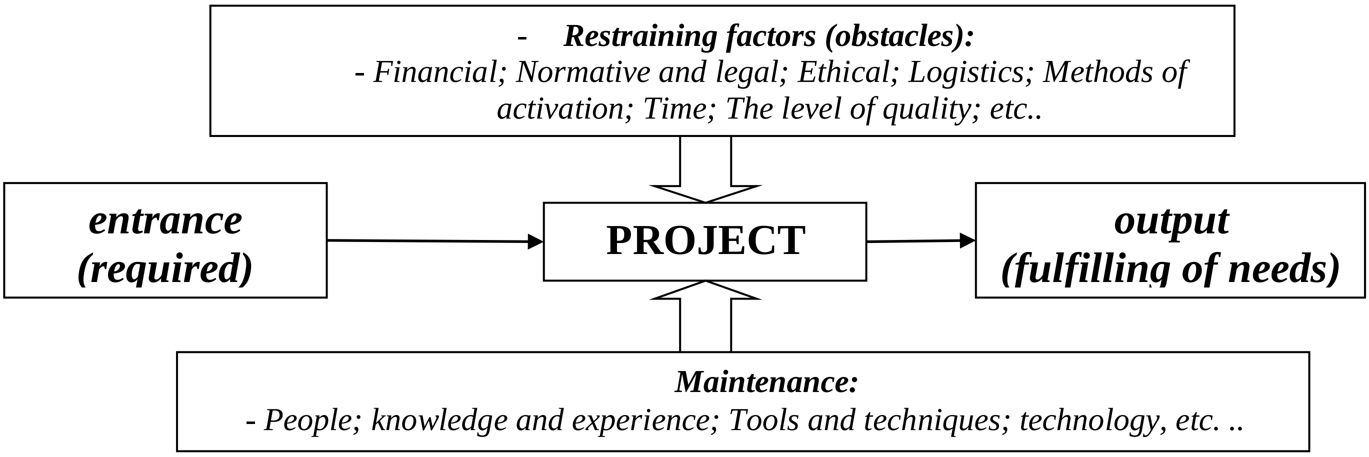


Fig. 1. The project, from initial state to final

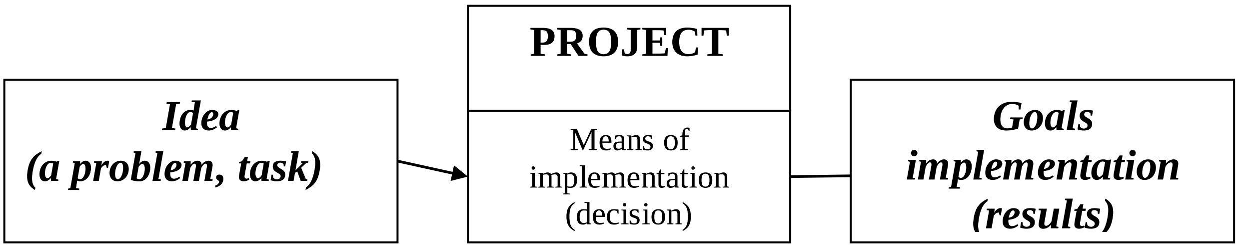


Fig. 2. The main elements of the project

Project management is an organised venture for managing projects, involves scientific application of modern tools and techniques in planning, financing, implementing, monitoring, controlling and coordinating unique activities or task produce desirable outputs in accordance with the determined objectives with in the constraints of time and cost.

1.2. CHARACTERISTICS OF PROJECT

(1) Objectives : A project has a set of objectives or a mission. Once the objectives are achieved the project is treated as completed.

(2) Life cycle : A project has a life cycle. The life cycle consists of five stages i.e. conception stage, definition stage, planning & organising stage, implementation stage and commissioning stage.

(3) Uniqueness : Every project is unique and no two projects are similar. Setting up a cement plant and construction of a highway are two different projects having unique features.

(4) Team Work : Project is a team work and it normally consists of diverse areas. There will be personnel specialized in their respective areas and co-ordination among the diverse areas calls for team work.

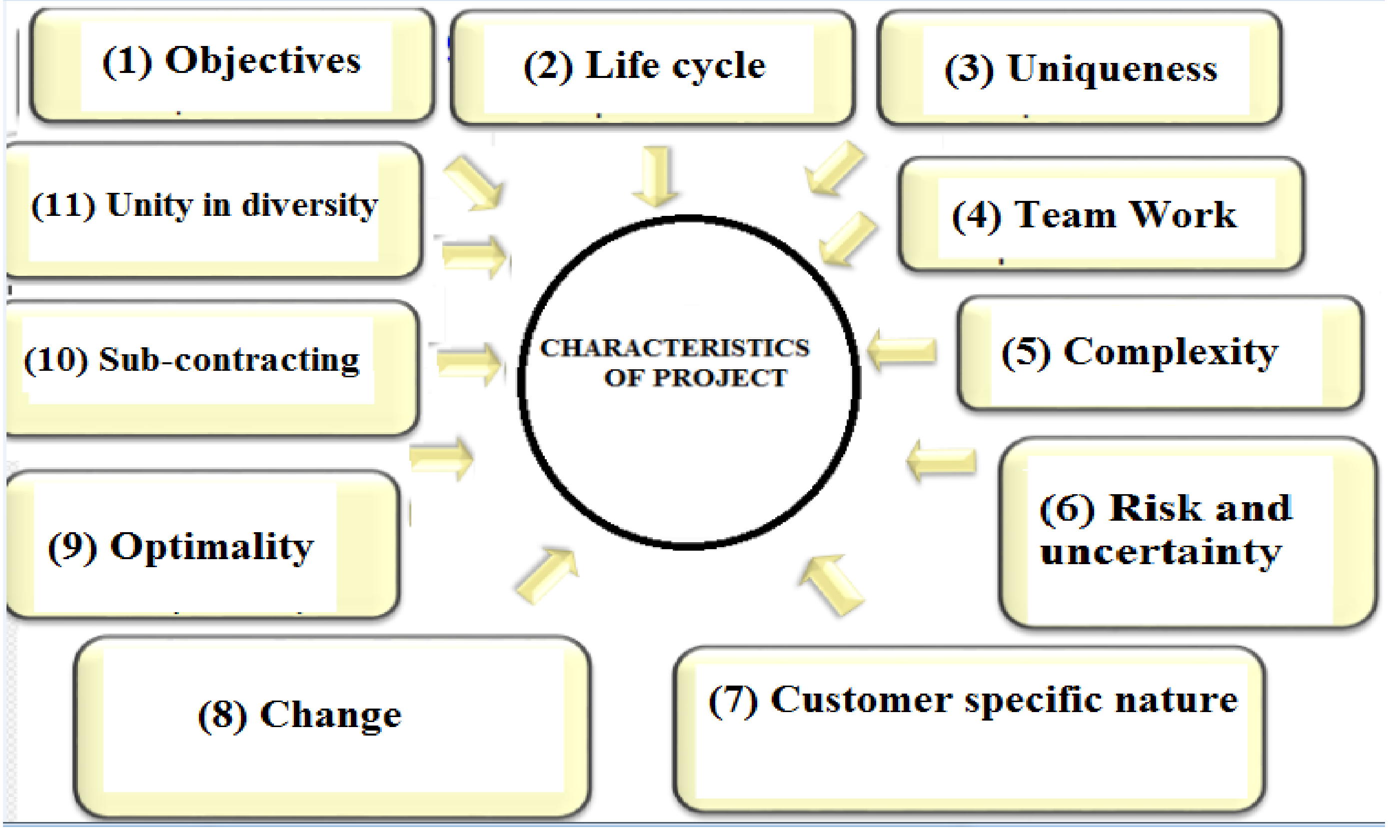


Fig. 1. CHARACTERISTICS OF PROJECT

(5) Complexity : A project is a complex set of activities relating to diverse areas.

(6) Risk and uncertainty : Risk and uncertainty go hand in hand with project. A risk-free, it only means that the element is not apparently visible on the surface and it will be hidden underneath.

(7) Customer specific nature : A project is always customer specific. It is the customer who decides upon the product to be produced or services to be offered and hence it is the responsibility of any organization to go for projects/services that are suited to customer needs.

(8) Change : Changes occur through out the life span of a project as a natural outcome of many environmental factors. The changes may very from minor changes, which may have very little impact on the project, to major changes which may have a big impact or even may change the very nature of the project.

(9) Optimality : A project is always aimed at optimum utilization of resources for the overall development of the economy.

(10) Sub-contracting : A high level of work in a project is done through contractors. The more the complexity of the project, the more will be the extent of contracting.

(11) Unity in diversity : A project is a complex set of thousands of varieties. The varieties are in terms of technology, equipment and materials, machinery and people, work, culture and others.

1.3. CLASSIFICATION OF PROJECT

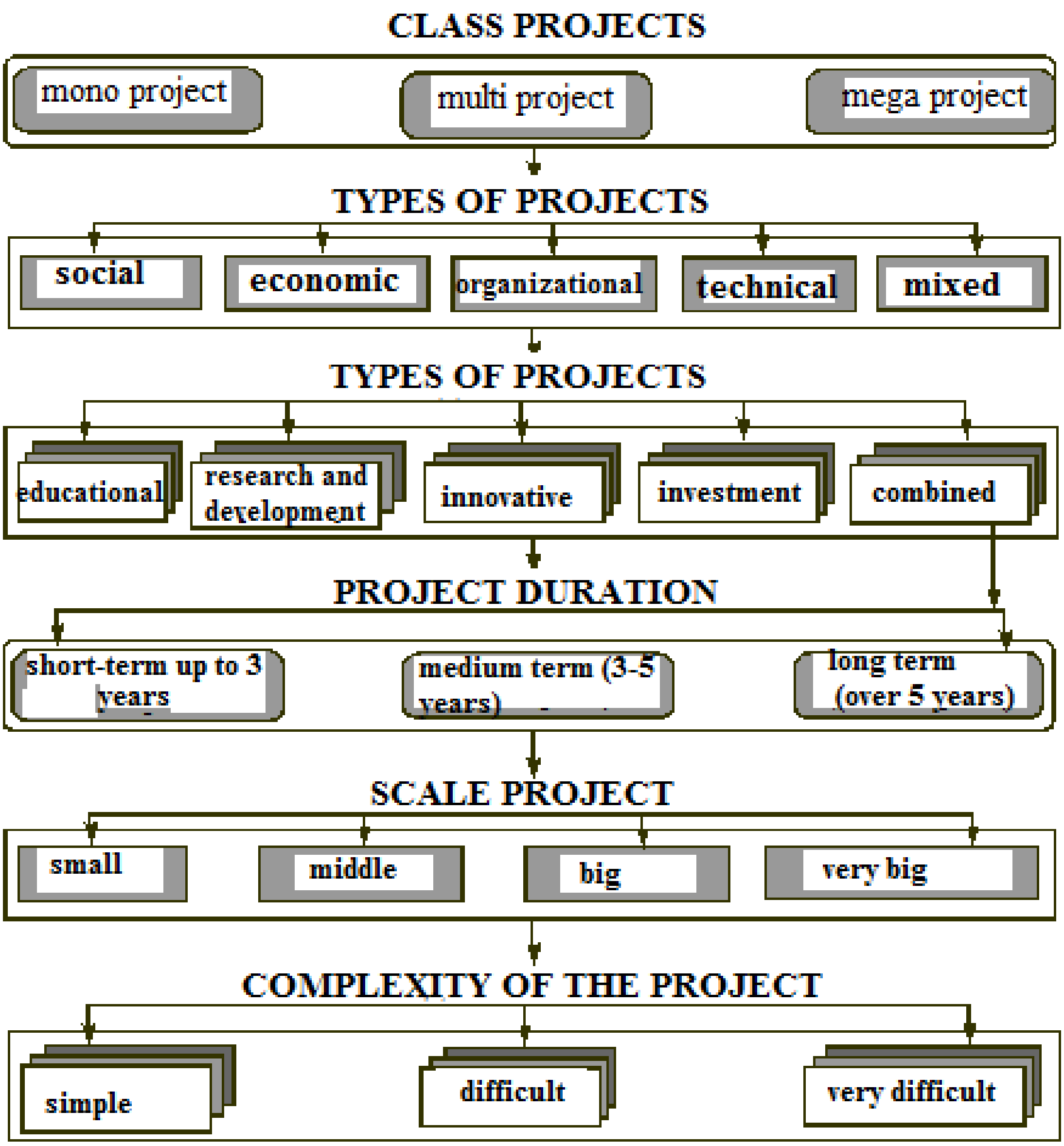


Fig. 2 Classification of Project

1.4. PROJECT SELECTION PROCESS

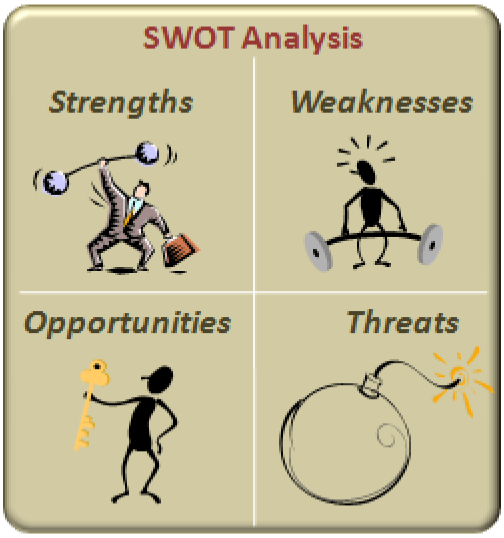
Identification of a new project is a complex problem. Project selection process starts with the generation of project ideas. In order to select the most promising project, the entrepreneur needs to generate a few ideas about the possible project one can undertake. The project ideas as a process of identification of a project begins with an analytical survey of the economy (also known as pre-investment surveys). The surveys and studies will give us ideas. The process of project selection consists of following stages :

- **Idea generation**
- **Environment appraisal.**
- **Corporate appraisal**
- **Scouting for project ideas.**
- **Preliminary screening.**
- **Project rating index**
- **Sources of positive Net Present Value.**

□ **Entrepreneur qualities.**

Idea Generation :- Project selection process starts with the generation of a project idea. Ideas are based on technological breakthroughs and most of the project ideas are variants of present products or services. To stimulate the flow of ideas, the following are helpful:

SWOT Analysis :- SWOT is an acronym for strengths, weaknesses, opportunities and threats. SWOT analysis represents conscious, deliberate and systematic effort by an organisation to identify opportunities that can be profitably exploited by it. Periodic SWOT analysis facilitates the generation of ideas.



Fostering a conducive climate :- To tap the creativity of people and to harness their entrepreneurial skills, a conducive organisation climate has to be fostered. Two conspicuous examples of organisation which have been exceptionally successful in tapping the creativity of employees are the Bell Telephone Laboratory and the 3M

Corporation. While the former has succeeded in harnessing creativity by providing an unconstrained environment, the latter has effectively nurtured the entrepreneurial skills of its employees as sources of idea generation. The project ideas can be generated from various internal and external sources. These are :-

- Knowledge of market, products, and services.
- Knowledge of potential customer choice.
- Emerging trends in demand for particular product.
- Scope for producing substitute product.
- Market survey & research.
- Going through Professional magazines.
- Making visits to trade and exhibitions.
- Government guidelines & policy.
- Ideas given by the experienced person.
- Ideas by own experience.
- SWOT analysis.

Environment appraisal :- An entrepreneur or a firm systematically appraise the environment and assess its competitive abilities. For the purposes of monitoring, the business environment may be divided into six broad sectors as shown in fig. 1.3.

The key elements of the environment are as follow :

Economic Sector

- State of the economy
- Overall rate of growth
- Cyclical fluctuations
- Inflation rate
- Growth rate of primary, secondary and territory sector
- Growth rate of world economy
- Trade surplus and deficits
- Balance of Payment

Government Sector

- Industrial policy
- Government programmes and projects
- Tax structure
- EXIM policy
- Financing norms
- Subsidies incentives and concessions
- Monetary policy

Technological Sector

- Emergence of new technologies
- Access to technical know-how, foreign as well as indigenous

Socio-demographic Sector

- Population trends
- Age shifts in population
- Income distribution
- Educational profile
- Employment of women
- Attitudes toward consumption and investment

Competition Sector

- Number of firms in the industry and the market share of the top few
- Degree of homogeneity and differentiation among the products
- Entry barrier
- Comparison with substitutes in term of quality and price
- Marketing polices and practices

Supplier Sector

- Availability and cost of raw material
- Availability and cost of energy
- Availability and cost of capital

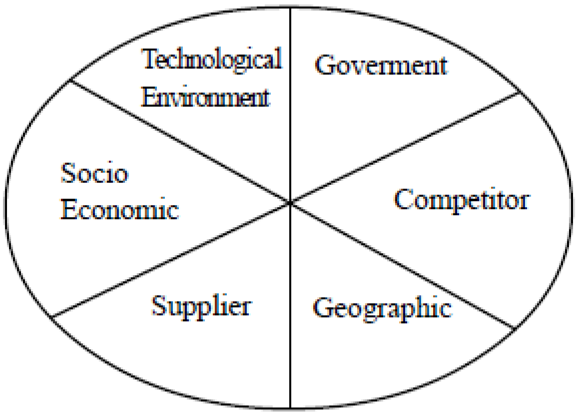


Fig. 3 Business Environment

Corporate Appraisal :- A realistic appraisal of corporate strengths and weaknesses is essential for identifying investment opportunities which can be profitably exploited.

The broad areas of corporate appraisal and the important aspects to be considered under them are as follow :

Marketing and Distribution

- Market Image
- Product Line
- Product Mix
- Distribution Channels
- Customer loyalty
- Marketing & distribution costs

Production and Operations

- Condition and capacity of plant and machinery
- Availability of raw material and power
- Degree of vertical integration
- Locational advantage
- Cost structure

Research and Development

- Research capabilities of the firm
- Track record of new product developments
- Laboratories and testing facilities
- Coordination between research and operations

Corporate Resources and Personnel

- Corporate image
- Dynamism of top management
- Relation with government and regulatory agencies
- State of industry relations

Finance and Accounting

- **Financial leverage and borrowing capacity**
- Cost of capital
- Tax structure
- Relation with share holders and creditors

• Accounting & control system
• Cash flow and liquidity

1.5. PROJECT LIFE CYCLE

The project manager and project team have one shared goal: to carry out the work of the project for the purpose of meeting the project's objectives. Every project has a beginning, a middle period during which activities move the project toward completion, and an ending (either successful or unsuccessful). A standard project typically has the following four major phases (each with its own agenda of tasks and issues): initiation, planning, implementation, and closure. Taken together, these phases represent the path a project takes from the beginning to its end and are generally referred to as the project "life cycle."

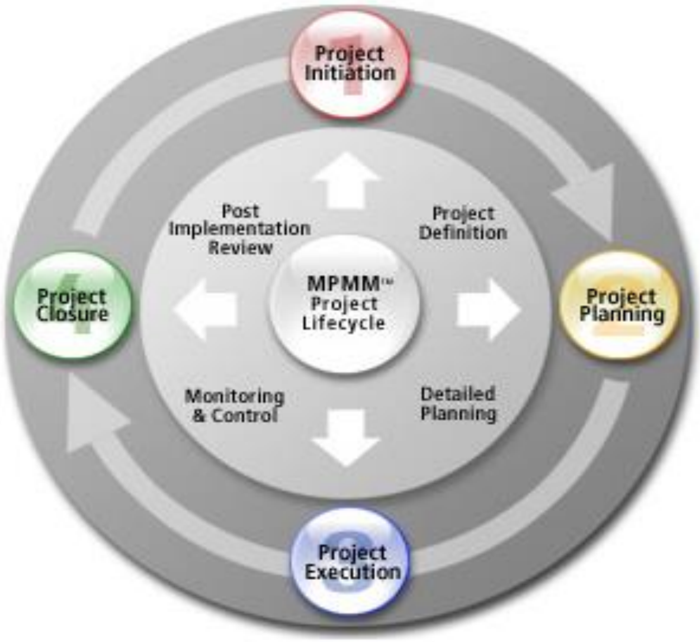


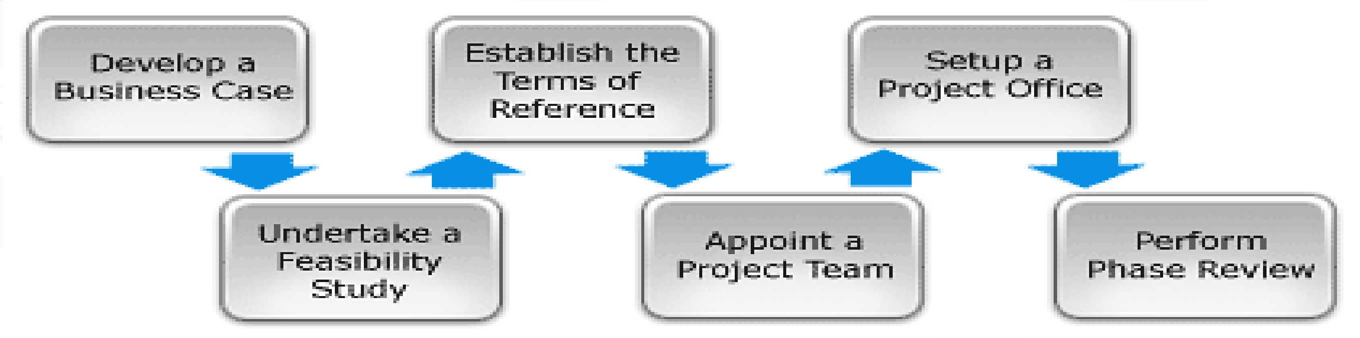
Fig. 4. Project Life Cycle

INITIATION PHASE

During the first of these phases, the initiation phase, the project objective or need is identified; this can be a business problem or opportunity. An appropriate response to the need is documented in a business case with recommended solution options. A feasibility study is conducted to investigate whether each option addresses the project objective and a final recommended solution is determined. Issues of feasibility ("can we do the project?") and justification ("should we do the project?") are addressed.

Once the recommended solution is approved, a project is initiated to deliver the approved solution and a project manager is appointed. The major deliverables and the participating work groups are identified, and the project team begins to take shape. Approval is then sought by the project manager to move onto the detailed planning phase.

Project Initiation phase involves the following six key steps:



SUMMARY this phase:

Initiation involves starting up the project, by documenting a business case, feasibility study, terms of reference, appointing the team and setting up a Project Office.

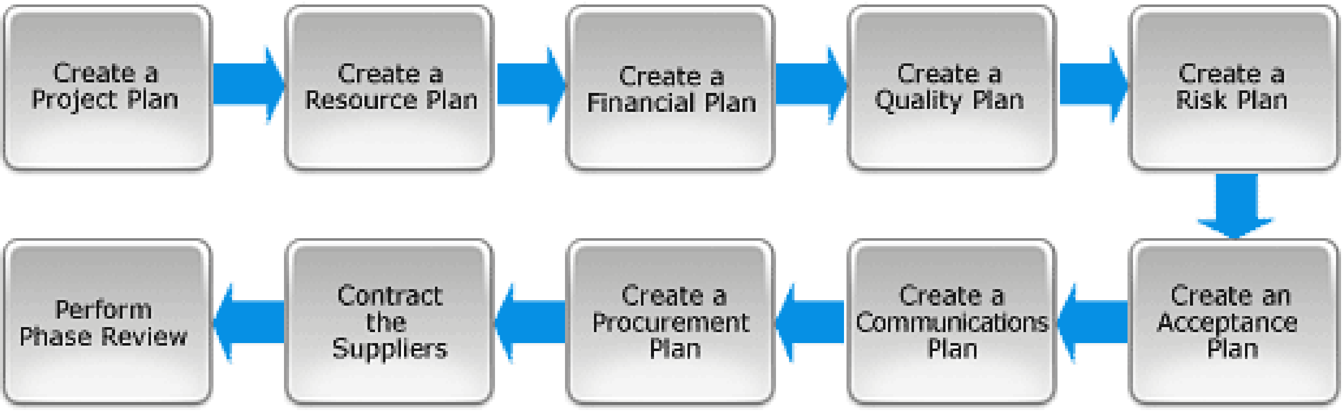
PLANNING PHASE

The next phase, the planning phase, is where the project solution is further developed in as much detail as possible and the steps necessary to meet the project's objective are planned. In this step, the team identifies all of the work to be done. The project's tasks and resource requirements are identified, along with the strategy for producing them. This is also referred to as "scope management." A project plan is created outlining the activities, tasks, dependencies, and timeframes. The project manager coordinates the preparation of a project budget by providing cost estimates for the labor, equipment, and materials costs. The budget is used to monitor and control cost expenditures during project implementation.

Once the project team has identified the work, prepared the schedule, and estimated the costs, the three fundamental components of the planning process are complete. This is an excellent time to identify and try to deal with anything that might pose a threat to the successful completion of the project. This is called risk management. In risk management, "high-threat" potential problems are identified along with the action that is to be taken on each high-threat potential problem, either to reduce the probability that the problem will occur or to reduce the impact on the project if it does occur. This is also a good time to identify all project stakeholders and establish a communication plan describing the information needed and the delivery method to be used to keep the stakeholders informed.

Finally, you will want to document a quality plan, providing quality targets, assurance, and control measures, along with an acceptance plan, listing the criteria to be met to gain customer acceptance. At this point, the project would have been planned in detail and is ready to be executed.

The Planning Phase involves completing the following 10 key steps:



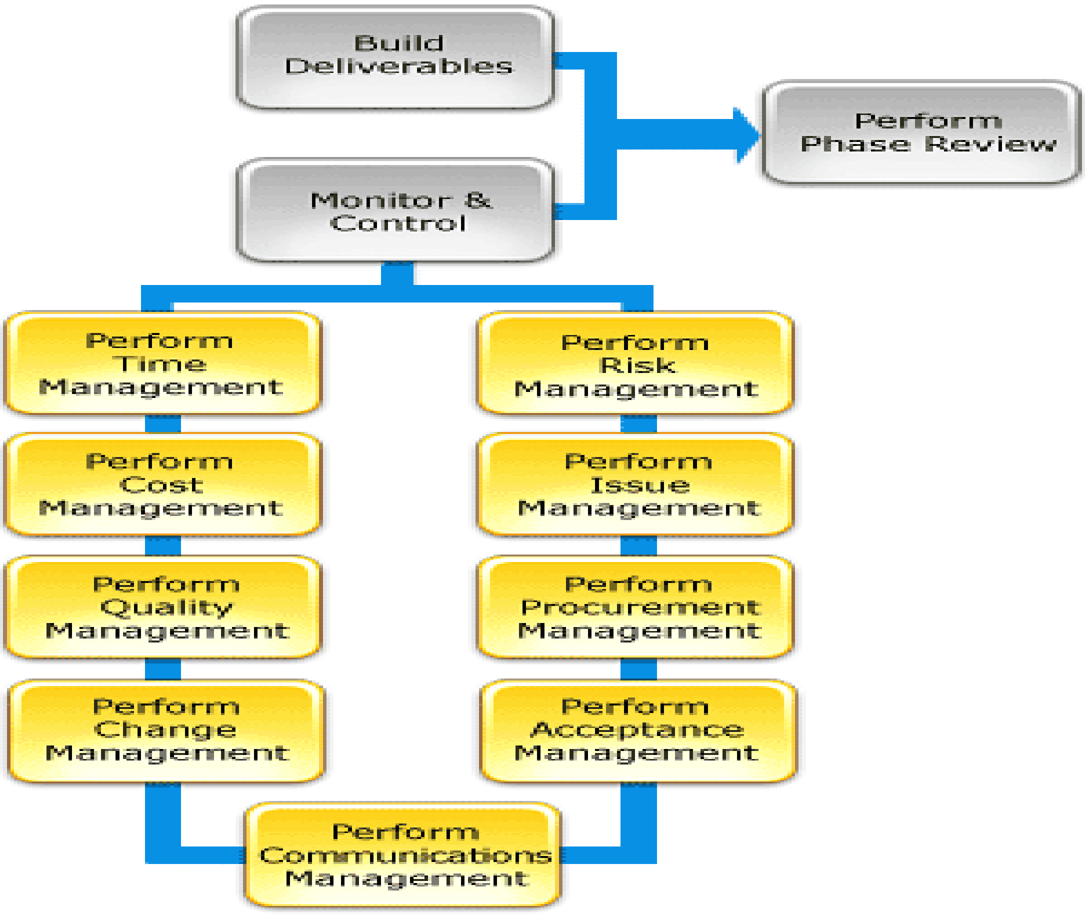
SUMMARY this phase:

Planning involves setting out the roadmap for the project by creating the following plans: project plan, resource plan, financial plan, quality plan, acceptance plan and communications plan.

IMPLEMENTATION (EXECUTION) PHASE

During the third phase, the implementation phase, the project plan is put into motion and the work of the project is performed. It is important to maintain control and communicate as needed during implementation. Progress is continuously monitored and appropriate adjustments are made and recorded as variances from the original plan. In any project, a project manager spends most of the time in this step. During project implementation, people are carrying out the tasks, and progress information is being reported through regular team meetings. The project manager uses this information to maintain control over the direction of the project by comparing the progress reports with the project plan to measure the performance of the project activities and take corrective action as needed. The first course of action should always be to bring the project back on course (i.e., to return it to the original plan). If that cannot happen, the team should record variations from the original plan and record and publish modifications to the plan. Throughout this step, project sponsors and other key stakeholders should be kept informed of the project's status according to the agreed-on frequency and format of communication. The plan should be updated and published on a regular basis.

Status reports should always emphasize the anticipated end point in terms of cost, schedule, and quality of deliverables. Each project deliverable produced should be reviewed for quality and measured against the acceptance criteria. Once all of the deliverables have been produced and the customer has accepted the final solution, the project is ready for closure.

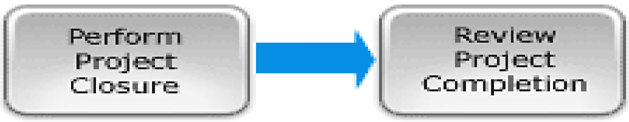


SUMMARY this phase:

Execution involves building the deliverables and controlling the project delivery, scope, costs, quality, risks and issues.

CLOSING PHASE

During the final closure, or completion phase, the emphasis is on releasing the final deliverables to the customer, handing over project documentation to the business, terminating supplier contracts, releasing project resources, and communicating the closure of the project to all stakeholders. The last remaining step is to conduct lessons-learned studies to examine what went well and what didn't. Through this type of analysis, the wisdom of experience is transferred back to the project organization, which will help future project teams.



SUMMARY this phase:

Closure involves winding-down the project by releasing staff, handing over deliverables to the customer and completing a post implementation review.

<u>EXAMPLE: PROJECT PHASES ON A LARGE MULTINATIONAL PROJECT</u>

A U.S. construction company won a contract to design and build the first copper mine in northern Argentina. There was no existing infrastructure for either the mining industry or large construction projects in this part of South America. During the initiation phase of the project, the project manager focused on defining and finding a project leadership team with the knowledge, skills, and experience to manage a large complex project in a remote area of the globe. The project team set up three offices. One was in Chile, where large mining construction project infrastructure existed. The other two were in Argentina. One was in Buenos Aries to establish relationships and Argentinian expertise, and the second was in Catamarca—the largest town close to the mine site. With offices in place, the project start-up team began developing procedures for getting work done, acquiring the appropriate permits, and developing relationships with Chilean and Argentine partners.

During the planning phase, the project team developed an integrated project schedule that coordinated the activities of the design, procurement, and construction teams. The project controls team also developed a detailed budget that enabled the project team to track project expenditures against the expected expenses. The project design team built on the conceptual design and developed detailed drawings for use by the procurement team. The procurement team used the drawings to begin ordering equipment and materials for the construction team; develop labor projections; refine the construction schedule; and set up the construction site. Although planning is a never-ending process on a project, the planning phase focused on developing sufficient details to allow various parts of the project team to coordinate their work and allow the project management team to make priority decisions.

The implementation phase represents the work done to meet the requirements of the scope of work and fulfill the charter. During the implementation phase, the project team accomplished the work defined in the plan and made adjustments when the project factors changed. Equipment and materials were delivered to the work site, labor was hired and trained, a construction site was built, and all the construction activities, from the arrival of the first dozer to the installation of the final light switch, were accomplished.

The closeout phase included turning over the newly constructed plant to the operations team of the client. A punch list of a few remaining construction items was developed and those items completed. The office in Catamarca was closed, the office in Buenos Aries archived all the project documents, and the Chilean office was already working on the next project. The accounting books were reconciled and closed, final reports written and distributed, and the project manager started on a new project.

1.6. PROJECT REPORT (business plan)

In simple words project report or business plan is a written statement of what an entrepreneur proposes to take up. It is a kind of course of action what the entrepreneur hopes to achieve in his business and how he is going to achieve it. In other words, project report serves like a road map to reach the destination determined by the entrepreneur.

Contents of Project Report

- General Information
- Promoter
- Location
- Land and Building
- Plant and Machinery
- Production process

- Utilities
- Transport and communication
- Raw material
- Manpower
- Product
- Market

1.7. PROJECT APPRAISAL

Project appraisal means the assessment of a project. Project appraisal is made for both proposed and executed projects. In case of former project appraisal is called ex-ante analysis and in case of letter 'post-ante analysis'. Here, project appraisal is related to a proposed project.

Project appraisal is a cost and benefits analysis of different aspects of proposed project with an objective to adjudge its viability. A project involves employment of scarce resources. An entrepreneur needs to appraise various alternative projects before allocating the scarce resources for the best project. Thus project appraisal helps select the best project among available alternative projects. For appraising a projects its economic, financial, technical market, managerial and social aspect are analysed.

Financial institutions carry out project appraisal to assess its creditworthiness before extending finance to a project.

Method of Project Appraisal

Appraisal of a proposed project includes the following analyses :

1 Economic analysis
2 Financial analysis
3 Market analysis
4 Technical analysis
5 Managerial competence
6 Ecological analysis

Economic Analysis :

Under economic analysis the aspects highlighted include

- Requirements for raw material
- Level of capacity utilization
- Anticipated sales
- Anticipated expenses
- Proposed profits
- Estimated demand

It is said that a business should have always a volume of profit clearly in view which will govern other economic variable like sales, purchase, expenses and alike.

Financial Analysis ***<u>(more details see topic 6)</u>***

Finance is one of the most important prerequisites to establish an enterprise. It is finance only that facilitates an entrepreneur to bring together the labour, machines and raw materials to combine them to produce goods. In order to adjudge the financial viability of the project, the following aspects need to be carefully analysed :

• Cost of capital
• Means of finance
• Estimates of sales and production
• Cost of production
• Working capital requirement and its financing
• Estimates of working results
• Break-even point
• Projected cash flow
• Projected balance sheet.

The activity level of an enterprise expressed as capacity utilization needs to be well spelled out. However the enterprise sometimes fails to achieve the targeted level of capacity due to various business vicissitudes like unforeseen shortage of raw material, unexpected disruption in power supply, instability to penetrate the market mechanism etc.

Market Analysis ***(more details see topic 4)***

Before the production actually starts, the entrepreneur needs to anticipate the possible market for the product. He has to anticipate who will be the possible customer for his product and where his product will be sold. This is because production has no value for the producer unless it is sold. In fact, the potential of the market constitutes the determinant of possible reward from entrepreneurial career.

Thus knowing the anticipated market for the product to be produced become an important element in business plan. The commonly used methods to estimate the demand for a product are as follows. :

1 Opinion polling method

In this method, the opinion of the ultimate users. This may be attempted with the help of either a complete survey of all customers or by selecting a few consuming units out of the relevant population.

2. Life Cycle Segmentation Analysis

It is well established that like a man, every product has its own life span. In practice, a product sells slowly in the beginning. Barked by sales promotion strategies over period its sales pick up. In the due course of time the peak sale is reached. After that point the sales begins to decline. After sometime, the product loses its demand and dies. This is natural death of a product. Thus, every product passes through its life cycle. The product life cycle has been divided into the following five stage : Introduction, Growth, Maturity, Saturation and Decline.

Technical (Manufacturing) Analysis ***(more details see topic 5)***

Technical analysis implies the adequacy of the proposed plant and equipment to prescribed norms. It should be ensured whether the required know how is available with the entrepreneur. The following inputs concerned in the project should also be taken into consideration.

- Availability of Land and site
- Availability of Water Power, transport, communication facilities.
- Availability of servicing facilities like machine shop, electric repair shop etc.
- Coping with anti pollution law

- Availability of work force
- Availability of required raw material as per quantity and quality.

Management Competence

Management ability or competence plays an important role in making an enterprise a success. In the absence of Managerial Competence the project which are otherwise feasible may fail. On the contrary, even a poor project may become a successful one with good managerial ability. Hence, while doing project appraisal, the managerial competence or talent of the promoter should be taken into consideration.

Ecological Analysis

In recent years, environmental concerns have assumed great deal of significance.

Ecological analysis should also be done particularly for major projects which have significant implication like power plant and irrigation schemes, and environmental pollution industries like bulk-drugs, chemical and leather processing. The key factors considered for ecological analysis are :

- Environmental damage
- Restoration measure

This process is a kind of business plan for your business project. We consider the topic of business planning in the next lecture

SELF ASSESSMENT QUESTIONS

1. Define Project Management and outline its features clearly.
2. Discuss the process of generating and screening the project ideas.
3. What can a firm do to stimulate the flow of Project Ideas?
4. Discuss the concept of project life cycle.
5. What factors influence the project ideas?. Discuss their implications.
6. Define the term ‘Project’. How will you classify the projects ?
7. What do you understand by project identification? Discuss, with examples, the process involved in project identification.
8. How are projects classified ? In your view which criterion seems to be more rational and acceptable for classification of a project?

Topic 2. A BUSINESS PLAN IN A MARKET SYSTEM

Learning Objectives

After studying this chapter you should be able to:

1. Determine the role of business planning in a market system
2. Distinguish business plans, project charters and project plans

PREPARATORY STAGE OF A BUSINESS PLAN DEVELOPMENT

Learning Objectives

After studying this chapter you should be able to:

1. Understand what business idea is and what reasons lead to its development.
2. Find out the goal of developing the business mission and the requirements to the future goals.
3. Learn to classify the factors of both direct and indirect influence and show them by means of the business plan specific factors.
4. Compare the strong and weak sides of the future business project with the opportunities and threats of the external environment while using SWOT-analysis methodology.

Key words: *business idea, business project mission and goals, strategy, external factors, internal possibilities,SWOT-analysis, key success factors, business plan, venture capital, start-up project, start-up company, entrepreneurial activity,entrepreneurship.*

The economic development of market management system is considerably connected with the development level of technologies, novelties and economic agents activity. The success of the world leading countries became possible owing to the initiative work of economic agents through the new ideas commercialization. Usually business ideas financing is carried out by means of venture capital. At the same time the best and the most perspective ideas of the start-up companies are selected.

First the term 'start-up' as a newly established company (project) has been used in 1939 by David Packard and William Hewlett, the students of Stanford University. Silicon Valley had already been the centre of entrepreneurship that focused on high technology development. These days electronic, Internet and biotechnology companies are among the most-common start-ups[1]

Start-up projects are developed and implemented according to standard templates of business plans that show the very aspects that are interesting for investors. **Business plan** is the complex planned document setting out the measures of a business ideas implementation for the purpose of getting profit during the stated period.Usually a business plan has planning horizon of three, five or ten years. A business plan of new companies is drawn up by many businesses for the purpose of raising capital or forecasting the activity volumes and cash flows relating to a specific project within an organization (Figure 1.1).

[1]Что такое стартап? [Electronic recourse]/ http://constructorus.ru/finansy/chto-takoe-startap.html

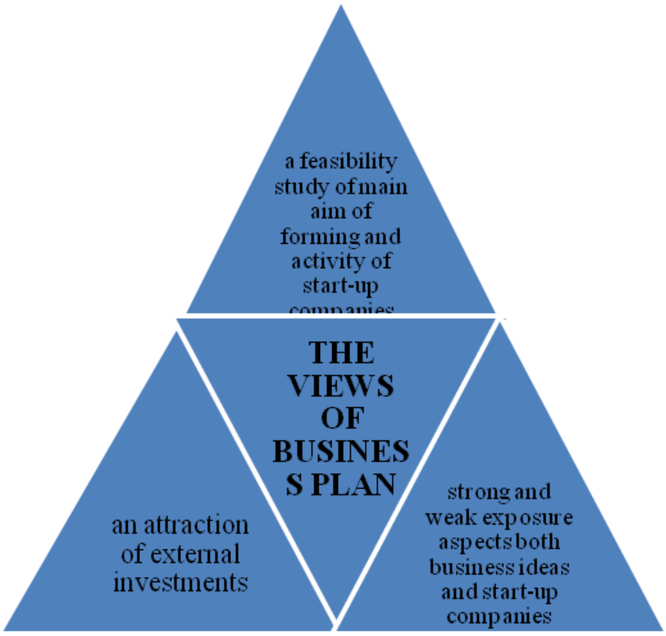


Figure 2.1. The views of business plan

The plan should quantify maximum possible goals, securing monthly cash flows and production figures for at least the first two years, with diminishing details in the following years; it must also plan its strategy and tactics that it is going to use for the reaching its objectives. Expected profit and loss calculations must form the part of the quarterly business plan for minimum two years, and the annual basis thereafter. For the groups of companies the business plan is often named a corporate plan.

The importance of business plan is determined by the following:

the possibility to measure the project viability within the market competitive conditions;

the availability of guideline that show what way the project (start-up company) should be developed;

opportunity of external investors financial support;

understanding of start-up companies market position;

assistance in analysing of development prospects of branch, market, product (service) and getting a new angle on start-up companies, their problems and development prospects;

determining of levels of start-up companies viability and future capability;

entrepreneurial activity risk reduction;

concretization of business prospects in the form of quantitative and qualitative development (growth) indicators system;

gaining of planning experience;

developing of perspective view of start-up company and its environment, possibility of strategic plans development.

The business plan of start-up projects is estimated by potential investors estimate in accordance with the following key aspects (that is why these things should be present at business plan, see Figure1.2):an idea;a team;a technology; risks and profits;a market characteristics.

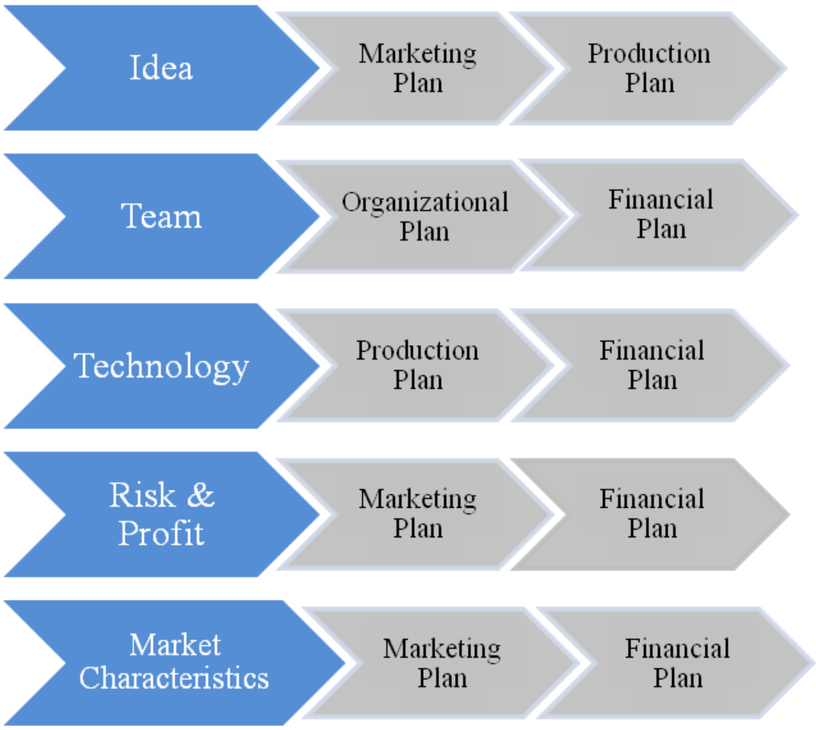


Figure 2.2. The key elements of business plan

The business planning process should start from defining business need (Figure 1.3). Thereafter is necessary to identify goals and clarify the expected result. It will help to allocate resources, roles, and responsibilities[2].

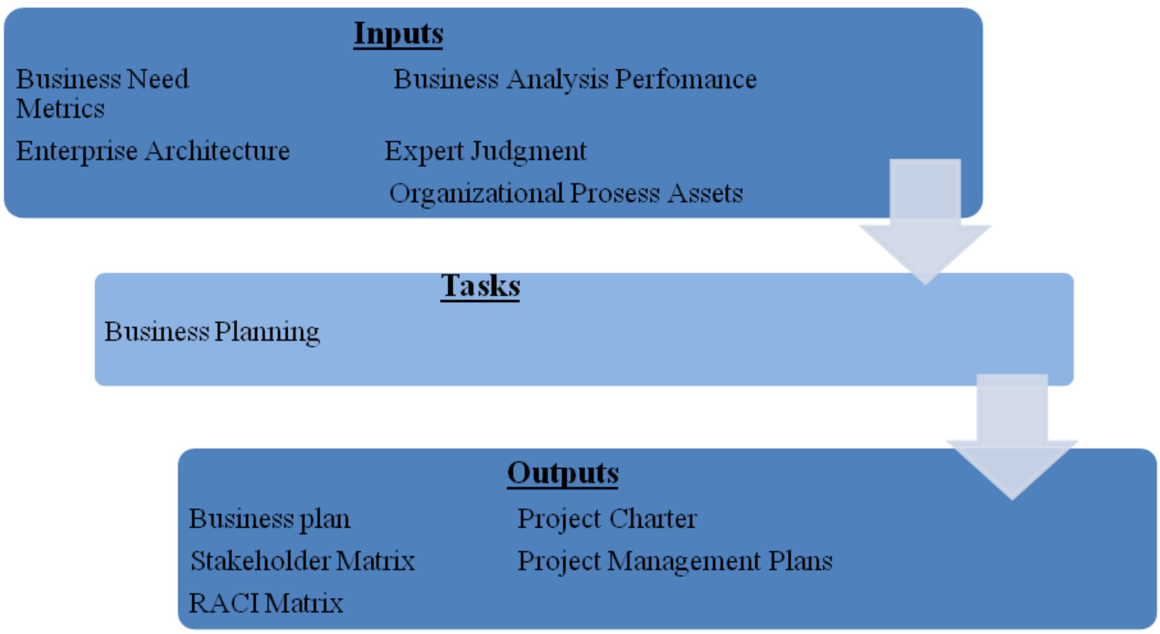


Figure 2.3. Business Planning Input / Output Diagram

The aims should be tested to make sure that there are all assets and possibilities for their implementation. SMART- technique is the most common technique that is used for aims assessment[2].

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[2] *A Guide to the Business Analysis Body of Knowledge / IIBA.* –Version 2.0, 2009

The next thing that should be pointed out is the stakeholders of start-up companies. Most companies have many stakeholders, which influence the result of companies' business activities[3]. That is why, it's important to make a list of stakeholders while business planning.

Business planning should be carried out according to specific principles:

1. ***The principle of foundation of aims and objectives of the start-up company*.** Clearly defined aims are the start point of planning.
2. ***The principle of consistency*.** According to it the planning is an integral system of plans that covers all areas of entrepreneurial activity;
3. ***The principle of scientific approach*.** It requires consideration of the prospects of scientific and technical progress and application of scientifically based standards for progressive use of all resources;
4. ***The principle of continuity*.** It is considered as a parallel combination of current and advanced planning;
5. ***The principle of a balanced plan*.** It shows the quantitative correspondence between related sections and plan performance, between necessary and available resources.

There are lots of standards used for the successful business planning. A few of them are presented at the Figure 1.4.

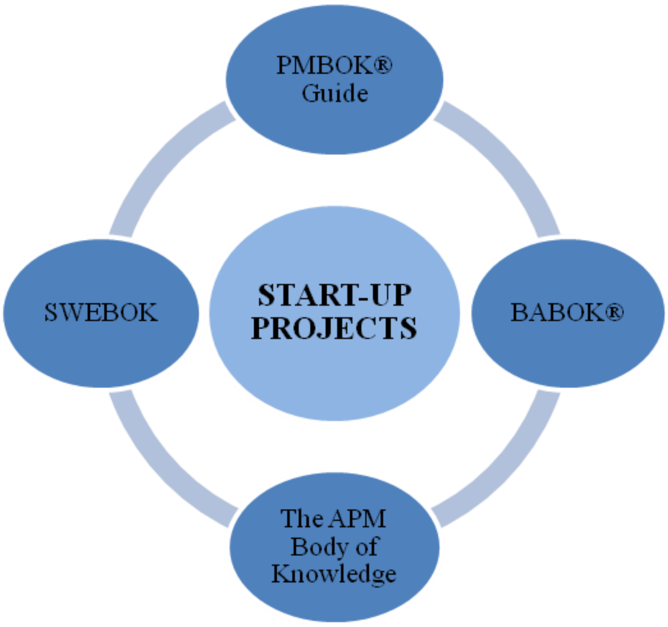

Figure 2.4. Start-up projects Body of Knowledge

It is well known, that business planning includes the creation of business plans. But it is also important to make project charter and project management plans (Figure 1.5).

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[3]A guide to the project management body of knowledge / Project Management Institute. – Fifth edition. 2013.

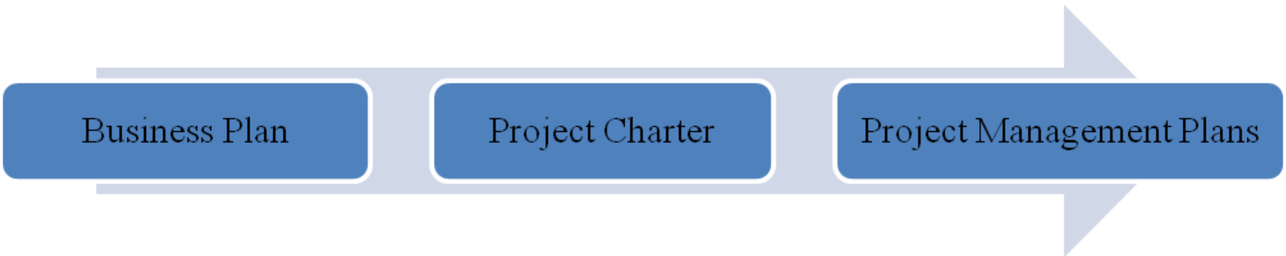

Figure 2.5. Business Planning Process

These planning instruments fill not only the need in getting investment, but also the further need in start-ups planning activities (Figure 1.6).

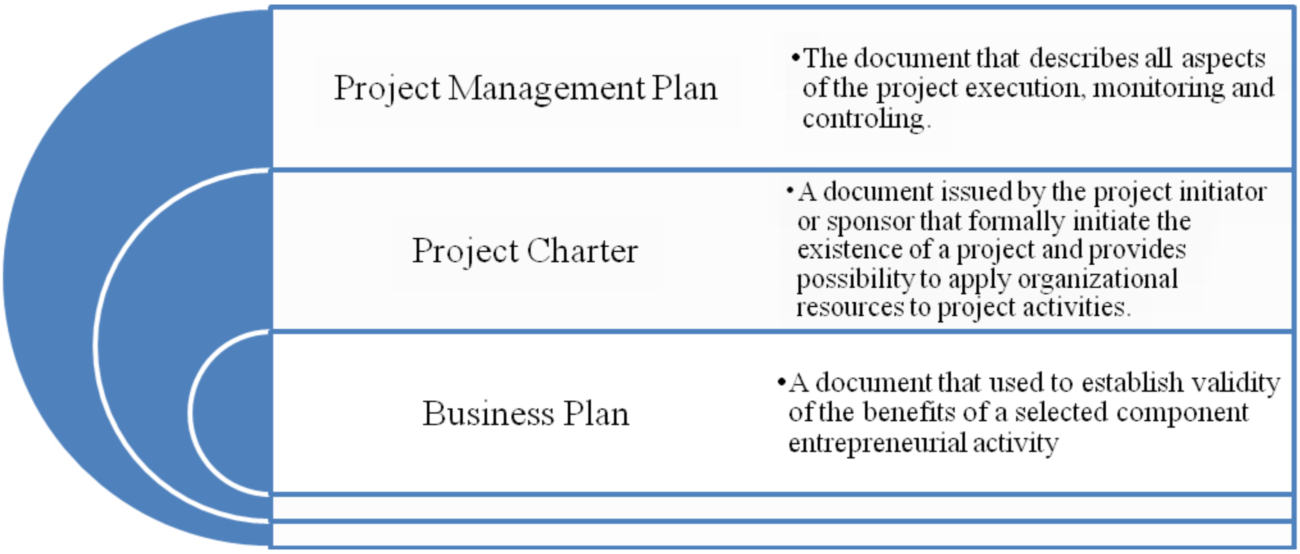

Figure 2.6. Planning Onion Diagram

After you have defined the project plan and distributed out the necessary resources of the plan, it can be possible to schedule the work according to resource availability. The plans also help to measure the work planned versus work performed, and to manage existent deviations.

Conclusion. Business planning is a specific field of business activity of entrepreneurship. Business planning is an integral part of any business project. Business planning is necessary to attracting internal investment and improving business performance. Business plan is the complex planned document setting out the measures of a business ideas implementation for the purpose of getting profit during the stated period.

The effectiveness of business planning occurs only after the project implementation in the real (production or) market conditions. During the implementation of the business project the schedule of main stages of the work is developed and the adjusted cost estimate is formed.

PREPARATORY STAGE OF A BUSINESS PLAN DEVELOPMENT

The leverage and headstone of any business is the idea that can be defined as a nonmaterial thing that by its nature is very similar to a human thought. However, it is not a simple thought. It is a creative search that pays off and in the future transforms into a rather real form that is a business plan of a specific investment project.

The ***business idea and business skills*** are two components giving a synergetic effect. They are instrumental in generating new ideas, bringing them to the implementation stage and, as a result, receiving benefits.

A range of reasons can precede the business idea:

1) the longing for personal development and running beyond the conventional way of life;
2) the need to be useful for the society and implement the personal human potential;
3) the desire to invest free assets into the innovative business fields;
4) the detection of possibilities of improving the existing business fields;
5) the possibility of establishing communications with potential partners.

It should be mentioned that not every business idea can be selected in the process of shaping a preliminary stage of business plan development.

The ideas will undergo the "test" of ***efficiency, possibility of their implementation, their real and potential value, risk level and the economic efficiency of their realization***. Only if the results of such a "test" turn out to be positive, it will be worth to start developing the project mission, goals and task, defining the business plan general structure, selecting and processing the necessary information resources as well as developing the business plan of a specific project.

The principle of "from the general to the specific" is employed at the preliminary stage of business planning (Figure 2.1).

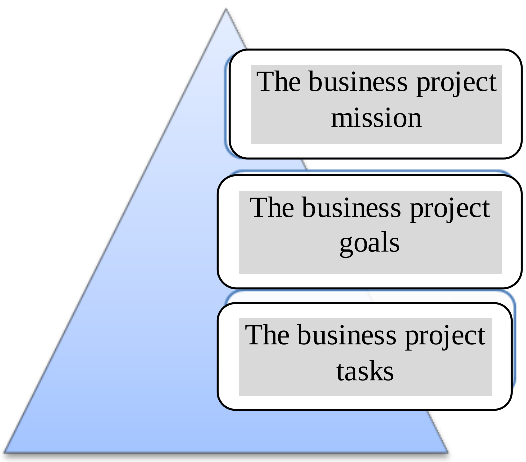

Figure. 2.7. Levels of detailed elaboration of business plan development

The main general objective (***mission***)of the companyis a well-defined reason of the company activity (the main type of activity the company is involved in). All the further goals are developed to fulfil this mission.

EXAMPLE

The mission of the motor company Henry Ford established is to provide people with cheap transport. In the former Soviet Union such was the mission of "AvtoVAZ" OJSC. The mission of "Ternopilvtormet" OJSC is to store, process and transport metal (obtained from waste, swarf or scrap metal) to consumers as well as to deliver raw products to metallurgic plants.

Some may say that the mission of the newly created company is to gain a profit. To gain a profit is an important goal of the company rather than its mission. Profit is a completely internal problem of a company. Since the company is an open system, in the end it can only survive if it satisfies a demand beyond itself. To gain the profit necessary for its survival, any firm has to study the environment of its functioning. That is why the environment is the very place where the executive management are to look for the company's goal.

The ***company's goals*** make its further activity more specific and are to conform to ***certainrequirements***:

to be specific, well-defined and measurable;

to have different duration of action: urgent, current – a decade, a month, a quarter, middle-term – up to one year, long-term – from 1 to 5 years, prospective – indefinite period, directed to the future, and unlimited in time. First of all, the company develops long-term goals. Then it develops middle- and short-term ones to make provisions for the long-term goals;

to be real;

to be developed for every single type of activity that is important for the company;

to complement each other rather than disagree.

EXAMPLE

A long-term goal – to increase the general efficiency by 25% during 5 years, a middle-term one – to increase the labor efficiency by 10% during two years, short-term goals are developed in specific areas like the inventory reserve price, workers' further training, modernization of a newly created enterprise, more efficient usage of existing productive capacity, improvement of management, conclusion of a one-year-long agreement with the trade union that allows for a bonus in case the worker's overall performance raises by 10 % a year.

The most typical goals for a newly created commercial company are described in table 2.1.

Table 2.1

The examples of the future business project goals

Goal name	Factors to measure the goals
Profitability	The amount of profit, return on investment, dividend payment, profit-sales ratio, the share that remains at the disposal of the company after the taxes have been paid and accounts with the partners have been settled
Market	A market segment (the company's share in a certain field or type of activity), volume of sales in either money or natural measure, sectorial niche
Rentability	Economic effect, financial result or the relation between the obtained result and the total expenditures

Production	The production volume and sales in terms of separate types and items of products
Financial capacity	Capital structure, its subdivision into capital owned and capital employed (permanent), characteristic of money usage, analysis of receivables and payables
Industrial capacity	Value of capital funds, capital productivity and capital coefficient (ratio), amortization, constant expenditures per unit of output.
R& D	Ratio of expenditures on research, development and innovations to the useful effect from their implementation, technology level and the level of the product moral obsolescence
Changes in either structure or organization	Creating, selecting or eliminating specialized structural units, merging, selling or purchasing, developing new types of activity and introducing subsidiary manufacture departments
Deployment of staff	Labor efficiency, quantity and quality of the workers of both principal and subsidiary manufacture departments as well as administrative personnel
Social accountability	Ecological safety, efficient use of resources, waste-free production or waste utilization, social services, advantages for workers, pension and healthcare benefits, philanthropic activity, development of service sector and public amenities

However, it should be born in mind that the idea will only be efficient in the process of its implementation in case the external environment factors are taken into account along with the future business inner potential.

Interesting facts. Why does it often happen that even an effective business plan does not bring the desired results? A range of reasons leading to losses of start-up companies have been defined by the analytical research conducted within the frame of business projects of some famous investment companies (Fig. 2.2).

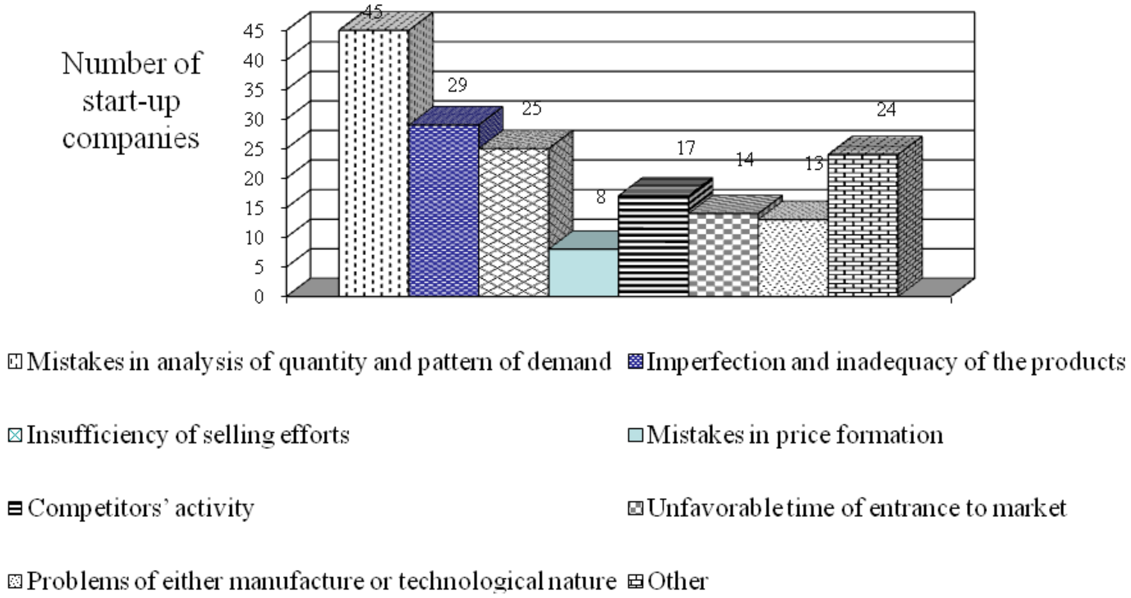

Figure. 2.8. List of typical reasons leading to failures of business projects

When polling 175 start-up companies, whose debut proved to be unsuccessful, the reasons leading to failures have been defined. Most of these reasons turned out to be related to the external environment of the new company activity[4].

The external environment assessment and analysis are made by studying the influence of the factors given in Figure 2.3.

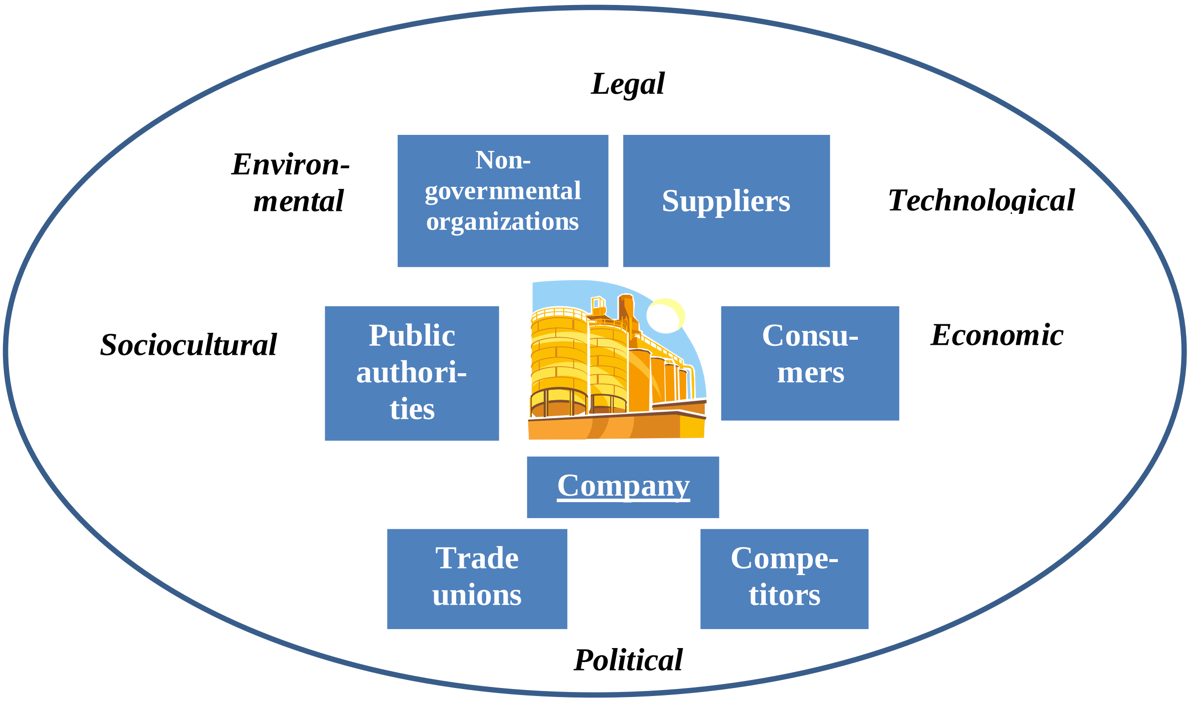

Figure 2.9. Scheme of direct and indirect influence factors on implementation of business projects

The factors of direct influence include suppliers, consumers, competitors, trade unions, public authorities, parties and non-governmental organizations while the factor of indirect influence comprise the ***technology level, economics climate, social and cultural conditions, political factors and international environment***.

When making an analysis, we should define the level of influence of some factors and the potential adaptability of the newly created company to these factors. Here adaptation should be treated in the enlarged term of this word. It encompasses all the actions of strategic nature facilitating the future company relations with its environment.

The ***company needs to adjust to both favourable external opportunities and dangers***, provide the strategy effective adjustment to the environment by means of developing more accomplished production systems and cooperating with the government and society.

"Royal Kriun" company, that spent a lot of time to study the external possibilities and dangers prior to introducing its caffeine-free "RC 100" cola to the consumers concerned about "a healthier" soft drinks, can serve as a good **example** of adaptation to surrounding condition.

[4]Researchthecausesofunsuccessfulstartabusiness[Electronic resource]/ Management Consulting Group PLC. – Access mode: http://www.mcgplc.com.

Let us try to analyze how external environment factors can be reflected in a specific business-plan.(Figure 2.4).

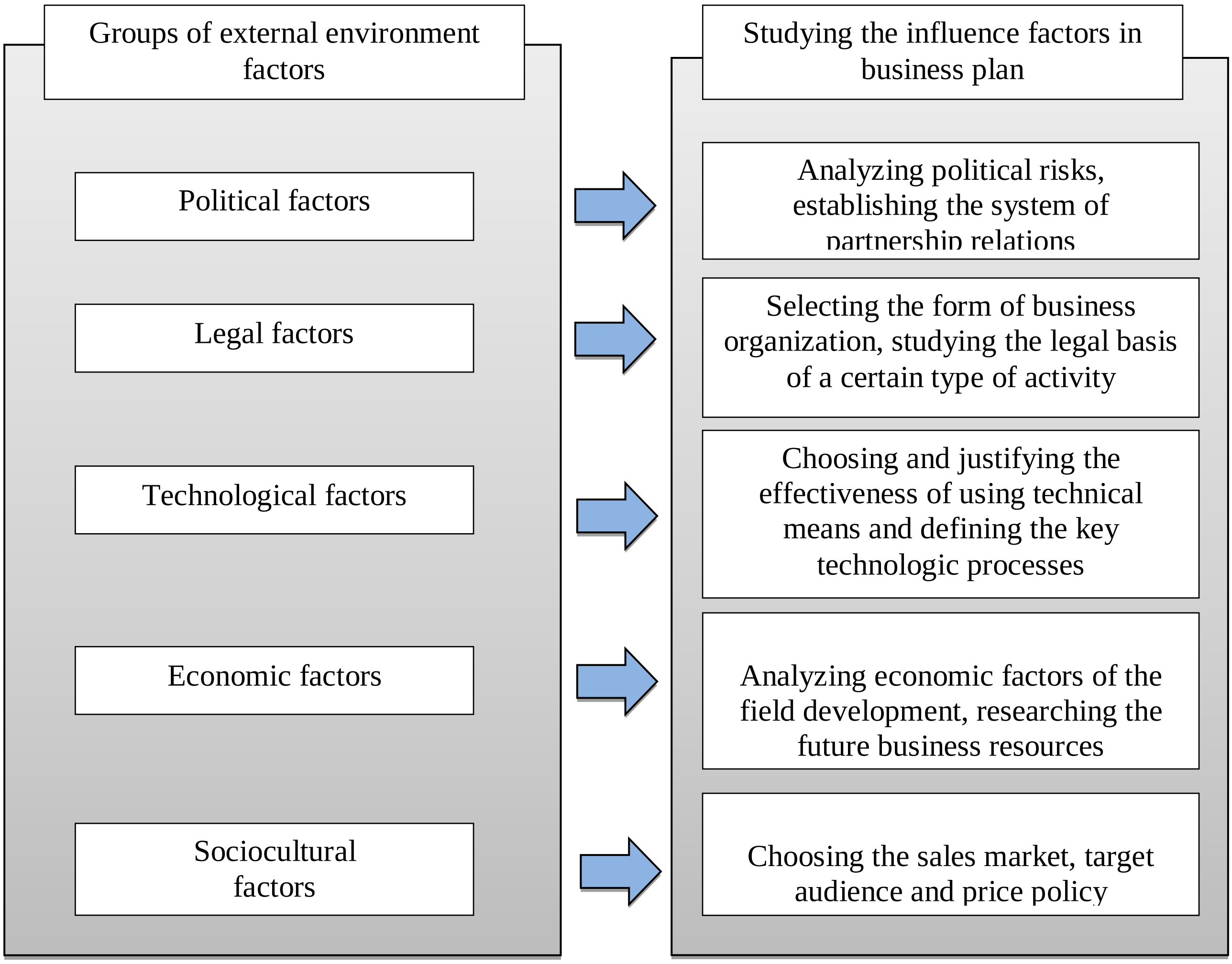

Figure 2.10. Depiction of external factors influence in the process of business plan development

The next step is to determine whether the future company has inner potential to use the external possibilities and detect the inner weaknesses that may make the company condition worse.

The administrative research of both strong and weak sides is done within studying:

1. Marketing (market share and competitive power, product choice variety and quality, market analyses and projects, pre- and aftersales, sales function, advertisement and etc.).

2. The status of finances, accounting, norm setting and payment for work.

3. The state of production (the equipment condition and its up-to-date status, the production process plan, the control system of product quality).

4. The employment of labor (the workers and managers' qualification and skills, the workers' employment, staff turnover).

5. The future company culture and image (team environment, opinion about the enterprise).

The results of analysis of the external influence factors and inner possibilities of small business projects can be depicted as SWOT matrix.

SWOT is the abbreviation of ***Strength, Weakness, Opportunities, and Threats***. Its nature lies in comparing the inner potential of the future business (both strong and weak sides) with the external influence factors (opportunities and threats). Such a comparison enables us to define strategic development alternatives, range strong and weak sides, opportunities and threats by the level of business project influence.

The analysis results can be given as a table (tables 2.2, 2.3)[5]. Table 2.2 demonstrates four main SWOT fields, and table 2.3 shows the matrix of strategies of using SWOT-analysis results.

Table 2.2

Depiction of SWOT-analysis results

Weak sides The inner drawbacks of the future business project	***Strong sides*** Inner advantages of the business project in different functional areas: marketing, finances, production, personnel.
Threats Unfavourable external factors whose influence can lead to failures in the process of business project implementation	***Opportunities*** Promising directions of business projects development capable of bringing success in the future

Table 2.3

Matrix of strategies of using SWOT-analysis results

SO	Measures to be taken to make usage of business project strong sides in order to enhance the opportunities
ST	Measures to be taken to make usage of business project strong sides in order to prevent and reduce the threats
WO	Measures to be taken to overcome the business project weak sides in order to enhance the opportunities
WT	Measures to be taken to overcome the business project weak sides in order to prevent and reduce the threats

The word ***«strategy»*** comes from the Greek «strategos» – «art of troop leader». In its turn, a strategy is an all-round complex plan designed to provide the fulfilment of the future company mission and achievement of its goals.

First of all, a strategy is defined and developed by the business founders, but its implementation needs the participation of all management levels and the range of its activity can be rather big (a few years, a few decades) etc.

SO field (strength and opportunities) suggests the strategies that make usage of strong sides of the future business project to implement the opportunities of the external environment.

[5]SWOT Analysis: Discover New Opportunities. Manage and Eliminate Threats.[Electronic resource] / Access mode: http://www.mindtools.com.

ST field (strength and threats) suggests strategies that make usage of strong sides of the future business project to eliminate the external environment threats.

WO field (weakness and opportunities) suggests strategies that minimize the weak sides of the future business project by using the market status opportunities.

WT field (weak sides and threats) suggests strategies that minimize both weak sides of the future business project and the threats of the external environment. The most favourable situation for business project implementation occurs upon maximal overlapping of its strong sides and the external environment opportunities. And vice versa, the external environment threats making direct influence on the future business project weak sides may lead to its unsuccessful implementation.

Conclusion.A business idea is the initial stage and the main starting condition of business plan development.However, a range of stages bearing the name of the previous stage of business planning precede the idea assimilation and creation of a real business plan. The selection of business ideas by criteria of their potential and real value, risk level and efficiency should be made on this stage. Further, the future business mission and goals should be established, both strong and weak sides as well as the opportunities and threats formed by the external environment should be analyzed. The research positive results on the preliminary stage of business planning are the basis for establishing the main sections of an effective business plan for the future project.

In developing a Business Plan should be allocated two levels (Figure 2.11)

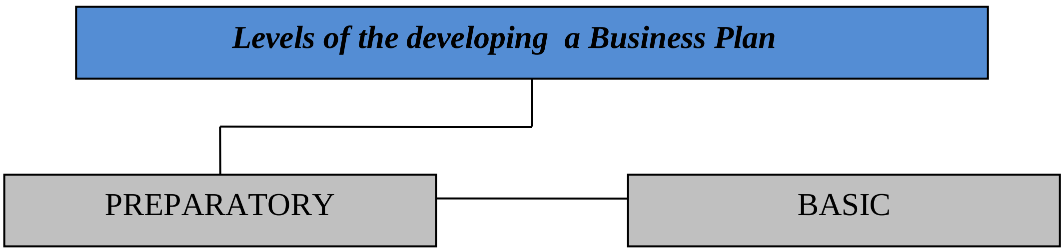

Figure 2.11.*Developing of the Business Plan*

Preparatory level of the developing a Business Plan. This level consists from two series-connected levels: description of the business ideas and express calculation of the profit margin of the business ideas. To begin must to articulate (preferably in writing) business idea.

If the calculation shows rapid return on investment, then can move on to the develop of the basic level of the business plan[6,7,8] (Figure 2.12) *(see topic 3)*.

Consider these basic stages of the developing a Business Plan.

Description of the product offering.This will include details of product features and an overview of unique technology or processes. But don’t stop there and don’t focus too much on technology. Should also describe the product benefits and why customers will want to buy.

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[6]Writing a Business Plan [Electronic resource]/http://www.va.gov/osdbu/docs/vepBusinessPlanOutline.pdf

[7]How To Prepare A Business Plan That Gets Results [Electronic resource]/http://www.nebs.ca/pdf/business/Business_plan.pdf

[8]The Elements of a Business Plan: First Steps for New Entrepreneurs [Electronic resource]/ https://www.extension.purdue.edu/extmedia/EC/EC-735.pdf

Figure 2.12.*Basic level of the developing a Business Plan*

For most businesses, the products/services are not totally unique. If yours are, take advantage of this while can and plan for the competitive battles that will come. If products/services are not unique, must find a way to position of the products/services in the mind of customer and to differentiate them from the competition.

Positioning is the process of establishing your image with prospects or customers. (Examples include: highest quality, lowest price, wider selection, Best customer service, faster delivery, etc.)

Description of the enterprise. This will show and prove the reality of business endeavour by describing the form of practical actions, taking into account the real situation in chosen field of business. This section should clearly and concisely explain the two main points:

What is the enterprise as a means of making a profit?

What will be based its successful operations?

Enterprise can be as a legal entity and individual entrepreneurship**.**

Market Analysis.For start-ups or existing businesses, market analysis is important as the basis for the marketing plan and to help justify the sales forecast. Existing businesses will rely heavily on past performance as an indicator of the future. Start-ups have a greater challenge - they will rely more on market research using libraries, trade associations, government statistics, surveys, competitor observation, etc. In all cases, make sure market analysis is relevant to establishing the viability of the business and the reasonableness of the sales forecast[6].

Marketing Plan. In this section, include the highlights or detailed marketing plan. The basic components of a Marketing Plan are:

What are you selling? (what benefits do you provide and what position or image do you have?)

Who wants the things you sell? (identify target markets)

How will you reach your target markets and motivate them to buy? (develop product, price, distribution and promotional strategies)[7].

<u>(more details see topic 4)</u>

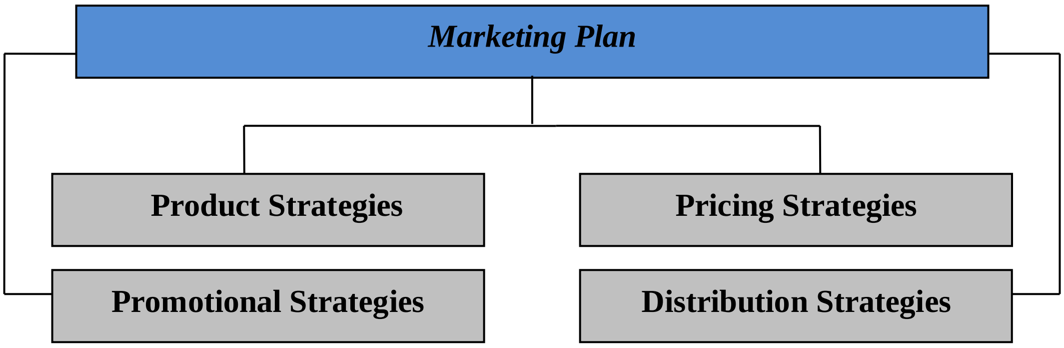

Figure 2.13. Components of Marketing Plan

Locations with greater customer traffic usually cost more to buy or rent, but they require less spending for advertising to attract customers. This is especially true of retail businesses where traffic count and accessibility are critical[6].

For Mail Order, Telemarketing, Manufacturing, Consulting, or other companies where the customer does not purchase while physically at the business address, less location detail is needed. Modify the location section to fit your situation. In some cases, a good location may be one close to suppliers, transportation hubs or a complementary business that will also attract your Target Market

Competition. This will expand concept of competition. If you plan to open the first roller skating rink in town, your competition includes movie theatres, malls, bowling alleys, etc.

Business by nature is competitive, and few businesses are completely new. If there are no competitors, be careful; there may be no market for your products

Production plan. In this section, it is important to identify the needs of the organization and functioning of the company, which will produce the previously described product (service).

Organizational plan. In this part of the business plan describes how the business will be structured, what legal form of ownership it will use, elucidates logistics of the organization such as the various responsibilities of the management team, the tasks assigned to each division within the company and skills of staff, highlights company's management philosophy and business culture, and explains how will these contribute to the business's success.

Management problems are the leading cause of business failures, it is important to discuss management qualifications and structure

Financial plan. In this part of the business plan, it is important to important to determine the financial needs required for the creation of the enterprise, and calculate the financial support of the entrepreneurial project[8].

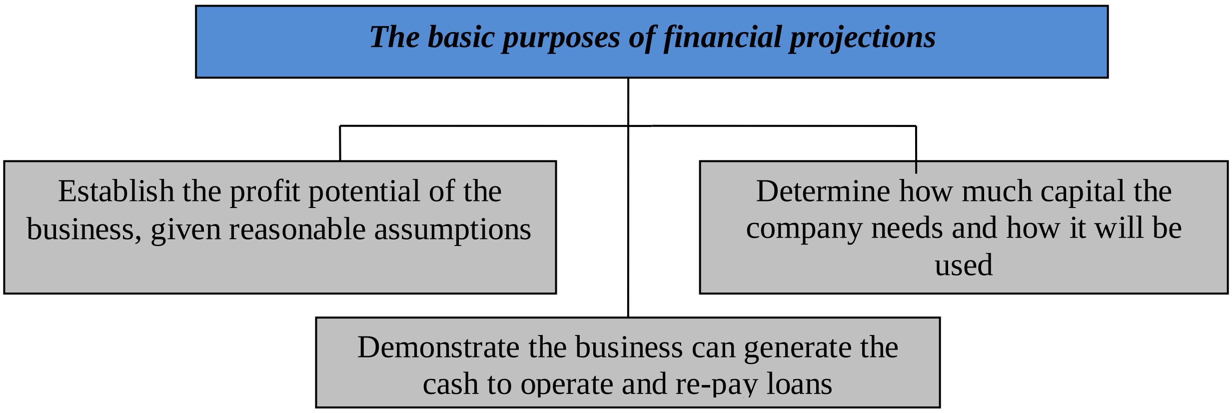

Figure 2.14. Elements of financial projections

Business risks and guarantees.The aim of this section of the business plan is a description of the internal and external factors that enhance or reduce a specific type of risk, and the measures envisaged to protect against possible financial losses of the business and the lender. Investors (lenders) want to know: what problems you might encounter when implementing the project and as an entrepreneur suggests to overcome them. Depth of analysis and the riskiness of the case depends on the specific type of activity and scope of the project. Business risk is influenced by numerous factors, including sales volume, per-unit price, input costs, competition, overall economic climate and government regulations.

Business risks the possibility that a company will have lower than anticipated profits, or that it will experience a loss rather than a profit

Socio-economic importance of the project. In section should contain the impact of the project results on the socio-economic situation of the region (the city), as well as desirable forms of support for the local administration of the project.

Socio-economic importance of the project, in particular, includes:

creation of new jobs;

providing the population of new products and services;

broadening the tax base of the local budget;

solution of environmental problems;

development of a competitive environment.

Conclusion.A winning business plan requires time: hours to write an effective business plan which would include research, documentation, analysis and review. There is no magic equation for success, but one basic rule holds true: "A business owner who fails to plan, plans to fail"[9].

Discussion Questions

1. What is the need of business planning?
2. What is the difference between business plan and project charter?
3. What are the advantages and disadvantages of business plan usage?
4. Do you know the characteristics of start-up project business planning?
5. Can you think of any issue concerning business planning? Give the examples.
6. Define the peculiarities of business ideas development and selection.
7. Characterize the peculiarities of the company’s mission and goals development.
8. Determine the principal requirements to the company’s goals and their measurement criteria.
9. Characterize the direct and indirect influence factors on the future company activity.
10. Define the opportunities of external factors depiction in the process of business plan development.
11. Characterize the methodology of SWOT-analysis and try to analyze the future business strong and weak sides, opportunities and threats.
12. Which are the stages of developing of the Business Plan Do you know?
13. What is the sequence of steps of the business plan?
14. Describe each structural section of the Business Plan.

Topic 3. Valuation of Future Cash Flows

Being completely comfortable with the time value of money is critical when working in the field of finance and commercial real estate. The time value of money is impossible to ignore when dealing with loans, investment analysis, capital budgeting,

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[9]Writing a BusinessPlan for a NewPharmacy Service.[Electronic recourse]/ http://www.pharmacist.com/sites/default/files/files/mtm_writing_business_plan.pdf

and many other financial decisions. It's a fundamental building block that the entire field of finance is built upon. And yet, many finance and commercial real estate professionals still lack a solid working knowledge of time value of money concepts and they consistently make the same common mistakes. In this article we take a deep dive into the time value of money, discuss the intuition behind the calculations, and we'll also clear up several misconceptions along the way.

Why Money Has Time Value

First of all, why does money have time value? Time value of money is the economic principal that a dollar received today has greater value than a dollar received in the future. The intuition behind this concept is easy to see with a simple example. Suppose you were given the choice between receiving $100,000 today or $100,000 in 100 years. Which option would you rather take? Clearly the first option is more valuable for the following reasons:

No Risk – There is no risk of getting money back that you already have today.

Higher Purchasing Power – Because of inflation, $100,000 can be exchanged for more goods and services today than $100,000 in 100 years. Put another way, just think back to what $100,000 could buy you 100 years ago. $100,000 in 1914 would be the equivalent of roughly $2,300,000 today.

Opportunity cost – a dollar received today can be invested now to earn interest, resulting in a higher value in the future. In contrast, a dollar received in the future can not begin earning interest until it is received. This lost opportunity to earn interest is the opportunity cost.

For these reasons we can boil down time value of money into two fundamental principals:

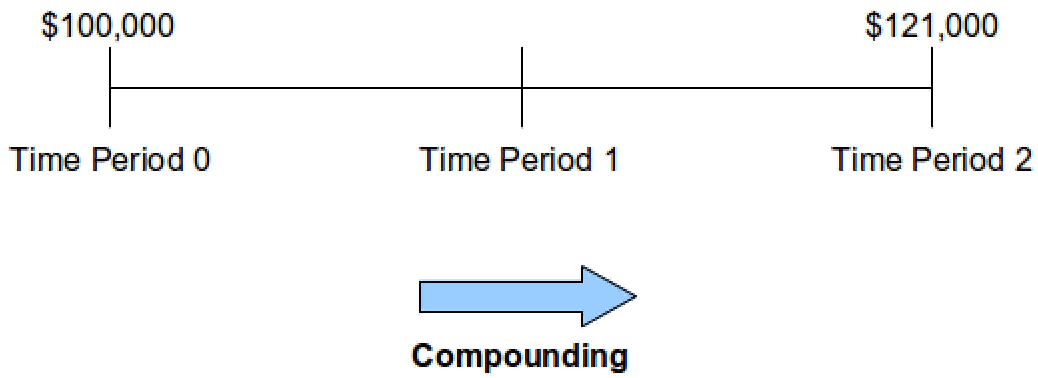
1. More is better than less.
2. Sooner is better than later.

With this fundamental intuition out of the way, let's jump right in to the two basic techniques used in all time value of money calculations: compounding and discounting.

Compounding and Discounting: The Foundation For All Time Value of Money Problems

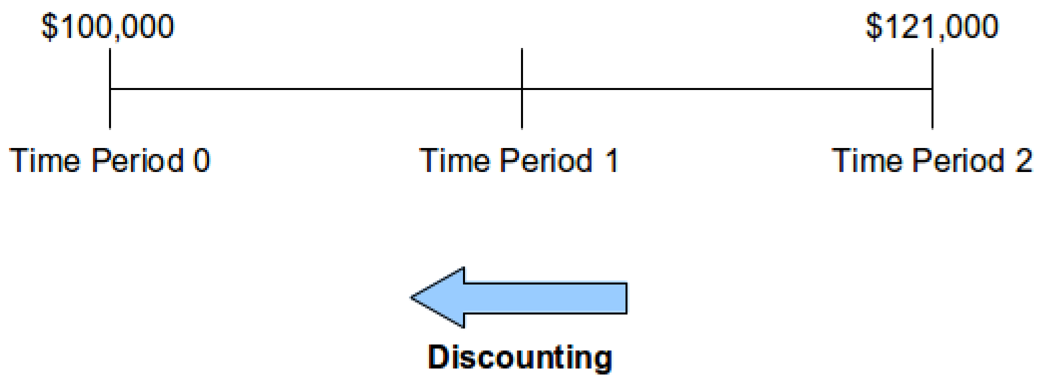
All time value of money problems involve two fundamental techniques: compounding and discounting. Compounding and discounting is a process used to compare dollars in our pocket today versus dollars we have to wait to receive at some time in the future. Before we dive into specific time value of money examples, let's first review these basic building blocks.

Compounding is about moving money forwards in time. It's the process of determining the future value of an investment made today and/or the future value of a series of equal payments made over time (periodic payments).



What's the intuition behind compounding? Most people immediately understand the concept of compound growth. If you invest $100,000 today and earn 10% annually, then your initial investment will grow to some figure larger than the original amount invested. For example, in the illustration above $100,000 is invested at time period 0 and grows at a 10% rate to $121,000 at time period 2. We'll go over the details of this calculation later, but for now just focus on the intuition. The initial investment compounds because it earns interest on the principal amount invested, plus it also earns *interest on the interest.*

Discounting is about moving money backwards in time. It's the process of determining the present value of money to be received in the future (as a lump sum and/or as periodic payments). Present value is determined by applying a discount rate (opportunity cost) to the sums of money to be received in the future.



What's the intuition behind discounting? When solving for the future value of money set aside today, we compound our investment at a particular rate of interest. When solving for the present value of future cash flows, the problem is one of **discounting**, rather than **growing**, and the required expected return acts as the **discount rate**. In other words, discounting is merely the inverse of growing.

The 5 Components of All Time Value of Money Problems

So now that we have some basic intuition about compounding and discounting, let's take a look at the 5 components of all time value of money problems. Why is it important to understand this? Because in every single time value of money problem you'll know four out of these five variables and will be able to easily solve for the fifth unknown variable. The 5 components of all time value of money problems are as follows:

Periods (n). The total number of compounding or discounting periods in the holding period.

Rate (i). The periodic interest rate or discount rate used in the analysis, usually expressed as an *annual* percentage.

Present Value (PV). Represents a single sum of money today.

Payment (PMT). Represents equal periodic payments received or paid each period. When payments are received they are positive, when payments are made they are negative.

Future Value (FV). A one-time single sum of money to be received or paid in the future.

The Key to Solving Any Time Value of Money Problem

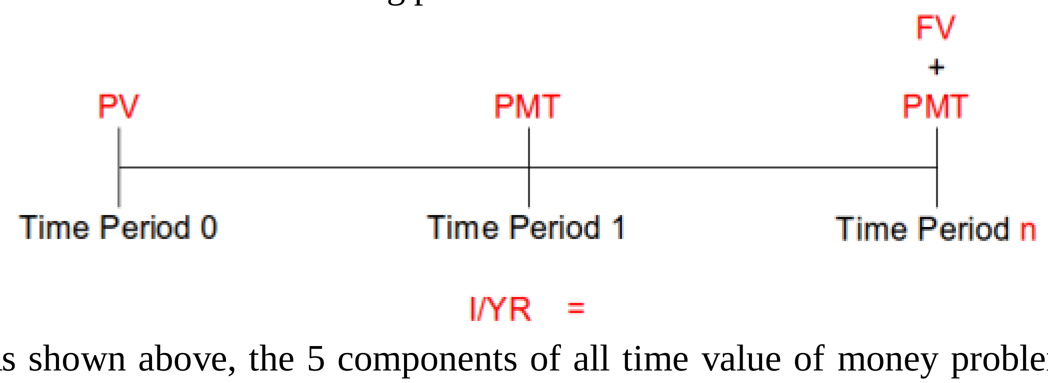
Every single time value of money problem includes the above 5 components. Understanding this is critical because of one simple fact: if you can identify any 4 of the 5 components then you can easily solve for the 5th. The key is to simply learn to identify the 4 known variables in a time value of money problem. Let's revisit the example above to illustrate how this works.

Suppose you invest $100,000 today at 10% compounded annually. What will this investment be worth in 2 years?

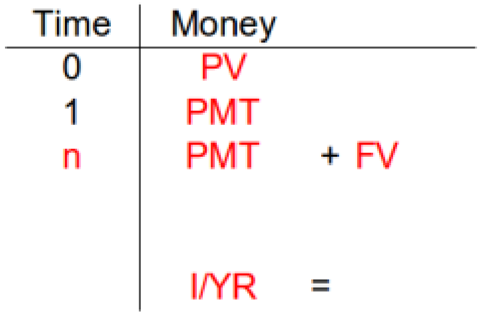
First of all we know that our present value (PV) is $100,000 since this is what we are investing*today*. Next the rate (i) is given to us as 10%. Third, the number of periods (n) in this problem is 2 years. So that leaves 2 remaining variables out of the five: payment (PMT) and future value (FV). Which one out of the two do we know? While it wasn't explicitly given to us, we do know that the payment (PMT) in this problem is zero. Whenever payment isn't explicitly given to us, it's implied that there is no payment. So, all that leaves us with is the future value (FV) component, which we can now easily solve. For now don't worry about actually doing the calculations. Instead, just focus on identifying the 4 known variables and the final 5th unknown.

The Time Value of Money Timeline

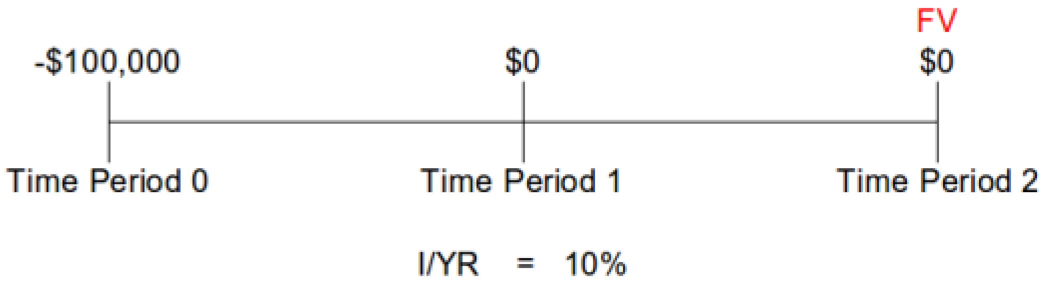
Time value of money problems can always be visualized using a simple horizontal or vertical timeline. When you're first learning how to solve time value of money problems, it's often helpful to draw the 5 components of each problem out on a timeline so you can visualize all of the moving pieces.



As shown above, the 5 components of all time value of money problems (PV, FV, PMT, i, n) can be illustrated on a simple horizontal time line. It's also common to see a vertical timeline as well:



When drawing out a timeline for a time value of money problem, simply fill in the 4 known components so you can clearly identify and solve for the unknown component. Here's a timeline for the example compounding problem above showing the 4 known components:



Consistency of Time Value of Money Components

Before we dive into specific time value of money example problems, let's quickly go over one of the most common roadblocks people run into. One of the most common mistakes when it comes to the time value of money is ignoring the frequency of the components. Whenever you are solving any time value of money problem, make sure that the n (number of periods), the i (interest rate), and the PMT (payment) components are all expressed in the same frequency. For example, if you are using an annual interest rate, then the number of periods should also be expressed annually. If you're using a monthly interest rate, then the number of periods should be expressed as a monthly figure. In other words, n should always be the total number of periods, i should be the interest rate per period, and PMT should be the payment per period.

Note that most financial calculators have a "Payment Per Year" setting that attempts to auto-correct the consistency of the n and i components. If you're just starting out with a financial calculator it's a good idea to ignore this functionality altogether. Instead you can simply set the payments per year in the calculator to 1 (one) and then keep the n, i, and PMT components consistent. This will greatly reduce the errors and frustration you have with your financial calculator.

Cash Inflows vs Cash Outflows

In time value of money problems it's also important to remember that negative and positive signs have different meanings. One helpful way to think about about sign changes is as inflows and outflows of money. A negative sign simply means money is flowing out of your pocket. A positive sign means money is flowing into your pocket.

Financial Calculators and The Time Value of Money

The above 5 components of every time value of money problem are the same regardless of how you decide to solve for the unknown. There are several popular financial calculators available and all of them include the above 5 components as buttons. Teaching you how to use a financial calculator is beyond the scope of this article, but if you're just getting started we recommend either the Hewlett Packard 10BII or the Texas Instruments BA II Plus. They both come with instruction manuals that include helpful tutorials.

Additionally, all time value of money problems can also be solved in Excel. Below we provide you a solutions worksheet containing sample time value of money problems and answers. This will give you the exact formulas you can use in Excel to solve the most common time value of money problems.

Time Value of Money Problems: The 6 Functions of a Dollar

With the above foundations out of the way, let's dive into some time value of money practice problems. There are 3 fundamental types of compounding problems, and also 3 fundamental types of discounting problems. Together these make up what's commonly referred to as the 6 functions of a dollar.

These fundamental time value of money problems come up over and over again in finance and commercial real estate, so mastering them will go a long way towards improving your skillset. As mentioned, we are providing you with a solutions worksheet below containing answers to the following 6 time value of money problems. As you read through the questions, focus on identifying the 4 known components, and if you are already comfortable with a financial calculator, try solving them first before looking at the answers.

3 Basic Types of Compounding Problems

Half of the 6 functions of a dollar are compounding problems. These time value of money problems include finding the future value of a lump sum, the future value of a series of payments, and the payment amount needed to achieve a future value. Let's dive into each of these problems with specific time value of money examples.

Future value of a single sum

This type of problem compounds a single amount to a future value. Here's an example of this type of time value of money problem: What will $100,000 invested today for 7 years grow to be worth if compounded annually at 5% per year?

To solve this problem simply identify the 4 known components and then use a calculator to find the 5th unknown component. In this problem we know the present value $\boxed{\textbf{PV}}$ is -$100,000 because it's what's invested today. It's negative because it's leaving our pocket when we put it into the investment. The number of periods $\boxed{\textbf{N}}$ is 7 years, and the rate $\boxed{\textbf{I}}$ is 5%. The N and I components are both expressed annually, so they are consistent. Knowing this we can simply plug those 4 components into the calculator and solve for future value $\boxed{\textbf{FV}}$, which is $140,710.

Future value of a series of payments

This type of problem compounds an annuity to a future value. Here's an example of this type of time value of money problem: If you deposit $12,000 at the end of each year for 10 years earning 8% annually, how much money will be in the account at the end of year 10?

To solve this problem, let's first identify the 4 known components. We know that the payment amount $\boxed{\textbf{PMT}}$ is -$12,000 because that's what we are depositing at the end of each year. We also know that the interest rate **I** is 8% and the total number of periods **N** is 10 years. What about the present value? Well, because we aren't starting with anything, our present value is simply $0. Again, in this problem the total number of compounding periods is expressed annually and so is the interest rate, so the n and i components are consistent. Now we can easily solve for the future value **FV**, which is the 5th remaining component.

Payments needed to achieve a future value

This type of problem compounds a series of equal payments into a future value and is also known as a sinking fund payment. Here's an example of this type of time value of money problem: At a 7% interest rate, how much needs to be deposited at the end of each month over the next 10 years to grow to be exactly $50,000?

Let's start by identifying the 4 known variables. We know that the rate **I** is 7% and it is implied to be an annual rate. Next, we are given the total number of periods **N** which is 10 years, and finally the future value **FV** we are trying to achieve is $50,000. A quick check ensures that the rate and the number of periods are both expressed in years, but what about the payment frequency? The payment frequency in this problem is expressed monthly, so we are going to have to do some conversion in order to set this problem up correctly. Let's convert everything to a monthly frequency so we are consistent with our payments.

To do this we can simply divide the 7% interest rate by 12 month to get .58% per month. Next we can multiply our 10 year analysis period by 12, since there are 12 months in each year, to get 120 total months. Now our **N** is 120 months, **I** is .58% per month, our **FV** is $0 and we can solve for a monthly payment **PMT** amount. Now we can simply plug these 4 known components in and solve for the payment **PMT** needed.

3 Basic Types of Discounting Problems

The other half of the 6 functions of a dollar involve discounting. These time value of money problems involve finding the present value of a lump sum, the present value of a series of payments, and the payment amount needed to amortize a present value such as a loan. Let's dive into these discounting problems with some specific time value of money examples.

Present value of a single sum

This type of problem discounts a single future amount to a present value. Here's an example of this type of time value of money problem: A U.S. savings bond will be worth $10,000 in 10 years. What should you pay for it today in order to earn 6.5% annually?

To solve this time value of money problem let's take a look at the 4 variables that we know. We are given the future value **FV** of $10,000, the number of periods **N** is 10 years, and the rate **I** is 6.5% per year. Both the rate and the number of periods are consistent, so we can now solve for the unknown present value **PV**.

Present value of a series of payments

This type of problem discounts an annuity (or series of equal payments) to a present value. Here's an example of this type of time value of money problem: An insurance company is offering an annuity that pays $2500 per month for the next 20 years. How much should you pay for the annuity in order to earn 8% per year?

In this time value of money problem we know that the payment **PMT** is $2500 per month, the total number of periods **N** is 20 years, and the rate **I** is 8% per year. The rate and the total number of periods is consistent as annual figures at first glance, however we also have monthly payments. So, we have to convert our annual number of periods (20 years) to 240 months, and also convert our annual rate of 8% to a monthly rate of .667. Now we can now easily solve for the present value **PV**.

Amount needed to amortize a present value

This type of problem determines a series of equal payments necessary to amortize a present value. Here's an example of this type of time value of money problem: What are the monthly payments on a 30 year loan of $300,000 at a annual rate of 4.5% compounded *monthly*?

In this problem we are given the total number of periods **N** of 30 years, a present value **PV** of $300,000, an annual interest rate **I** of 4.5% compounded monthly, and because this is a loan amortized over 30 years, it is implied that the future value **FV** is $0. After a quick check it appears that the number of periods and the rate are actually expressed in different compounding periods, which of course presents a conflict. To resolve this let's adjust the n and i components so they are both expressed monthly. Using the formulas above we can convert the total number of compounding periods to 30 x 12, or 360 months and the rate to 4.5% / 12, or 0.375% per month. Now we have our 4 known components and can easily solve for the present value.

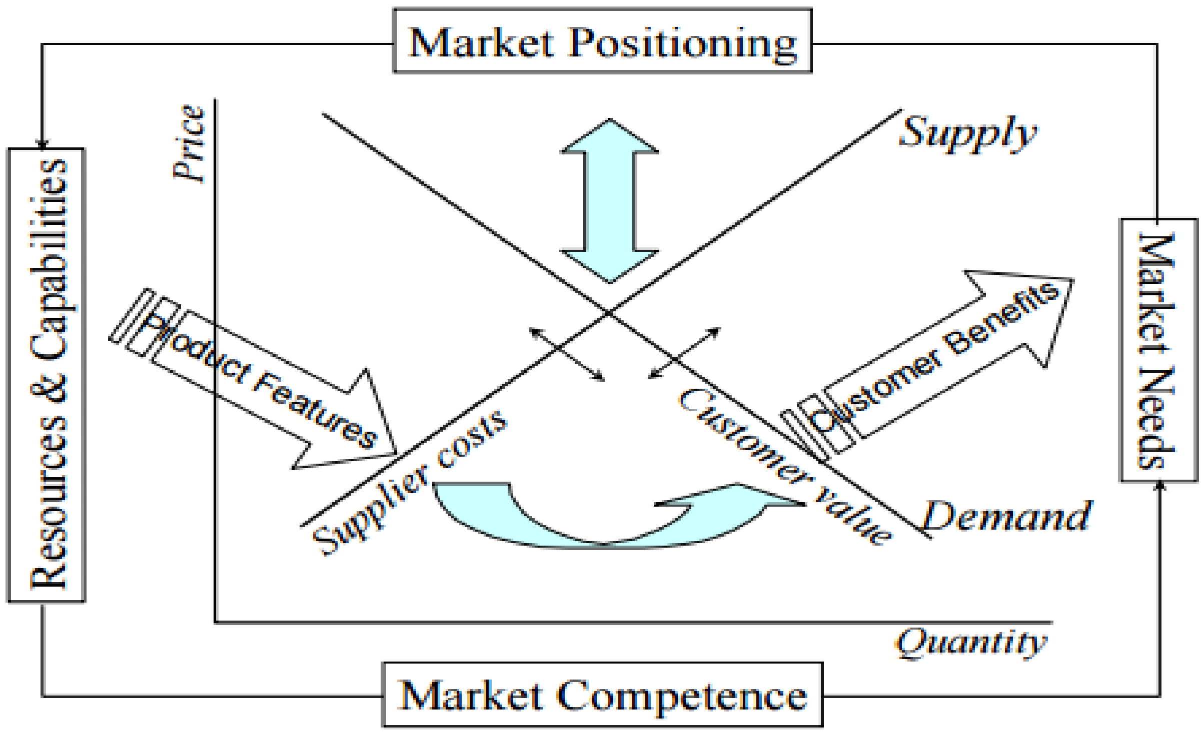
Topic 4. Marketing (commercial) project analysis

4.1. The market and competitive analysis framework
4.2. The project market. What is a market?
4.3. Defining the project relevant market
4.4. Estimating market size
4.5. Understanding market expectations
4.6. The project competitiveness
4.7. Marketing mix (4 P)

4.1. The market and competitive analysis framework

The market and competitive analysis framework is proposed as a conceptual background by which to gather, analyse and interpret data about the project and its market. Consider the diagram below: The core of the model is the project's market. Competitiveness revolves around the interactions of suppliers and consumers in the market. Suppliers compete in a market by using available resources to serve market needs better than their competitors. Their offerings take the form of product features designed to generate customer benefits that meet customer needs. To the extent that existing competitors fail to meet market

The Competitive Environment of a Project



The core of the model is the project's market. Competitiveness revolves around the interactions of suppliers and consumers in the market. Suppliers compete in a market by using available resources to serve market needs better than their competitors. Their offerings take the form of product features designed to generate customer benefits that meet customer needs. To the extent that existing competitors fail to meet market expectations they leave behind market performance gaps. In order for a new project to be successful, therefore, it must identify unsatisfied market needs for which it can develop competencies and position itself so as to fill market performance gaps. Project competitiveness is assumed to be a factor of the ability of the project to develop market competencies and to correctly position itself in the market as part of a continuing selfcorrecting process.

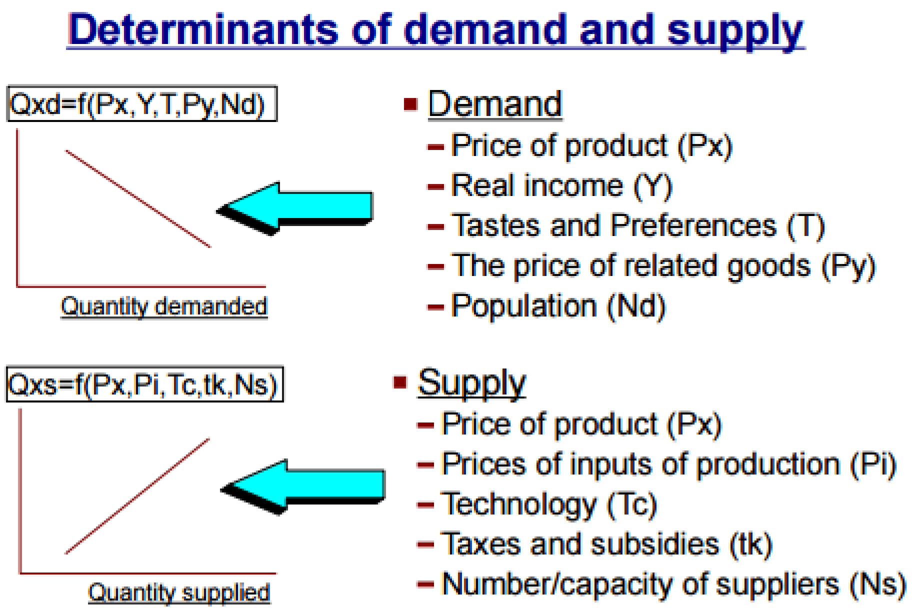
3.2. The project market. What is a market?

Projects exist and operate within markets. In order to pose and attempt to answer the project competitiveness question it is imperative to first define the project relevant market and disaggregate both the demand and supply into its basic component parts.

What is a market? The essence of a market is epitomised by the act of exchange. People strive to improve their quality of life by seeking to acquire (consume) products and services that are perceived to be capable of satisfying their needs. In order to achieve this, they enter into exchange agreements with other people (suppliers) who likewise have their particular need profiles and economic assets (or capabilities) so that through the act of exchange (be it labour services in return for a wage or tomatoes for potatoes) both parties consider themselves better off. Economic value is nothing more than the net benefit (or utility) generated through exchange. An economy based on free market exchange, by and large, directs economic resources into their most productive uses as each economic unit strives to maximise its own welfare by producing those goods that it is capable of producing efficiently from a spectrum of products that other people want most.

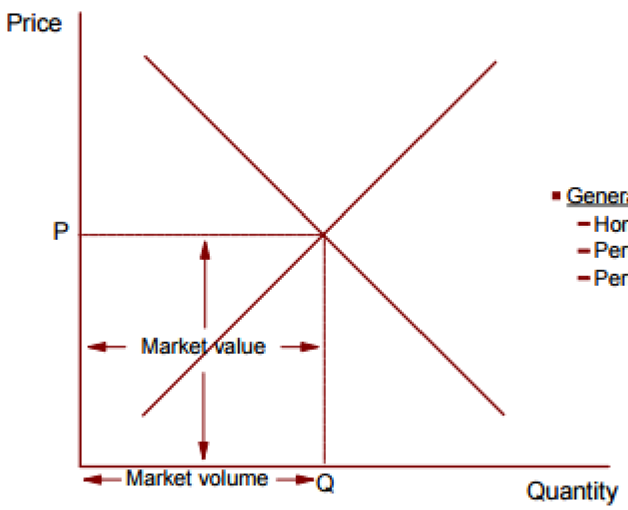
The value at which a product is sold (or price) and the amount of it being exchanged in a market situation results from the demand and supply profiles of consumers and suppliers. Micro-economic theory is based on a conceptual model, which however, assumes the existence of a homogeneous product, perfect knowledge and perfect accessibility to the market place. Moreover, micro-economic theory identifies that demand and supply can change as a result of a number of factors, which with the exception of the price of the product, are usually assumed to remain constant during the period of analysis. A change in any of these factors represents a shift (left or right) in the position of the demand or supply curve. The demand and supply functions of a micro-economic model are illustrated in the diagram below: Market volume (the quantity consumed in a certain period) and market value (the money value of the transactions in a period) can be measured at the equilibrium point where "Demand" meets "Supply"3 . This is illustrated in the diagram below, 3 The existence of monopolistic power or the ability of firms to differentiate their products may cause the price to be higher and quantity lower than the equilibrium point under conditions of perfect competition. Supply Price of product (Px) Prices of inputs of production (Pi) Technology (Tc) Taxes and subsidies (tk) Number/capacity of suppliers (Ns)

Determinants of demand and supply



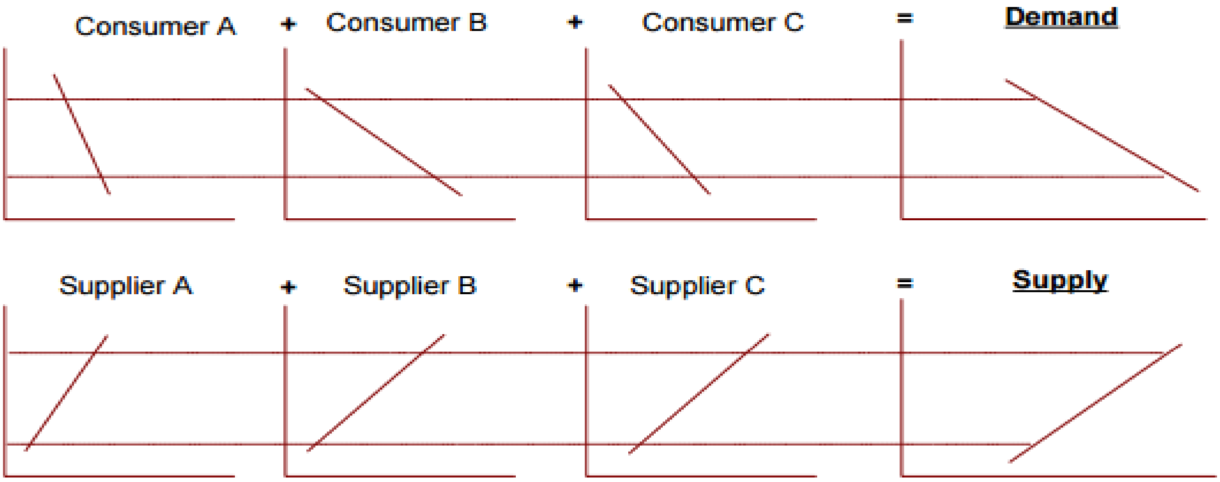
Market volume (the quantity consumed in a certain period) and market value (the money value of the transactions in a period) can be measured at the equilibrium point where "Demand" meets "Supply"3 . This is illustrated in the diagram below,

The market demand and supply



A market demand and supply curve is an aggregate of the individual demand and supply functions of each consumer and supplier participating in that market. As illustrated in the diagram below, the market demand and supply curve is the horizontal summation of the demand and supply curves of each consumer and supplier respectively.

Determining market demand and supply



A market therefore is made up of many individual consumers and suppliers where each consumer has a different demand function and each supplier has a different supply function. The search of a project's competitiveness begins from this basic fact. Since in reality, all consumers and suppliers are different then there must be more than one way for a project to attain and sustain a competitive position. But it would surely be a daunting task to attempt to find an optimum competitive strategy, even if it was ever possible to gather all the necessary information in order to define each individual demand and supply function. But fortunately, although everybody is different many market participants actually have typically similar demand and supply profiles. And it is not by chance that this is so. For example, two persons of the same sex, age and social background who are exposed to similar stimuli (school, family, values, etc.) are likely to want similar things and have similar market behaviour. There may of course exist differences in personalities, but there again, one can identify and categorise types of people to some basic character traits (the aggressive, the revolutionary, the conservative, the fashion follower, etc.). Hence, while everybody is different, it is usually possible with some basic market research to understand and describe the types of customer groups (market segments) that make up the market.

The determinant factors of demand and supply together with the tools of market segmentation provide the keys to finding a competitive marketing strategy for the project. To understand demand, one should define the behaviour of the typical market segments making up the demand of a product with respect to each segment's responsiveness to price movements, aspects of quality (tastes and preferences) and, where relevant, changes in income. On the supply side, competitors should be compared according to their ability to reduce costs and add features (through technology, efficient use of inputs of production and creativity) so that customer value is maximised.

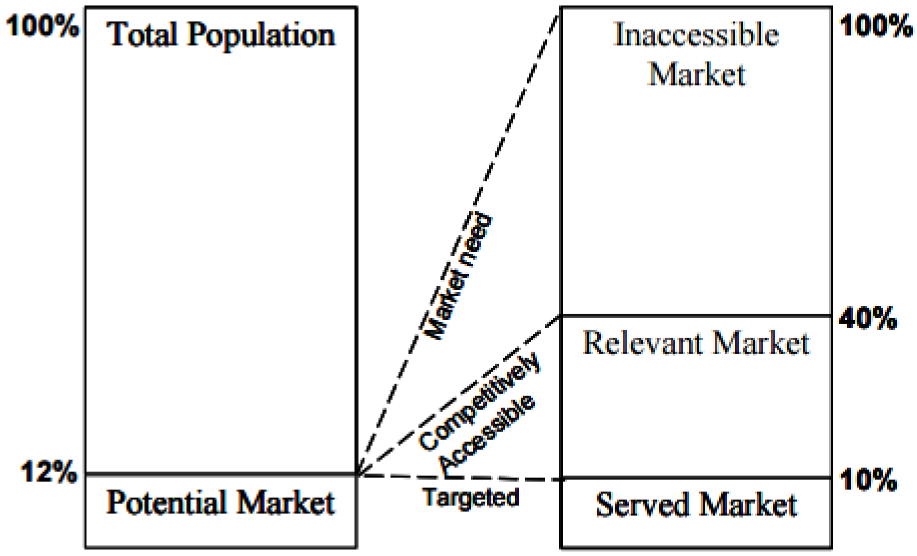
Marketing is sometimes defined as the art of creating loyal customers. A new project should identify its potential customers and justify why it can win them over from the competition. Out of the many project scenarios that are possible from varying the elements of a market offering there are a number which, given the capabilities of the project, have the potential for making the project a competitive one. But first, one should define and size-up the market that is immediately relevant to the project.

3.3. Defining the project relevant market

The need to define a market usually determines the type of definition selected. As Day, Shocker and Srivastava (1979) point out:

"Ultimately all product-market definitions are arbitrary. They exist because of recurring needs to comprehend market structures and impose some order on complex market environments. But this situation could not be otherwise. One reason is the wide variety of decision contexts which dictate different definitions of boundaries". A market, as defined in this paper, is conceptually different from the commonly used term of an industry. While an industry refers to products with similar physical and technical characteristics, a market refers to products that serve the same basic market need. The boundaries of the market within which the project is expected to operate therefore depend

Levels of market definition



on the degree of substitutability between its products and other potentially competing products. The boundaries of such definition are often difficult to establish and even harder to achieve with a high degree of consensus4 . Within this framework, the "relevant market" is simply that part of the total potential market that is competitively accessible to the project. It is the sum of the served markets of the project and its competitors. In general, the project's market should be defined in a way that permits the inclusion of all major competitors and their customers but excludes those that are only remotely related to it. A description of the project concept around the core market need becomes the starting point for the market analysis as it facilitates the identification and selection of the likely competitors and market segments of the project. In public sector projects, the perceived social need that the project is supposed to serve and the likely demand for its products or services is the very first market aspect of the project that has to be researched clarified and agreed. As Jenkins and Harberger5 point out:

"… too often in the public sector one finds that feasibility studies have been commissioned before administrators or policy makers have a clear idea of the nature of the output and the economic and social benefits that are to be expected from it. When this occurs the terms of reference given to the consultants … are usually so general that they are left in the awkward position of having to second-guess the government in deciding what its objectives are and what components of a potential expenditure program should be included in the project."

In defining the relevant market, the analyst should also consider whether the products of the project will be sold domestically or traded internationally. For most products sold in the international market there is usually an abundance of information from specialized journals, trade organisations and international consulting firms. However, unless the product is totally homogeneous and transport is not a major cost item, one needs to define the project relevant market as consisting of only those countries and types of customers within the countries that are accessible or cost effective to target. Markets that are evidently uneconomical to aim for should be excluded. For example, in the case of a fertiliser project in Cyprus the total world consumption of compound fertilisers for 1988 was estimated (using the supply-side market size estimate formula -see market size chapter below) at 99 million tonnes.

Supply Side World Market Estimate - example

Supply and Demand for Compound Fertilisers

(million tonnes) - 1988

	Production	Imports	Exports	Consumption
West Europe	30.5	5.8	-7.6	28.7
East Europe	16.1	0.2	-1.1	15.2
Africa	1.9	0.9	-0.2	2.6
North America	29.1	0.3	-0.4	29.0
Latin America	10.0	0.6	-0.1	10.5
Asia/Oceania	11.6	2.3	-0.9	13.0
Total world market	99.2	10.1	-10.3	99.0

Source: Fertecon

Was this, however, the relevant market for the project under review? After commissioning a specialised consulting organisation in London to help the team of analysts define the market for the project it was soon realised that the Cyprus project could only consider a very small part of the total international market as accessible or cost effective to aim for.

The Cyprus fertiliser plant could only sell to countries in Western Europe, which were still using a particular type of compound fertiliser that Cyprus was in a position to produce and could deliver in relatively small batches. The size and growth prospect of the sub-market that was relevant to the Cyprus project was very different, and far smaller, than the total world fertiliser market. While the total world market for 1988 was estimated at about 99 million tonnes, the project relevant market was only 13 million tonnes. The relevant market included only the consumption of countries that were considered to be competitively accessible by the project, taking into consideration factors such as distance and the capacity of the Cyprus project to serve these markets, given its scale, production capabilities and the opportunities available to transport fertiliser shipments in the required frequency to these countries.

Relevant Market for Cyprus Project Estimate - example

Consumption of Compound Fertilisers
(million tonnes) - 1988

	Consumption
France	6.80
Italy	2.40
Spain	2.40
Greece	1.20
Saudi Arabia	0.20
Libya	0.20
Local Market	0.04
Relevant market	13.24

Source: Fertecon

3.4. Estimating market size

Market size refers to the volume and value of the products or services consumed, or expected to be consumed, in a period. There are two ways one can go about estimating market size; supply-side and demand-side measures. In supply-side estimates, volume and value are measured from the point of view of production and trade intermediaries. In demand-side estimates, market size is derived from studying the behaviour of the consumers in the market place.

To arrive at a supply-side market size estimate for a given period based on official published statistics for a country one should apply the following formula:

$$Ms = P + (I - E) + (So - Sc)$$

Where:
Ms= Market size (Supply side definition)
P = Production of relevant products
I = Imports of relevant products
E = Exports of relevant products So= Opening stocks
Sc= Closing stocks

To arrive at the demand-side market size estimate one should apply the following formula:

$$Md = n\ q\ p$$

Where:
Md= Market size (Demand side definition)
n = penetration (number of customers)

q = total volume purchased per customer in period
p = average price paid

The demand-side market estimate is very helpful especially in situations where information is not readily available. The formula can easily be applied with only some basic population statistics, such as the number of households, and a few survey questions to establish likely patterns of consumption among various groups of the population.

3.5. Understanding market expectations

"Necessity is the mother of invention". In a modern society the maxim still holds true; only instead of inventing to satisfy one's own needs, in the market place, suppliers invent to satisfy the needs of their customers. Those suppliers who understand the needs of their customers better than others and manage to develop appropriate skills and products are the successful ones. Hence, the first point of reference of any business should not be what the competition is doing but rather how to best serve the needs of their customers.

But needs vary by many factors; the situation of the consumer, his income and wealth, the people that influence his life, his level of education and ambitions, and so on and so forth.

Current management thinking does not pay enough attention to the importance of needs perhaps because it is very hard to understand and to draw general conclusions from, particularly because they change almost constantly. Yet, this is exactly where the key to business success lies. It is therefore imperative that in order to be competitive, one should adopt systems by which it is possible to closely monitor customer needs, learn the appropriate skills and technologies and respond accordingly in a quick and efficient manner. At any given point in time the competitive organisation should be aware of the current market expectations regarding the market needs which its business mission is to serve.

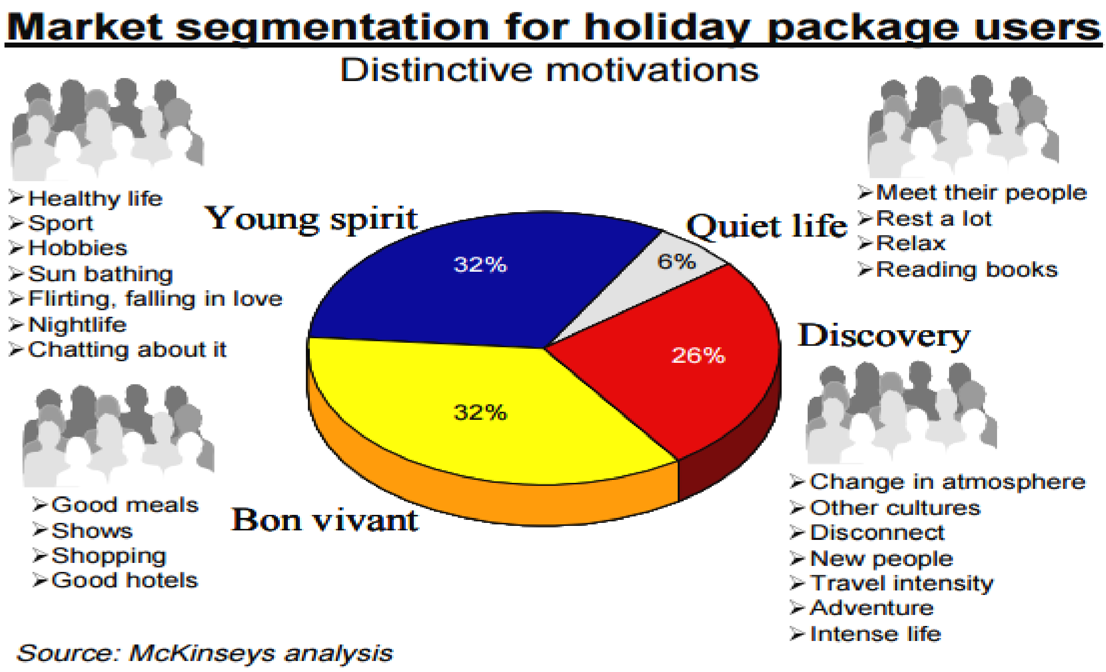
The need to go beyond the identification of customer needs and to genuinely try and understand their pulse, aspirations and the extent of their imagination cannot be overstated. Schnedler (1996), following market research by which Hewlett-Packard, using an approach, which they term "strategic market modelling" whereby they derived a customerneeds based segmentation and perceptions about competitors, concludes as follows:

"[Through] needs based segmentation and modelling [we were able to] define customer segments by "what the customer needs". Knowing customer' needs is [however] not enough. To have what we call a truly imaginative understanding of user needs, we must know the customers so well that we fully comprehend both their spoken and unspoken needs - now and in the future. We need to know what new products, features and services will surprise and delight them. We need to understand their world so well that we can bring new technology to problems that customers may not yet truly realise they have. Our ultimate goal is this deeper, richer level of understanding."

The term "market expectations" refers to this deeper understanding of the customer and his expectations. It means anticipating what may make him happy even before he is able to realise it himself. "Market expectations" is therefore more than just a reference to the notional ideal product for a market segment. It means thinking and feeling like the consumer. The depth of market enquiry may thus be more important in understanding real needs than the spread of market research. In other words, it may be more useful getting under the skin of a single consumer rather than asking a thousand to respond to a series of descriptive questions. Of course, once you touch upon a real customer need you may form a hypothesis and test its validity through more extensive market research. Business history has many examples of entrepreneurs who conceived great product ideas without ever conducting market research. They managed to do that just by studying people and being able to put themselves in their place in a genuine effort to truly understand their expectations, aspirations and fears.

In defining the limits of the relevant market, one seeks to identify common market needs that are shared by all consumers; these are used to identify potential customer groups and to size up the market (demand-side market definition). Common market needs may also serve as close approximations to the determinant choice factors by which products are perceptually positioned in the market (see "market positioning" below). But while all consumers making up market demand share the same broad market needs, they are also distinctly different by way of what customer benefits they seek and in the manner by which they try to fulfil those needs. It is this element that makes market need based segmentation a particularly useful tool in project appraisal.

Defining market segments in terms of distinctive needs and characteristics of the main customer groups can be a powerful tool for developing an effective competitive strategy. A market-need-based segmentation should always have some implications regarding the appropriate strategy and positioning of the project. In the example below, McKinseys have used ad-hoc consumer research to arrive at the following market segmentation, which is based on distinctive motivations of holiday package users:



A demographic/geographic description of segments (using variables like age, income, family status, location, etc.) further enhances the usefulness of market-need based segmentation. McKinseys describe the market-need-based segments shown in the above diagram by general and distinctive demographic characteristics:

Example of distinctive characteristics of different market segments of European consumers of holiday packages (users)

Segments / Characteristics	Young Spirit	Bon Vivant	Discovery	Quiet life
Destination	Islands	Cultural Europe	Sunny Europe/North Africa	Close resorts
Activity	Same place	Circuit	Some excursion	Same place
Information	Friends	Image of the place	Brochures	Friends and relatives, previous visits
Company	Group of friends	Wife/husband Girlfriend/boyfriend	Group of friends	Family, alone
Age	16-30	46-65	31-45	31-45
Job	Student	Business-man	Worker, professional	Employee, professional
Transport	Charter	Coach	Scheduled	Charter

Source: McKinseys analysis

In order for segmentation to be useful it is necessary to gain a good understanding of customers and their needs. The importance of this point is expressed by McBurnie and Clutterbuck (1988) as follows:

"Raw market research data will not normally provide [the necessary] understanding. If it does, the lack of refinement will make it easy for competitors to follow".

The defined market segments should be accessible, substantial in size and predictable. It is easy to select criteria that do not cluster people with similar market needs together or are so complex that make the defined market segments inaccessible and operationally useless. For example, it is increasingly being discovered by tourism organisations that, although grouping tourists on geographical or national criteria is a neat way of aggregating the tourism market (leaving no gaps or double counting), it inevitably leads towards market segments whose members have little in common in terms of predictable market behaviour. Such segmentation is therefore of little use for the development of competitive strategy. As illustrated in the McKinsey's example, recent efforts to analyse the European tourist market go beyond national borders emphasising the motivations, the personal and situational characteristics of typical groups of consumers across Western Europe.

Factors that determine consumer choice usually fall into two broad categories; quality and price. Although price is conceptually straightforward in all markets (it is always important to get the lowest price possible for a given product), "quality" can have various dimensions and manifestations. It is not enough to assert that a project will provide products of high quality. In every market, quality has to be defined in terms of the fundamental market needs that a product aims to satisfy. In the summer holiday package market for example, although there are many distinctive benefits that various segments seek to have, it maybe possible to reduce the basic market needs to a short list such as:

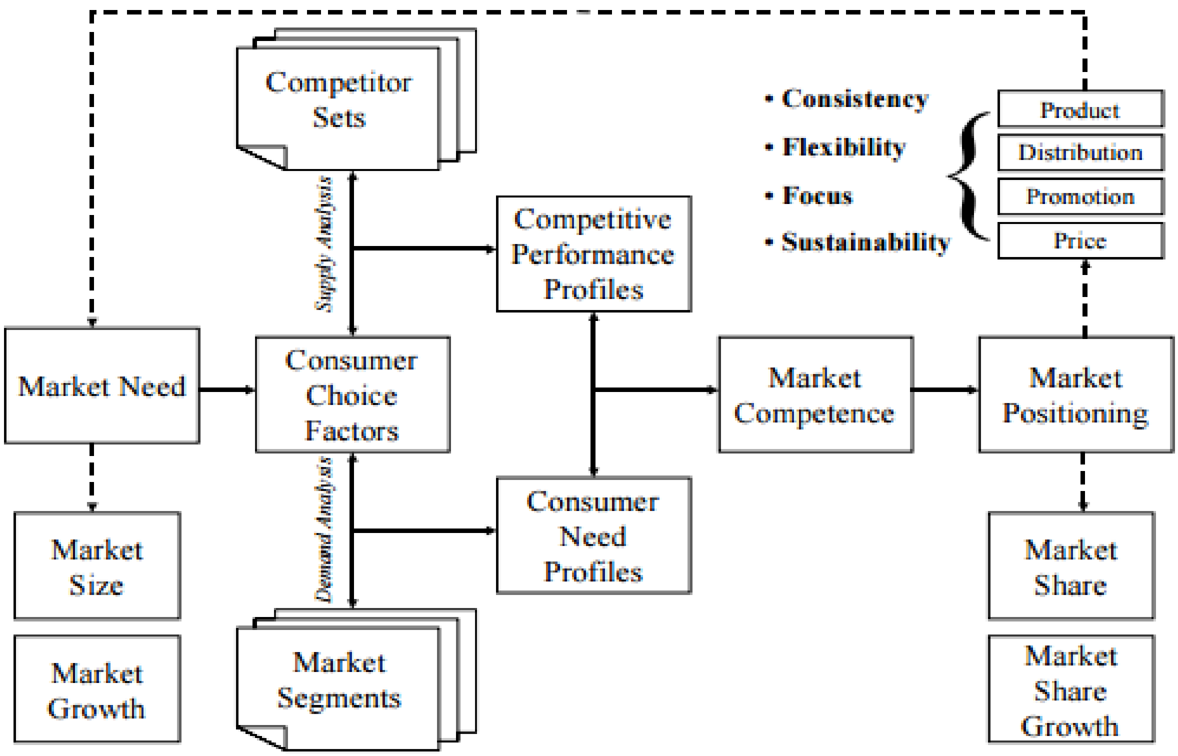
- Suitable sun and sea location
- Comfortable staying conditions
- Entertainment/fun
- Affordability/Price

Market needs represent the basic determinants of consumer choice. They are the dimensions in which consumers perceive and position the various products in the market. Each market segment attaches a different level of importance to each of the basic market needs characterising the relevant market thereby giving rise to different "consumer need profiles".

3.6. The project competitiveness

The competitiveness of a project is assessed through a process of disaggregating demand and supply with respect to the market need that the project aims to satisfy and setting market segments and competitor sets against the main consumer choice factors, as illustrated in the diagram below. Consumer choice factors are the basic criteria on which the decision of which product or service to buy is taken by consumers participating, or likely to be participating, in the project's market. Consumer need profiles are extracted by adjusting for the relative importance attached to these factors by the identified market segments.

The Market and Competitive Analysis framework



The capacity of the competing products to satisfy the consumer choice factors enables the creation of competitive performance profiles. Market competence is simply the ability of the project to perform as well or better than other competitors on any of the key consumer choice factors. A competitive edge is therefore considered to be the capability to outscore other competitors with respect to a market segment. Market positioning is the direction of the project supply, or more precisely the marketing mix of the project, towards those market segments which maximise in terms of return the organisation's investment and inherent capabilities

Market size and market growth are estimated in the context of the demand and supply analysis based on the project relevant market. Market share is taken to be the relative project supply adjusted by an estimate of the project competitive edge (positive or negative) in each targeted market segment. Finally, considerations regarding the project's organisation ability to adapt itself to market expectations and changing market conditions should drive the projected estimates for market share growth.

3.7. Marketing mix (4 P)

Category	Definition
Product	A product is seen as an item that satisfies what a consumer demands. It is a tangible good or an intangible service. Tangible products are those that have an independent physical existence. Typical examples of mass-produced, tangible objects are the motor car and the disposable razor. A less obvious but ubiquitous mass-produced service is a computer operating system.

	Every product is subject to a life-cycle including a growth phase followed by a maturity phase and finally an eventual period of decline as sales fall. Marketers must do careful research on how long the life cycle of the product they are marketing is likely to be and focus their attention on different challenges that arise as the product moves. The marketer must also consider the product mix. Marketers can expand the current product mix by increasing a certain product line's depth or by increasing the number of product lines. Marketers should consider how to position the product, how to exploit the brand, how to exploit the company's resources and how to configure the product mix so that each product complements the other. The marketer must also consider product development strategies.[4]
Price	The amount a customer pays for the product. The price is very important as it determines the company's profit and hence, survival. Adjusting the price has a profound impact on the marketing strategy and, depending on the price elasticity of the product, often it will affect the demand and sales as well. The marketer should set a price that complements the other elements of the marketing mix.[4] When setting a price, the marketer must be aware of the customer perceived value for the product. Three basic pricing strategies are: market skimming pricing, market penetration pricing and neutral pricing. The 'reference value' (where the consumer refers to the prices of competing products) and the 'differential value' (the consumer's view of this product's attributes versus the attributes of other products) must be taken into account.
Promotion	All of the methods of communication that a marketer may use to provide information to different parties about the product. Promotion comprises elements such as:advertising, public relations, sales organisation and sales promotion. Advertising covers any communication that is paid for, from cinema commercials, radio and Internet advertisements through print media and billboards. Public relations is where the communication is not directly paid for and includes press releases, sponsorship deals, exhibitions, conferences, seminars or trade fairs and events. After web 2.0, the capacity of the customers tell about the products that they have bought, making reviews and testimonials related to their use experiences , are examples of public relation, as well. This kind of behavior takes the dissemination of the product information over the internet space and creates the phenomenon known as word-of-mouth.Word-of-mouth is any apparently informal communication about the product by ordinary individuals, satisfied customers or people specifically engaged to create word of mouth momentum. Sales staff often plays an important role in word of mouth and public relations (see 'product' above).[4]
Distribution(Place)	Refers to providing the product at a place which is convenient for consumers to access. Various strategies such as intensive distribution, selective distribution, exclusive distribution and franchising can be used by the marketer to complement the other aspects of the marketing mix.[4][9]

Result on this topic:

MARKET ANALYSIS & PRODUCT DEVELOPMENT

A Marketing Plan should concisely answer the questions: What are the industry and market trends for my product? Who are my customers? Who is my competition? What can I charge? and How will I promote my product throughout the year? Articulating well-researched answers to these questions is one of the most important steps you can take toward your success!

Document the answers to these questions using the following worksheet to draft your marketing plan online as part of your overall business planning process:

Marketing Plan

This worksheet is adapted from the publication "Starting an Ag Business? A Pre-Planning Guide" by Steve Richards, 2004. Ask yourself the following questions about each potential enterprise.

Email *

Describe your product or service. What are its attributes, its benefits?

Who is likely to buy this product or service? What are some of the characteristics of this customer?

How will your customers find out about you and your products?

What is the expected range of prices you will receive for this product/service?

The price range may result from the difference between wholesale and retail prices, or premiums you receive for having a product available early in the season (like tomatoes), or if you sell meat by the cut but also offer whole or half-animals at a discount to your customers.

Who is the competition and what do they offer? What makes your product better?

Market Analysis: What is my Target Market?

A target market is a well defined group of customers. Markets can be found within any broad category: consumers, businesses, industries, institutions, etc. Consumer groups, for instance, can be characterized by demographics, geography, lifestyle, values, leisure, or occupation. Business customers can be defined in terms of markets, products, management styles, distributions channels or size. Value-added product marketing includes the end consumers of your product/services and the businesses that may distribute and sell your product to the end user.

Who will buy my product?
Why will they buy my product?
What will they pay for my product?
Where do they expect to find this product?

Try to put yourself in the shoes of people who shop at the venue you're considering. Or think about customers you've seen purchase from farms similar to yours. When you are finished, step back and consider what you have learned. Write:

A brief, focused description of your target market

An assessment of which aspects of your business need to change in order to attract this market

A list of what is involved with making needed changes.

Next write your answers to the following four key questions:

Who will buy my product?

Why will they buy my product?

What will they pay for my product?

Where do they expect to find this product?

Short version topic 4
RESEARCH FACTORS OF EXTERNAL ENVIRONMENT AND DEVELOPMENT OF A MARKETING PLAN

Learning Objectives

After studying this chapter you should be able to:

1. Identify the importance and the need for a good Marketing Plan
2. Determine the key components of a Marketing Plan and its details

Key words: *marketing plan, environmental analysis, identifying customers, competitor/value creation analysis, marketing mix, marketing budget, segmentation, product strategy, pricing strategy, promotion strategy, distribution strategy*

A Marketing Plan is a key section of the business plan of a start-up project, on the basis of which production, organizational and financial aspects of the business are developed.

In Marketing Plan, you should be aiming to define your market and competitors in great detail. Before completing this section, ensure that you have carried out thorough market research so that you are presenting a valid business case. This section will be of particular interest to investors, as it will enable them to identify whether you fully understand your market and its associated trends. You should know the size and structure of your market, its geographical spread and its growth potential[10].

Marketing is anticipating the needs and wants of targeted customers and managing the process through which these needs and wants are satisfied.

A ***Marketing Plan*** is at the core of directing and coordinating all marketing efforts within a firm. If it is carefully researched, thoughtfully considered, and evaluated, it will help your firm to achieve its goals.

[10] Writing a Successful Business Plan. [Electronic recourse]/ http://www.grantnet.com/HelpfulReports/businessplan.pdf

Making a marketing plan for your business can be broken down into five steps:

1. ***Environmental Analysis (market research).***
2. ***Business Model.***
3. ***Identifying Customers.***
4. ***Competitor/Value Creation Analysis.***
5. ***Marketing Mix: The 4 P's.***
6. ***Marketing Budget.***

Your ***Environmental Analysis (market research)*** should describe the target market and the characteristics of the particular market sectors. This may be demonstrated by identifying market trends, examining how well similar products or services have performed and analysing both current and future competitors in terms of advantages and disadvantages, and their market share. Overall, you should be outlining the position of your business in relation to the competition, whilst demonstrating a need for your product, your competitive advantage and how you would deal with changes to the market.

Marketing concept is based on the necessity of understanding the needs and demands of consumers which could be initialized with the help of marketing research. Meeting needs is the heartland of every marketing program.

A useful tool in assessing the marketplace is SWOT (Strengths, Weaknesses, Opportunities, and Threats). Assessing the opportunities and threats and how the business can capitalize on them or avoid them using the firm's strengths weaknesses (tables 2.2, 2.3).

SWOT Analysis help you:

Know who you are selling to (market analysis, segmentation, prioritizing targets).

Know what is important to targeted customers (customer analysis).

Make sure you are distinctively different from your competition in areas of importance to targeted segments (competitive analysis, reallocation of resources if necessary, positioning, market intelligence).

The important step in creating a business plan is the development of business model. Business modeldescribes the rationale of how an organization creates, delivers, and captures value[1] (economic, social, cultural, or other forms of value). The process of business model construction is part of business strategy[11]. The business model is a good helper in the process of developing a business plan. If you can describe each element of the model, to develop a business plan for you is no longer a problem.

Description of the basis elements of the Business Model Canvas is presented in table 4.1.

Table 4.1

The basis elements of the Business Model Canvas

[11] *Business Model Generation*, A. Osterwalder, Yves Pigneur, Alan Smith, and 470 practitioners from 45 countries, self published, 2010

<table>
<tr>
<td rowspan="2">8. KEY PARTNERSHIPS
What players of the market will you cooperate with?</td>
<td>7. KEY ACTIVITIES
What shall be done for production of your good/service?</td>
<td rowspan="2">2.VALUE PROPOSITIONS
What good/service shall be offered to a customer?</td>
<td>4.CUSTOMER RELATIONSHIPS
How one-time customers will become adherents of your good/service?</td>
<td rowspan="2">1. CUSTOMER SEGMENTS
Who is your customer?</td>
</tr>
<tr>
<td>6. KEY RESOURCES
What key resources are necessary for production of your good/service?</td>
<td>3.CHANNELS
How will your good/service find its customer?</td>
</tr>
<tr>
<td colspan="3">9. COST STRUCTURE
What cost are necessary to start the business?</td>
<td colspan="2">5. REVENUE STREAMS
How much customers are willing to pay for an offered good/service?</td>
</tr>
</table>

Focus attention of everyone on delivering what the customer wants (management of people, monitoring and control).

Identifying Customers does not need to be a difficult process. You do not need a huge market base, but you need to be realistic and your market needs to be well-defined.

Your plan must demonstrate the knowledge of customers' needs and wants and prove that you have a reachable and significant market.

Identifying Customers help you to know:

Who is your perfect customer and what is your client base

What is your current customer base (in terms of age, sex, income, and geographic location)

What habits your customers and potential customers share.

What prospective customers you aren't currently reaching.

What qualities your customers value most of all about your product or service.

What qualities about your product or service you need to improve.

How they can be adjusted to serve your customers better.

Identifying Customers is based on market segmentation.

Market segmentation – identifying and profiling distinct groups of buyers who differ in their needs and preferences.

The basis for segmentation is a factor that varies among the groups of a certain market, but is consistent within each group. All markets can be broken down in different ways, and although many of the bases used to segment a consumer market can also be applied to businesses and organizations, the sheer nature of these eventually leads to other specific segmentation bases (tabl. 4.2)[12].

Table 4.2

Factors of segmentation

[12]Market segmentation: basic strategies to identify segments and select a target market. [Electronic recourse]/http://tisconsulting.org/news/market-segmentation-basic-strategies/

Consumer market		Business market	
Type of segmentation	**Variables**	**Type of segmentation**	**Variables**
Geographic	Region, climate, population density, and population growth rate	**Geographic**	Location, customer concentration, regional industrial growth rate, and international macroeconomic factors
Demographic	Age, gender, ethnicity, nationality, education, occupation, religion, income, and family status	**Customer type**	Size of the organization, its industry and position in the value chain
Psychographic	Values, attitudes, opinions, interests, activities, and lifestyles	**Buyer behaviour**	Loyalty to suppliers, usage patterns, and order size
Behavioural	Usage rate and patterns, price sensitivity, brand loyalty, and pursuit of benefits		

Once you have identified what is unique about your business and who your target buyers are, focus on your ***Competitor/ Value Creation Analysis:***

Identify your direct competitors and learn what they do.

Identify your value propositions.

Competitor Analysis –the process of identifying key competitors; assessing their objectives, strategies, strengths and weaknesses, and reaction patterns; and selecting which competitors to attack or avoid.

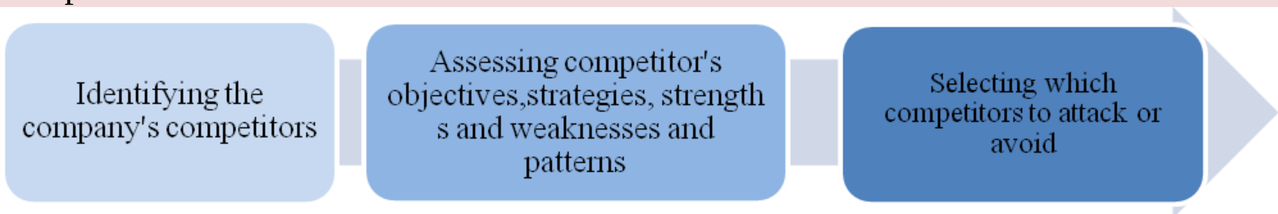


Figure. 4.1. Steps in Competitor Analysis

Competitor Analysis allows to detect Competitive Advantage and initiate Value Creation. A firm has a competitive advantage in a market if it earns a higher rate of economic profit compared to the average firm in the industry. Economic profit earned by a firm depends on the economic attractiveness of its market as well as the economic value created by the firm. A firm has a competitive advantage only if it can create more economic value than its competitors. A firm's ability to create value depends on its cost position as well as its benefit position relative to its competitors[13].

Before Competitor/ Value Creation Analysis you make ***sales forecasting***.

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[13]Marketing. 17 April 2012. [Electronic recourse]/ <http://www.sba.gov/category/navigation-structure/starting-managing-business/managing-business/running-business/marketing>

Sales forecasting provides the basis for comparison over a period of time. You should:

Correctly identify and estimate current demand by considering total market potential, market share, and expected sales.Estimate future demand by considering past sales patterns, consumer trends, and overall market projections.

Market demand is the total volume that could be bought by a defined customer group in, a defined geographical area, in a defined time period, and under a defined marketing program.

Marketing mix maybe defined as the mixture of the controllable marketing variables that the firm uses to persuade the customers in the target market in order to secure sales[14].

The marketing mix variables are referred to as the 4 Ps:
Product, Place, Promotion, and Price.

First, the firm chooses the ***product*** to meet the identified need of the target segment. Second, the right ***distribution channel*** is used to make the product available. Third, the firm undertakes eye catching ***promotion***. Fourth, the ***price*** platform is acceptable to the customer and firm (table 4.3).

Whether you are thinking of setting up, starting or expanding your business or selling any product or service, these four elements should be top-of-mind all the time:

1. The ProductStrategy helps you to:
Know what product or service you are going to sell to this market.
Define it in terms of what it is for your customer.
Know how it helps your customer to achieve, avoid or preserve something.

2. The Price Strategy helps you to know**:**
How much you are going to charge for your product or service, and on what basis.
How you are going to price it to sell at retail.
How you are going to price it at wholesale.
How you are going to charge for volume discounts.

3. The PlaceStrategy helps you to know:
Where you are going to sell this product at this price.
If you are going to sell directly from your own company or through wholesalers, retailers, direct mail, catalogues or the Internet.

4. The PromotionStrategy helps you to know:
How you are going to promote, advertise and sell this product at this price at this location.
What the process will be from the first contact with a prospect through to the completed sale.

Table 4.3

Characteristic of marketing mix variable

4 Ps Variables	The essence of the marketing mix	The elements of the marketing mix variables

[14]Kotler, P. and Armstrong, G. (2006) Principles of Marketing (11th ed.). Prentice Hall. NJ.

Product	Determining the product, individual goods, product lines, or services	Features of product, accessories, installation, instructions, service, warranty, packaging, and brand names
Place	Getting the product to the customer	Channels, distribution systems, middlemen, warehousing, transportation, fulfilment, and shipping
Promotion	Communicating with the customer	Personal selling, mass selling, sales promotion, sales personnel, advertising, media selection, copywriting
Price	Setting a price that serves the customer well and maximizes profits to the company	Price flexibility, level pricing, introductory pricing, discounts, allowances, geographic terms

Marketing Budget is the last of the Marketing Plan.

Marketing Budget is the document which determines expenses associated with marketing. Marketing Budgetestimates the costs of personnel, market research, marketing communications, channels and other tools of the marketing.

Marketing costs can ad up quickly, and that is why it is important to plan your mark eting initiatives for maximum impact and to make sure to plan accurately for costs.

EXAMPLE

Sample marketing budget template

Cost items	n	b	ar	r	may	n	l	g	p	t	v	Dec	tal
Personnel													
Salaries, wages													
Benefits													
Payroll taxes													
Commissions and bonuses													
Personnel Total													
Market Research													
Primary research													
Secondary research													
Market Research Total													
Marketing Communications													
Branding													
Advertising													
Web sites													
Internet marketing													
Public relations													
Events													
Marketing Communications Total													
Channels													
Channel communications and training													
Channel promotions and incentives													
Channels Total													
Other													
Telephone													
Travel													
Computers and office													

equipment													
Other Total													
Total Marketing Budget													

It is imperative that you develop amarketing budget as part of your overall marketin g plan, and carefully consider every number and how each number will affect other numbe rs.

Implementation and Control Plan supposesFocus attention of everyone on delivering what the customer wants: management of people, monitoring and control

Conclusion.A true marketing plan includes the upfront planning, communications expenditures and ongoing monitoring and tracking of your marketing efforts.Even when you make the best plans, unexpected events can happen – bad outcomes occur. A marketing plan will still help you to avoid some common marketing pitfalls, and for that reason it is useful. Don’t abandon the marketing plan because you missed the market high! Remember the marketing plan is designed to be passive – to help you obtain a market average. The plan may prevent you from hitting the market high, but it also prevents you from hitting the market low.

Discussion Questions

1. Describe how the marketing mix relates to the implementation of a marketing plan.
2. Explain how much segmentation can help a company increase its market share.
3. Which basic elements are considered in the marketing plan?

TOPIC 5. TECHNICAL (MANUFACTURING) ANALYSIS AND DEVELOPMENT OF AN ORGANIZATIONAL PLAN

Learning Objectives

After studying this chapter you should be able to:

1. Identify internal resources necessary for the activity
2. Know how to prepare a production plan
3. Determine the organizational aspects of the business
4. Allocate duties and responsibilities for the implementation of the business project

Key words: *internal factors, input, processes, outputs, internal resources, raw materials, suppliers, technological process, production plan,packaging, delivery, distributionchannel, organizational (management) plan, ownership structure, internal management team, external management resources, human resources needs, organizational chart.*

1. Identify internal resources necessary for the activity

All of these businesses can be described and analyzed in terms of a basic system model. In fundamental terms, any ‘’system’ has three parts: inputs, processes, and outputs. In a business organization this system should be designed to change invested capital, people’s labor, raw materials, and other resources into finished products or desired services so that customer needs are satisfied. The system structure is illustrated in Figure 5.1.

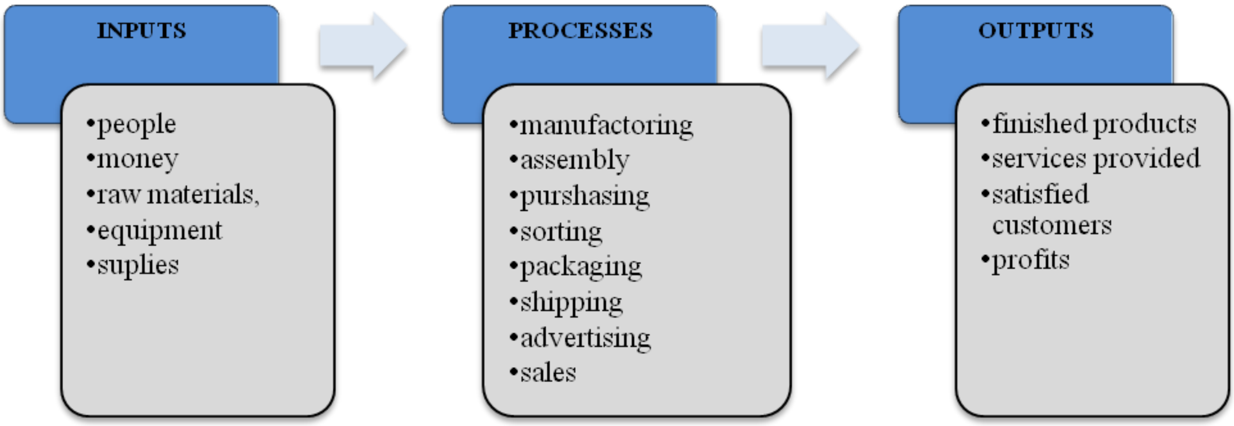


Figure 5.1. System Model of Small Business Operations

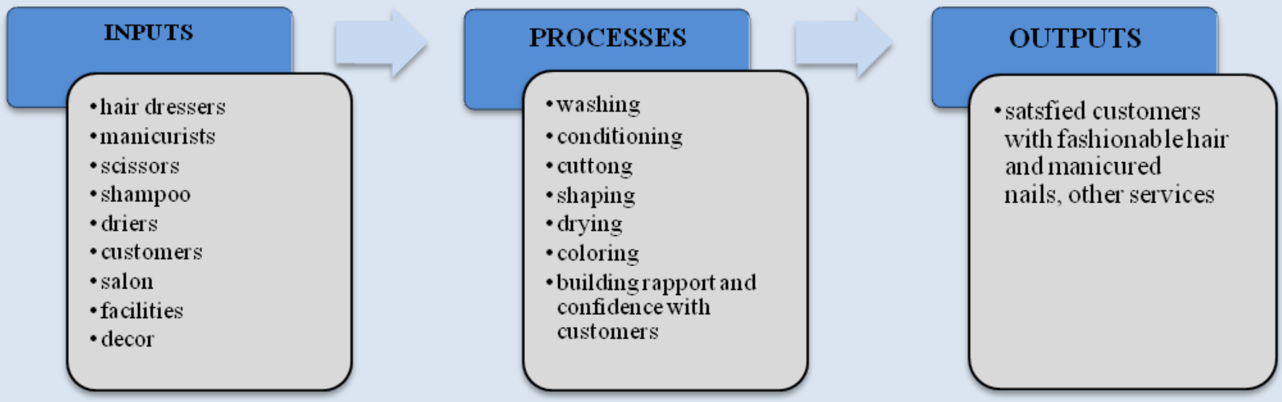
This model is useful for all type of businesses and help the entrepreneur to find the optimal solutions for their activities. The quality and quantity of **INPUTS** must be selected in light of the quality and quantity of **OUTPUTS** sought rather than vice versa.

The operations of every business are different. How businesses in the same core business conduct their business can be very different and helps distinguish them from their competitors.

This situation is depending of the existing internal resources and the using management system.

EXAMPLE

The System Model of Beauty Salon[15]



In this chapter of business plan you need to describe and analysis the existing internal resources, their quality and availability.

The main important internal resources are illustrated in Figure 5.2[16]

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[15]Kenneth R.Van Voorhis. Entrepreneurship and Small business Management.Allyn and bacon Inc. USA. 1980. Pag. 328

[16]Larisa Bugaian, Mihai Roșcovan, Angela Solcan, ȘtefanTodirașcu Cum sa-tiinitiezi o afacere. Ghidpracticpentruantreprenori. Chisinau. 2010. Electronic recourse]/ http://www.bci.md/media/files/Ghidpaginat.pdf

Figure 5.3. Internal resources of the company

In this section you should elaborate on the main operating units (production unit, development unit, marketing and sales, etc.) and the relationship and interactions between each of them.

An essential componentof theBusiness Plan mustclarifythatsuchbusiness willcreateproducts or services.

The important general questionsneedto think aboutand answers are[15]:

Whatand how will youproduce?

What are the sourcesof matterrawmaterials, energy?

Whatprocesses and technologieswillbe usedthe manufacture oftheirproducts?

Whereyouplacethe production?

How will yousolve the problemrelated to thepurchase of equipment?

Sourcing Materials.All business ventures have to source materials. The extent to which this can affect the business however is very diverse. Some service industries may only need stationery supplies, professional services etc. Supply companies core business revolves on the product or product lines that they sell. Manufacturing companies need raw materials to produce their products.[17]

So the questions you must ask yourself are:

What raw materials does your business use?

Who are your suppliers?

What other suppliers could you use?

What are the advantages of using your current supplier?

What goods do you buy and sell?

[17]Kenneth Germaine How toWrite Your Own Business Plan.2011.[Electronic recourse]/ http://startyourownbusinessblog.files.wordpress.com/2010/12/how-to-write-your-own-business-plan2.pdf)

What are your alternative sources of supply?
What are the advantages of your current supply source?
What other products do or will you use?
Can you simplify your sourcing of the products?

EXAMPLE

Determine Consumption ofraw materials[17]

Product	The consumption ofmeal forone shift, kg	Yeast		Salt	
		%	forone shift, kg	%	forone shift, kg
Bread	707	1,3	9,19	1,5	10,60
Bread Rolls	238	1,3	4,32	1,5	4,98
Pies	160	1,3	2,89	1,5	3,33
Total consumption forone shift	1105		16,4		18,91
Total annual consumption	**397800**		**5900**		**6800**

Depending on the location of your production facility, supply problems may arise because of import restrictions or custom delays, transport difficulties, unreliable logistics, etc.

To select thebest fittingprovideris required toidentifythe ***criteria*** for selection.

As an example of selecting criteriamay be used: quality, delivery time, deliveryvolume, quality of service, transportationcosts, and other. Entrepreneur selected the most important criteria's for the concrete type of production process.

EXAMPLE

Determine themainsupplierof raw materials [18]

Name of supplier	Name of given of raw materials	Annual procurement		Share involume stocked, %
		Quantity, kg	Value , euro	
X	WheatFlour	X	Y	88,7
Y	Pressedyeast	X	Y	1,8
Z	Salt, sugar, oil	X	Y	9,5

2. Know how to prepare a production plan

Production.In any manufacturing process there is a production process. For each product there is a chain of production with several distinct links. It is important that you identify these individual links and analyze any improvements in each link or in the way the links come together to improve the overall chain.So the questions you must ask yourself are:

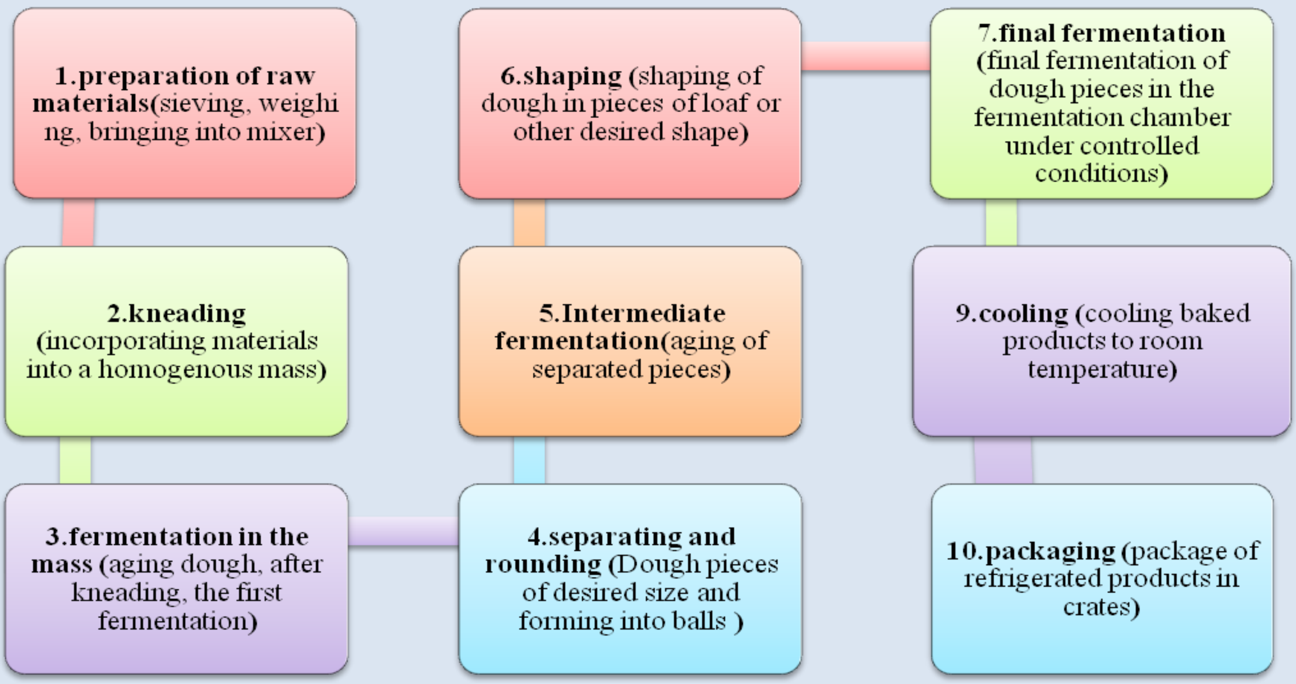
How do you produce each item you make?
What are the steps in the production?
Can any step by improved?
Can the way the links interact be improved?

[18]Larisa Bugaian, Valentina Catanoi, AlaCotelnic, Natalia Curagău, Cristina Dolghi, Igor Enicov, Maria Gheorghiţă, VasileGolovco, Marian Jalencu, AlaLevitschi, Claudia Melinte, Angela Solcan, Petru Tomiţă. Antreprenoriat: InIţIereaafacerII. UTM. Chisinau 2010. [Electronic recourse]/http://www.ase.md/~cmg/files/antreprenoriat.pdf

For this part you need to describe **TECHNOLOGICAL PROCESS** and identify the **EQIUPMENT** witch you need to use.

EXAMPLE

The steps of technological process of bread production [19]



Now you identify the equipment and other resources witch you need to implement the technological process.

EXAMPLE ***Necessary Equipment***[17]

Name of fixedmeans	Type, brand, technical characteristics	Energy consumption, kWt	The initial value, euro
Technological Equipment	Sift the flour FIMAK		x
	SpiralMixerwithremovablebowl FIMAK SPM 250 M(2 units)		x
	Modellerround (2 units)		x
	Oven FIMAK		x
	Tablesand Accessories		x
	FIMAKovenfor baking piesandbuns (6 units)		x
Computers	2 units ()		x
Office Furniture	Tables, chairs		x
Transport units	Car veco Dayly 50C		x
Total			xxxxxxx

[19]Scheme of technological process of bread production.[Electronic recourse]/http://www.pip-ns.com/en/2-5/Scheme-of-technological-process-of-bread-production/

Other resources which you need to production activity are: Office Space, Production facilities, Trading Spaces, Warehouses forraw materials and finished products, Garagevehicles and others.

Particular importanceisprovidingbusinesswith the necessary utilities such as:

Electrical energy.

Water and sewerage.

Fuel for transportation units.

You need to identify the type of energy the price and the suppliers of this resources.

Also in this part you need to determine the monthly and annuallyproduction plan using the Gant table.

EXAMPLE

Monthly production plan, (kg, units. tons, pieces)

Type of products	Time(month)												Total
	1	2	3	4	5	6	7	8	9	10	11	12	
A					xx				xx				Xxxx
B						xx	xx	xx					Xxx
C	xx		xx		xx		xx		xx		xx		Xxxx

The same table you can use for annual production plan.

Packaging and Delivery.These are two very important elements to your business process.

Packaging can have a great deal of impact to the final user.

The first role of packaging is to ensure that the product gets to the final user in pristine condition. In some cases the packaging also has a very important sales and marketing function. The issues you must address are:

How do we currently or intend to package our goods?

Does this ensure that the product arrives at the end user in prime condition?

Should you packaging have a marketing function?

How can this be improved (refer to marketing section)?

Is your current packaging cost effective?

The first thing a customer sees of a product is its packaging.

When deciding the best mode of transportation a number of issues should be addressed.

How quickly do we need to get goods to our customers, i.e., perishable versus non perishable goods?

What is the most cost effective method of delivery?

Is there a marketing aspect to your delivery service?

Conclusion. Implementation of this section of the business plan allows entrepreneurs to correctly identify the necessary resources in terms of quantity and quality. Also help to choose the rite technological process and the business partners.

3. Determine the organizational aspects of the business.

The Organizational (or management) Plan section of the business plan describes how the business will be structured, what legal form of ownership it will use, elucidates logistics of the organization such as the various responsibilities of the management team, the tasks assigned to each division within the company and skills of staff, highlights company's management philosophy and business culture, and explains how will these contribute to the business's success.

A convenient way to organize the Organizational Plan section is to break it into sub-sections which are detailed in Figure 5.4.[20].

Figure 5.4. Sub-sections of Organizational Plan

Ownership Structure sub-section describes the legal structure of the business.The most common forms of business entities are:

1. Sole Proprietorship. This form of business means that business owned and controlled by a single person.

2. Partnership. Partnership is an association of two or more people to carry on, as co-owners, a business for profit.

3. Corporations which mean a legal entity or “person” in itself.

Depending on the legal structure of the business explain at the next sub-sections how the business will be managed on a day-to-day basis. For instance, if the business will operate as a partnership, then it has to be explained who the partners are and how management decisions will be made and disagreements will be resolved. For a business organized as a corporation, describe the composition and function of a board of directors, who the principal owners will be, and how each will be involved in making decisions[21].

4. Allocate duties and responsibilities for the implementation of the business project

Internal Management Teamsub-section describes the main business management categories relevant to the business, identify who will be responsible for that category, and specify that person's skills. Although every company will differ in its organizational

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[20]Writing The Business Plan: Section 6. [Electronic recourse] /http://sbinfocanada.about.com/cs/businessplans/a/bizplanmanage.htm

[21]The Elements of a Business Plan: First Steps for New Entrepreneurs.[Electronic recourse]/ https://www.extension.purdue.edu/extmedia/EC/EC-735.pdf

structure, most can be divided into several broad areas that include[22]: marketing and sales (includes customer relations and service); production (including quality assurance); research and development; administration.

But not every business can be divided in this manner, because every business is different and must be structured according to its own requirements and goals. Depending on the type of business, other functions that may need to be represented are technology management, information technology management, quality management, etc.It's not necessary to have a different person in charge of each business management category, some key management people may fill more than one role. There are many different ways to structure a company. Factors that play an important role are the type of business, the industry, the size of the company, the ownership situation (partner organization, family business etc.) and the style of management, etc.

An effective way to lay out the structure of the company is to create an organizational chart with a narrative description. Organizational chart defines responsibilities and lines of reporting of middle and higher management. Figure 5.5 is an example of an organization chat.

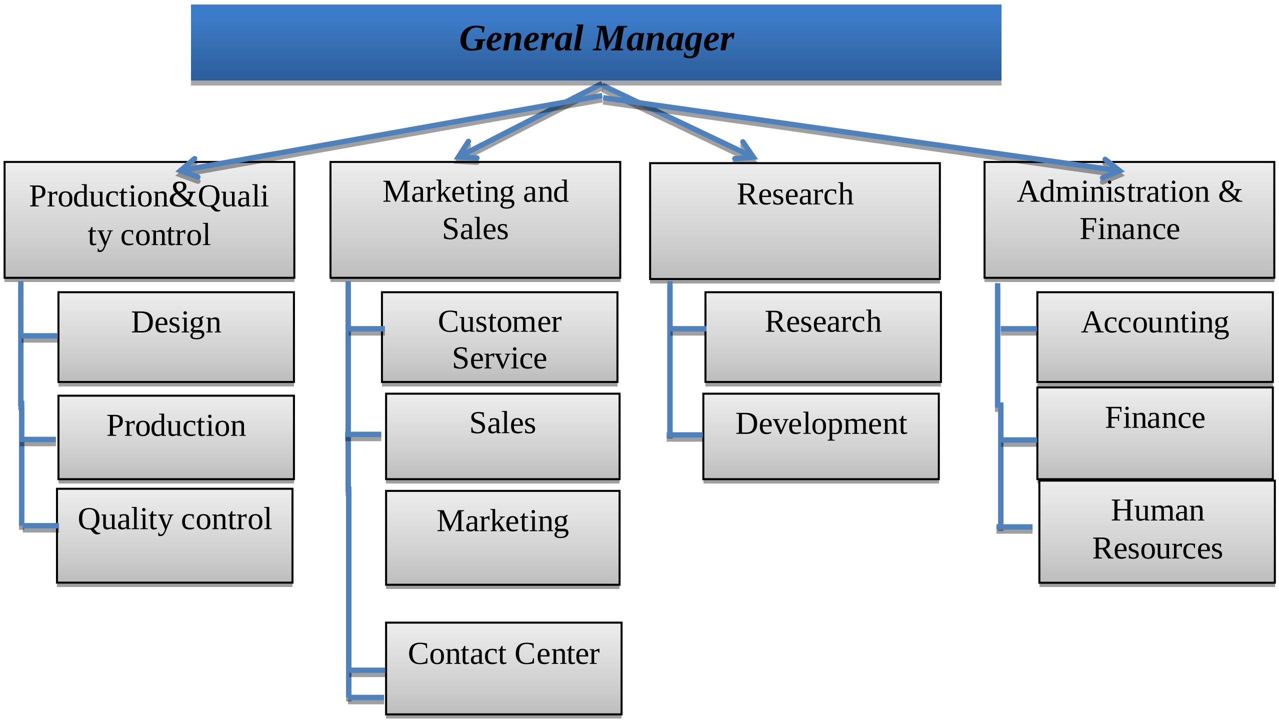

Figure 5.5. Example of Organizational chart

Organizational chart is a visual representation of how a firm intends authority, responsibility, and information to flow within its formal organizational structure.

After describing structure of the company, specify the management team's roles, duties, and responsibilities, previous experience and successes, and explain how these qualifications relate to the implementation of the proposed service.

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[22]Elements of a Business Plan.Operations & Management Plan.[Electronic recourse]/ http://www.entrepreneur.com/article/38308-6

Also highlight the educational background and any specialized training of key staff members. Résumés or curricula vitae can be included in the appendices[23].

Add an explanation of how your management team will be compensated: describe any profit-sharing plans and table of salary and benefits of management team members. It's also possible to include in an Appendix work contracts or non-competition agreements.

External Management Resourcessub-sectiondescribes two main sources of external management resources:

Professional Services.In the ***Professional Services sub-section*** list and describe an external support such as specialized industry consultants, lawyers, accountants or public relations / marketing agencies, and mention what type of service you will be getting from them, as well as what experience and/or contacts they provide to your business[6].

Advisory Board.Advisory Board consists of external business experts who meet periodically to help the management team evaluate the venture and make strategic suggestions for improvement. If a board of advisors was involved, the plan should present brief information on these individuals (including their names, titles, experience) and explanation how each member will contribute in providing consultation and running a profitable business. If a board of advisors is going to be involved, include this section anyhow, describing plans for setting up an Advisory Board and describing the types of people you will approach to serve on the Board[1,6].

Human Resources Needssub-sectiondescribes lower-level staff members, if it is planed to hire them. Explain in this sub-section how you will locate potential employees and what qualifications they must meet, what jobs they will perform, how you will compensate them, will it be best for your business to have employees or should you operate with contract workers or freelancers, do you need full-time or part-time staff and so on. Basically, think about the information you would include if you were advertising one of these job openings, and include that in your business plan[24].

In order to determine the number of employees a company need, apply the following equation to each department listed in the organizational structure:

$$C / S = P, \qquad (5.1)$$

when C – the total number of customers;

S – the total number of customers that can be served by each employee;

P – the personnel requirements.

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[23]Writing a BusinessPlan for a NewPharmacy Service.[Electronic recourse]/ http://www.pharmacist.com/sites/default/files/files/mtm_writing_business_plan.pdf

[24]Business Plan: Your Organizational And Operating Plan. [Electronic recourse]/ http://www.investopedia.com/university/business-plan/business-plan6.asp

After calculating the number of employees that organization needs, determine the labour expense:

$$P \times SL = LE, \quad (5.2)$$

when P – the personnel requirements for each department;

SL – the employee salary level;

LE – labour expense.

Next, determine how much salary each employee will receive, and total the cost of salary for all employees. Add to this the cost of any other employee benefits to calculate total labour cost[21].

The Organizational Plan should also include a short description of the company's policies for enhancing the performance of staff and for ensuring strong commitment of personnel to the business. Particular issues to be mentioned are[19]:

The main criteria and the process for selecting personnel.

Policies for staff remunerating (proportion of fixed to variable salary, bonus schemes, fringe benefits, etc.).

Training schemes.

Cultural elements promoted by top management (regular and efficient communication, open information policy, team-based decision-making processes, respect for individuals, fairness in personnel assessment, etc.).

Specific measures to retain key experts.

For owners of small business who work with only few persons, many of the functions mentioned above have to be combined and performed by them or only partially shared with the others. In such a case, in the business plan should be mentioned what you are planning to do when the business has grown so much that you are not able to deal alone with all these functions any more[25].

Conclusion. The Organizational (Management) Plan section of the business plan needs to establish the credibility of the management team. It describes a management team and staff and how a business ownership is structured. When writing the Management Plan section of the business plan, specify Ownership Structure, Internal and External Management Resources, Human Resources Needs. An organizational chart of the positions required and job descriptions for the key employees will help readers understand how the business will operate.

Discussion Questions

1. What are the internal resources that have to analyze the entrepreneur?
2. What criteria used entrepreneur to analyze suppliers?
3. What purpose describes the technological process?
4. Prove the necessity to include Organizational Plan section into the business plan.
5. What issues need to be included into Internal Management Team sub-section of Organizational Plan?

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[25]How to Prepare Your Business Plan. UNITED NATIONS New York and Geneva, 2002. [Electronic recourse]/http://unctad.org/en/docs/iteiia5_en.pdf

6. Are all sub-sections of the Organizational Plan required for small business? Prove your point of view.

Topic 6. DEVELOPMENT OF A STRATEGY OF FINANCING AND A FINANCIAL PLAN. ANALYSIS AND EVALUATIONOF THE BUSINESS PROJECTS

Learning Objectives

After studying this chapter you should be able to:

1. Understand the key elements of a financial plan
2. Determine and interpret risks, calculate and evaluate breakeven point of a business project
3. Understand the concept and terminology of analysis of the business plan
4. Understand the range of tasks involved in undertaking rigorous evaluation and analysis
5. Understand the importance of analysis and evaluation within it

Key words: *strategy of financing, financial plan, risks, break-even analysis, financial analysis, evaluation, business plan,presentation, private interview, investors.*

1. Understand the key elements of a financial plan

Financial analysis is defined as the process of discovering economic facts about an enterprise and/or a project on the basis of an interpretation of financial data. Financial analysis also seeks to look at the capital cost, operations cost and operating revenue. The analysis decisively establishes a relationship between the various factors of a project and helps in maneuvering the project's activities. It also serves as a common measure of value for obtaining a clear-cut understanding about the project from the financial point of view.

An analysis of several financial tools provide an important basis for valuing securities and appraising managerial programmes. Financial analysis is vital in the interpretation of financial statements. It can provide an insight into two important areas of management— return on investment and soundness of the company's financial position.

Internal management accounts provide information which is valuable for the purpose of control. The information is made available in the form of accounting data, which may be manifested as financial and accounting statements. A financial analysis reveals where the company stands with respect to profitability, liquidity, leverage and an efficient use of its assets. Financial reports provide the framework within which business planning takes place. They are the key through which an effective control of a business enterprise is exercised. It is the process of determining the significant financial characteristics of a firm. It may be external or internal. The external analysis is performed by creditors, stockholders and investment analysis. The internal analysis is performed by various departments of a firm.

Significance of financial analysis

Financial analysis primarily deals with the interpretation of the data incorporated in the proforma financial statements of a project and the presentation of the data in a form in which it can be utilized for a comparative appraisal of the projects. It is, in effect, concerned with the development of the financial profile of the project. Its purpose is to find out whether the project is attractive enough to secure funds needed for its various constituent activities and once having secured the funds, whether the project will be able to generate enough economic values to achieve the objectives for which it is sought to be implemented. It deals not only with the financial aspects of a project but also with its operational aspects. As such, it is necessary to undertake such an analysis not only in the case of industrial projects but also in the case of non-industrial projects.

Analysis of financial statements has become very significant due to the widespread interest of various parties in the financial results of a company. In recent years, the ownership of capital of most public companies has become broad-based. A number of parties and bodies, including creditors, potential suppliers, debenture-holders, credit institutions like banks, industrial finance corporations, potential investors, employees, trade unions, important customers, economists, investment analysts, taxation authorities and government have a stake in the financial results of a company. Various people look at the financial statements from various angles. A number of techniques have been developed to undertake analysis of financial statements in order to reach conclusions about the financial health, profitability and efficiency of an enterprise and also to compare an enterprise with other similar undertakings. The technique of ratio analysis is the most important tool of financial analysis. It helps in comparing the performance of various companies and judge their financial soundness.

Utility of financial and accounting statements

Financial statements play a vital role in the internal financial control of an enterprise. These should, therefore, the properly constructed, analyzed and interpreted by executives, bankers, creditors and investors.

The entire future of a company hinges on the manager's ability to decide relevant financial data with a view to planning profit ability moves.

Learning to read financial statements is the first essential element in any businessman's attempt to acquire financial management skills. The change in the elitism of stock ownership to broad public ownership has necessitated a concomitant change in the entire process of reporting corporate financial results.

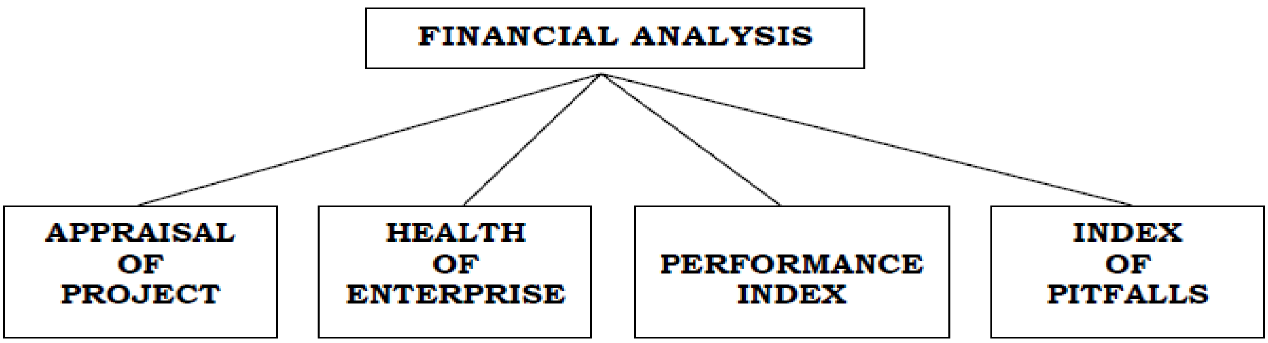

Fig. 1. Utility of financial analysis

The role of management in the matter of preparation of financial statements is to add understanding to these statements, the fairness of which is to be viewed through the eye of the user, while that of the accountant is to close the communication gap and of the auditor to add credibility to them. For evolving a good economic information system, accounting innovations are of great economic information system. Without these, communication with the financial community would be difficult, the interest of present and future potential investors would not be served, the ability of the company to raise additional capital would be impaired and the government's regulatory measures and policies would not serve the best interest of society.

Though a financial statement reveals less than it conceals, it provides the indicators of the enterprise's performance during the year.

Financial analysis seeks to spotlight the significant facts and relationships concerning managerial performance, viz., corporate efficiency, financial strengths and weaknesses and creditworthiness of the enterprise.

Business plans are inherently strategic. You start here, today, with certain resources and abilities. You want to get to a there, a point in the future (usually three to five years out) at which time your business will have a different set of resources and abilities as well as greater profitability and increased assets. Your plan shows how you will get from here to there[26].

It doesn't necessarily take a lot of money to make a lot of money, but it does take some. That's especially true if, as part of examining your goals and objectives, you envision very rapid growth.

Start by asking yourself what kinds of financing you're likely to need – and what you'd be willing to accept. It's easy when you're short of cash, or expect to be short of cash, to take the attitude that almost any source of funding is just fine. But each kind of financing has different characteristics that you should take into consideration when planning your plan. These characteristics take three primary forms:

First, there's the amount of control you'll have to surrender. An equal partner may, quite naturally, demand approximately equal control. Venture capitalists often demand significant input into management decisions by, for instance, placing one or more people on your board of directors. Angel investors may be very involved or not involved at all, depending on their personal style. Bankers, at the other end of the scale, are likely to offer no advice whatsoever as long as you make payments of principal and interest on time and are not in violation of any other terms of your loan.

You should also consider the amount of money you're likely to need. Any amount less than several million dollars is too small to be considered for a standard initial public offering of stock, for example. Venture capital investors are most likely to invest amounts of € 250,000 to € 3 million. On the other hand, only the richest angel investor will be able to provide more than a few hundred thousand dollars, if that.

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[26] *Plan Your Plan. [Electronic recourse]/* **http://www.entrepreneur.com/article/38292#ixzz2qJbujxdk**

Almost any source of funds, from a bank to a factor, has some guidelines about the size of financing it prefers. Anticipating the size of your needs now will guide you in preparing your plan.

The third consideration is cost. This can be measured in terms of interest rates and shares of ownership as well as in time, paperwork and plain old hassle.

Planning. What aspects of an organisational strategy and plan must be in place before you develop your financing strategy? You need to know where you are now. This should include general strengths and weaknesses, as well as specific financial strengths and weaknesses[27]. It may be helpful to do a SWOT Analysis.

Some useful indicators against which to measure your current sustainability situation are:

total number of donors – you need a reasonable number and spread, but not so many that you spend all your time reporting;

ratio of international to local donors – you need the ratio of local to international donors to be relatively high, if possible, because local donors have a direct stake in supporting your work;

earned income – you need to earn a reasonable percentage of your income (what is "reasonable" will depend on the nature of your organisation and the work it does) to ensure that you are not totally dependent on donors;

keeping overhead expenses as low as possible – this means you can do the work, but your core costs are kept low (not more than 15% to 20% of total expenditure);

the amount of money you have in reserve – you need to build up a reserve fund which can earn interest and give you a buffer against financial crises.

You need to have a clear organisational vision and mission, and a strategy and action plan for achieving them. Your financing strategy must support your organisational strategy. You need to know what you plan to do and how many staff members and other resources you need to do it, before you work out how much money you will need and how you will get the necessary finances.

2. Determine and interpret risks, calculate and evaluate breakeven point of a business project

Risk is the degree of uncertainty associated with the predicted result. The following types of risks can be distinguished (Fig. 6.2): allowable risk, which can be covered by profit; critical risk, which is covered by profit; catastrophic risk, which covered by the property of the company.

1. ***Production risk***

- delays in the construction and ground preparation
- delay in delivery of equipment
- seasonality of raw materials supply
- unforeseen stops
- lack of raw materials
- poor quality of products
- poor quality of raw materials
- outdated products
- depreciated machinery
-lack of reserve capacity

2. Market risks
- demand instability
- reduced competitors' prices
- raw materials' prices increase
- changes in tax and customs policy
- competitors' productivity increase
- effective demand reduction
- lack of skilled labor force

4. Ecological risk

- atmospheric emissions
- discharges to water

5. Financial risk

- lack of own circulating assets
- long-term diversion of working capital in calculations
- currency risk

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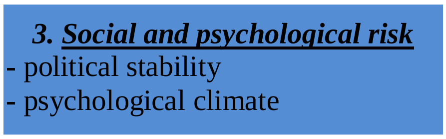


Figure 6.2.The main risk types

When formulating this section of the business plan the task is to assess the degree of uncertainty to achieve this goal, to determine the time and place of the coming of undesirable consequences, to analyse main risk types and their sources and to develop measures to reduce the loss of financial resources (Fig. 6.3).

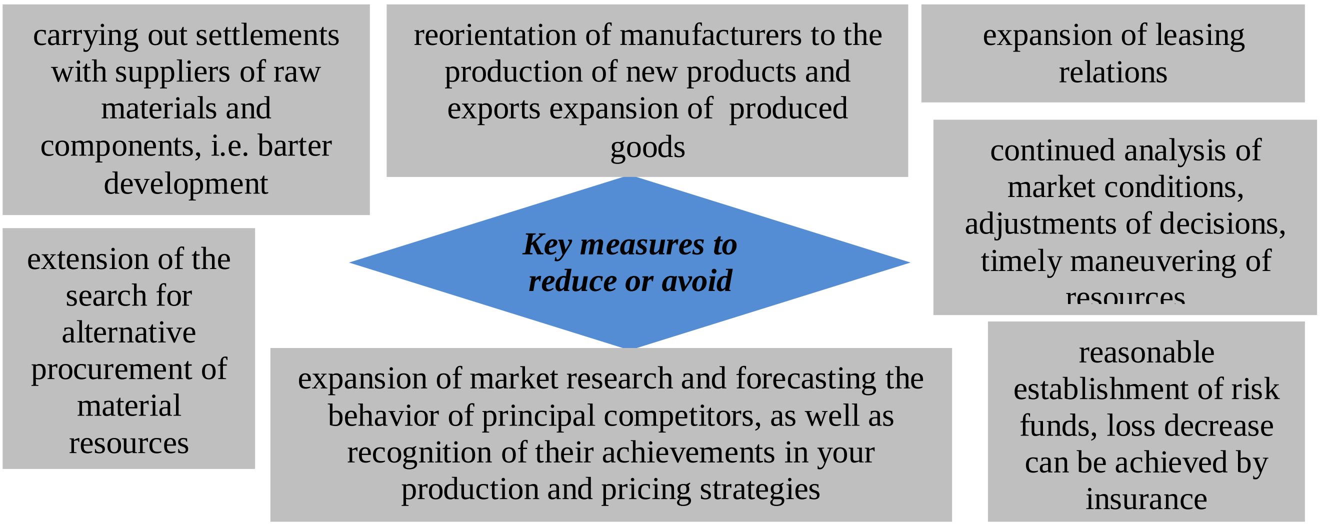


Figure 6.3. Key measures to reduce or avoid risks

Principal risk factors and measures to reduce financial losses can be summarized in table 1.

Table 1. Risk factors and measures to reduce financial loss

Risk Factors	Measures to reduce financial losses
Unstable general economic situation in the country	Implementation of economic stabilization measures, privatization and corporatization
The decline in production due to the lack of investment and working capital	Attracting additional loans and domestic investment in the form of equity
Limited ability to attract foreign investment to develop production and retooling	Improving the investment climate by providing additional benefits and government guarantees to investors
Targeting at only one supplier of raw materials	Research for opportunities and other options to obtain raw materials

Break-even analysis.For the efficiency estimations of start-up project the next types of investment appraisal are used net present value (NPV), internal rate of return (IRR), profitability index (PI), payback period (PP). These indicators are described in the courses ***Entrepreneurship*** and ***Innovation management***.

NPV means ***Net Present Value*** or the difference between the present value of cash inflows and the present value of cash outflows. NPV method is a discounted cash flow from the project to the investor over the predictive period from the beginning of investment to output. If NPV ≥ 0, the investment decision is taken.

IRR means ***Internal Rate of Return***. IRR is the maximum level of prices of capital (discount rate) at which the project with the specified flow of funds to the investor will have a commercial interest for him.

Generally speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project. As such, IRR can be used to rank several prospective projects a firm is considering. Assuming all other factors are equal among the various projects, the project with the highest IRR would probably be considered the best and undertaken first.

IRR is sometimes referred to as "economic rate of return (ERR)". You can think of IRR as the rate of growth a project is expected to generate. While the actual rate of return that a given project ends up generating will often differ from its estimated IRR rate, a project with a substantially higher IRR value than other available options would still provide a much better chance of strong growth.

Profitability Index. The profitability index is the ratio of the sum of present values of the project divided by the initial cost of the investment. It is a relative measure of the value (present value) of a project compared to its cost. The higher profitability index projects have higher PV's relative to the scarce capital invested.

Payback Period. Number of years for the cumulative net cash flows from a project to equal the initial cash outlay (the number of periods it takes the cash inflows from a project to recover the original cost of the project).

Decision rule: Firm specifies an arbitrary number of years as the critical number (x). If payback period < x, then accept the project. Otherwise, reject the project.

When accounting for risks, managers will determine if a project is too risky relative to the profitability of it. There are several techniques used when it comes to risk analysis, for example break-even analysis[28].

Break-even analysis is a type of simple analysis that tells us how many units must be sold in order for a particular project to offset it's costs or break even.

In other words, how many units must be sold so the pre-tax operating cash or the accounting profits are equal to € 0? This particular type of analysis is performed at a cash-flow DOL and at an accounting DOL level. It also gives us a relative measure of how solvent a certain project is.

Cash-flow break-even. The pre-tax operating cash-flow (EBITDA) is used to determine the cash-flow break-even point. This is important, as it reveals if the project's pre-tax operating cash-flows will be adequate to keep the project going without any additional investment being required.

[28] Project evaluation: what is break-even analysis? [Electronic recourse]/http://letslearnfinance.net/what-is-break-even-analysis/

It is quite easy to calculate the break-even point. The fixed-costs (FC) of a project is divided by the contributing proportion of an item sold (Price of Unit – Variable Cost of Unit). This, in it's mathematical form is:

$$\text{EBITDA Break} - \text{Even} = \frac{\text{FC}}{\text{Price} - \text{Unit VC}} \tag{6.1}$$

The cross-over level of sales. An extension to the EBITDA Break-Even or Cash-Flow Break-Even analysis is the Cross-Over Level of Sales analysis. Instead of looking at an individual project – the cross-over level of sales analysis compares two projects at once.

It describes the number of units that need to be sold, in order for two projects to attain the same Earnings Before Interest, Tax, Depreciation and Amortisation (EBITDA).

The cross-over level of sales is calculated using the following formula:

$$\text{CO}_{\text{EBITDA}} = \frac{\text{FC}_{\text{Alternative 1}} - \text{FC}_{\text{Alternative 2}}}{\text{UnitContribution}_{\text{Alternative 1}} - \text{UnitContribution}_{\text{Alternative 2}}} \tag{6.2}$$

EXAMPLE

A company can under-take one of two mutually exclusive projects. The projects are either for a manual or a automated production line. The manual production process has fixed costs of €4,000 per year and a variable cost of €20 per unit.

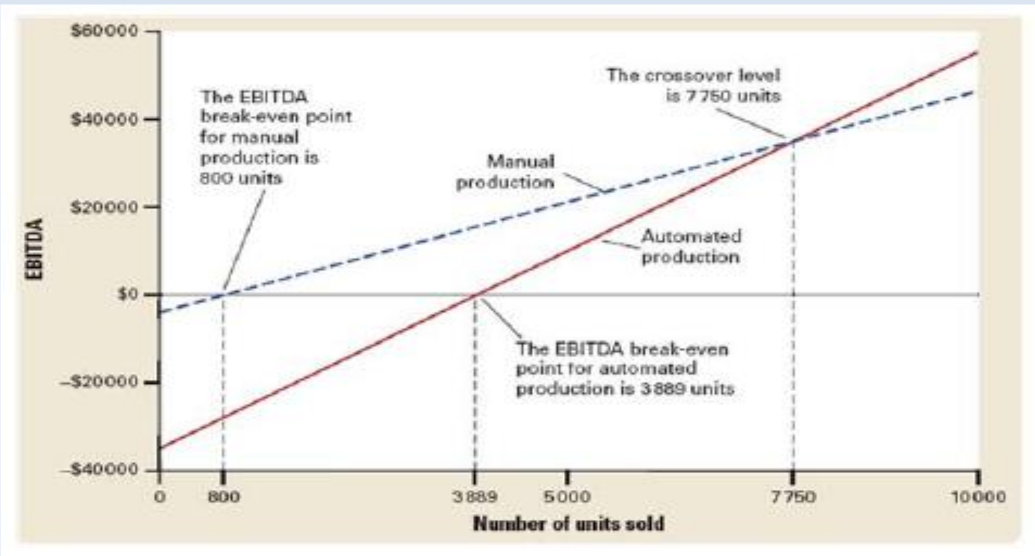
The automated production process has a fixed cost of €35,000 per year and a variable cost of €16 per unit. In either case, each produced unit is sold at €25.

To calculate the EBITDA break-even points for each process, we must apply the above formula:

EBITDA Break-Even (Automated Line) = €35,000 / (€25- €16) = 3,889 units

EBITDA Break-Even (Manual Line) = €4,000 / (€25- €20) = 800 units

The break-even points and point of crossover for the manual vs. automated processes



Accounting operating profit (EBIT) is used to determine the accounting break-even point. This measure is important as it reveals the number of units that must be sold, in order to avoid an accounting operating loss.

It is also quite simple to calculate the break-even point. The sum of the fixed-costs (FC) and the depreciation and amortisation costs of a project is divided by the contributing proportion of an item sold (Price of Unit – Variable Cost of Unit). This, in it's mathematical form is:

$$\text{EBIT Break} - \text{Even} = \frac{\text{FC}+\text{D\&A}}{\text{Price}-\text{Unit VC}} \tag{6.3}$$

Managers utilise the break-even analysis technique to determine how many units must be sold in order for the project to break-even; on an pre-tax cash-flow level and at an accounting operating profit level.

This is just one of the many ways that a manager can determine the risks associated with a certain project.

Conclusion. Each kind of financing has different characteristics that should be taken into consideration when planning a business plan. These characteristics take three primary forms (the amount of control you'll have to surrender, the amount of money you're likely to need and the cost of financing). It is helpful to do a SWOT Analysis, to analyse main risk types and their sources and to develop measures to reduce the loss of financial resources.

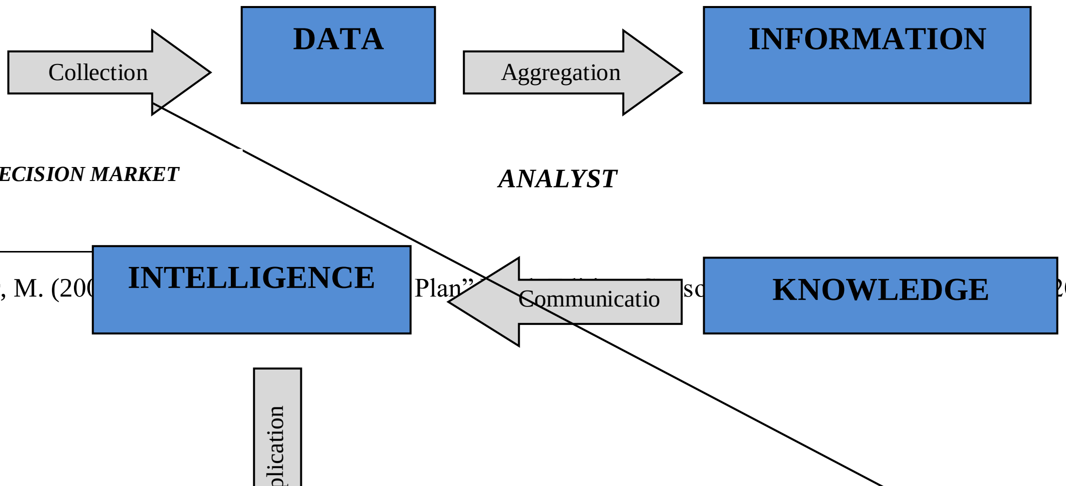
ANALYSIS AND EVALUATIONOF THE BUSINESS PROJECTS

3. Understand the concept and terminology of analysis of the business plan

Analysts must bear in mind that better results are the ultimate aim of their work, not simply "better decisions", and certainly not "better analyses". Analysis by itself creates no value - it must be used in a decision-making context in order to provide value.

Any business cannot be, developed without planning. It is essential to have a business project (because it makes all difference between organized & activity and chaos). It, opposes a randomized coursed of events to an estimated, pre-evaluated one, offering the premises of a success oriented business by reducing unexpected, unwanted occurrence[29]. Building a business plan can be rather demanding. It makes an exhaustive, detailed analysis of the activity of the company.

Analysis is part of a complex process that turns raw data into value for the organization. This "business intelligence value chain" is diagrammed in Figure 6.4. Note that the process consists of states (the boxes) and transformations (the arrows).



[29]McKeever, M. (200 ... Plan" ... sc ... 2007

Fig. 6.4. The Business Intelligence Value Chain

The business plan is the company's visiting card and will give you access to important business partners. Since, to outside observers, it reflects the image of the company attention must be given to points of style. Professional design and a careful choice of words are therefore important factors in the success of the document. Other points include such supposedly y trivial technical matters as the layout of the covering sheet and the quality of binding and paper. These are what give the reader his first impression.

Presentation of the business plan is carried out: for review of interested businesses and individuals with new businesses; to demonstrate best business as an entrepreneur and team leading managers of the company; for establishing active partnerships with potential lenders and investors[30].

There are several levels of oral presentations to investors:

LEVEL 1.THE ELEVATOR PITCH. As its name implies, this is a brief statement about your investment opportunity that you can get out in one breath. The sole purpose of the elevator pitch is to pique the interest of the investor. Success is an exchange of business cards and an offer for you to call and set up an appointment for an in-depth interview.

The elevator pitch should be memorized and rehearsed enough so that you can give it without it sounding rehearsed. You never know where you might meet a potential investor: at a cocktail reception, football game, even in an elevator.

LEVEL 2.THE FORMAL PRESENTATION AT A VENTURE FAIR or BUSINESS PLAN COMPETITION. You will probably be expected to have a PowerPoint presentation to support your verbal commentary.

The time allotted for pitches varies from 3 to 10 minutes, with 5-8 minutes being the middle of the bell curve. Obviously, you can cover a lot more material in 3 to 10 minutes than in an elevator pitch, but generally there will not be time to cover financial projections in detail or the resumes of the management team. For finances, cover sales and profit

[30] Brooks, J. K. and Stevens B. A. (1987), "How to Write a Successful Business Plan", The USA, 1987

projections and funding sought; for the management team, mention only significant successful and related experiences of key members[31].

The ideal presentation will necessarily be customized to emphasize the compelling nature of your investment opportunity. It is your responsibility to create a presentation that best characterizes the opportunity while including the following critical elements. Although your presentation will be tailored to your specific company, the first two slides and the final slide must contain the following information[32].

Slide 1 – Company name and logo, brief company description and presentation date.

Slide 2 – Presentation outline.

Final Slide – Contact information.

The presenter must determine the ultimate order of the presentation and what specific information should be included.

1. Mission Statement: This is the one liner of the company that describes what it's doing.

2. Market: How big is the market you are pursuing and how fast is it growing? How established is the market? What are the current trends? Who are the dominant players?

3. Problem: What is lacking or deficient in the market today? How big is the customer's problem you are solving?

4. Solution to the Problem: What is your company's unique solution to the problem? What is the value proposition to your customer?

5. Competitive Advantage: What is your sustainable competitive advantage? What are your barriers to entry? Do you own or control any patents, proprietary technology or other intellectual property? Caution: Do not dwell on your unique technology. Describe it and move-on.

6. Management Team: Who is the management team? What is their experience? What skills, background do they possess that is relevant? What team members are missing and what is the plan to fill these open positions?

7. Per Customer Economics: How much does it cost for you to acquire a customer? How much revenue do you generate per customer? What is your cost of goods per customer? What does it cost you to service each customer? What is churn? What is the profit per lifetime of a customer?

8. Marketing & Distribution: How do you market and position your product or service to your targeted customer? How do you get in front of a customer? What channels will you use and how powerful are they?

9. Milestones: What is your stage of development? What has been your progress to date? (make today's reality vs. the future you are pitching clear) What are your future milestones?

10. Capitalization & Fund Raising: What is the current capital structure of the company? How much cash has been invested and by whom? How much money are you

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[31]Mike Roer, David Sturgess. SENTREPRENEURSHIP Sources of Capital The Business Plan Investors. Business Planning for Start-Up Enterprises.Third edition.Editorial review board.Entrepreneurship Foundation; Fairfield, Connecticut.

[32]Ignition-Point-Presentation-Guidelines. [Electronic recourse]/http://ignitionpnt.com/wp-content/uploads/2012/05/Ignition-Point-Presentation-Guidelines.pdf

raising? What is your valuation expectation and what is it based on? How will the money be spent? How long will the new money last and what milestones will be met? How much additional financing do you anticipate and when?

11. Summary Financial Information: Present a summary of the company's financial projections for the next 5 years, preferably in one slide. Present the expected result – what you realistically expect to achieve. Avoid being either overly conservative or optimistic.

12. Conclusion: What are the 3-5 key points you want the listener to retain?[33]

LEVEL 3. THE PRIVATE INTERVIEW in the office of the investor. This is what you hope the elevator pitch or formal presentation leads to. If meeting with a VC firm, be prepared to present to an investment team of 3 to 5 people. Plan to give a formal 10-20 minute introductory presentation. Expect to be interrupted with questions.

Ask about logistics at the time you receive the invitation, or at least prior to the meeting, so you know what to expect:

Number of people in room?

Who are the decision makers? (Look up their bios on investor's web site).

Can you (should you) deliver a PowerPoint presentation?

How many people will be in the audience?

What is the total amount of time allotted for the interview?

Anything you should particularly be prepared to cover? (The answer might reveal their biggest concern).

Research the firm(Who have they invested in (who are their portfolio companies? Would a relationship with your firm strengthen any of their portfolio companies? Are there any potential synergies?)

Call some of the CEOs of the portfolio companies (What advice do they have? What is it like working with the investors? Do some due diligence yourself?).

What is the process for securing capital from the firm? If this is not on the web site, ask.

EXAMPLE

The Boston Consulting Group, gained prominence during the 1960s partly because its dog-star-cash cow- question mark matrix was both memorable, and applicable to one of the major management problems of the day-building portfolios of companies. Unique and persuasive analytic models are the stuff around which consulting practices, academic careers, and software packages can be built.

During the presentation of the business plan should cause a feeling of optimism and enthusiasm. Investors do not invest their money in a project that will have them for business interests.

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[33]Ignition-Point-Presentation-Guidelines. [Electronic recourse]/http://ignitionpnt.com/wp-content/uploads/2012/05/Ignition-Point-Presentation-Guidelines.pdf

Any potential investor or lender in the presentation of a business plan wants to verify its feasibility and effectiveness. If during the presentation of the entrepreneur will be able to bring to the minds of investors (lenders) the main purpose, and their potential outcomes, then he can usually rely on financial support. Thus the business interests of stakeholders (creditors and investors) do not match. Lender, as has been said, especially concerned about the company's ability to turn your debt. He is satisfied that were paid regularly and debt, and interest on the loan. Investors, shareholders are more thoroughly consider myself a business plan. They should be particularly attentive to issues related to reasonable compromise between the interests of the company and their own interests. If the activity of the company is successful, it will have a positive effect on the rate of return an investor who receives a share of the income in return on investment[34].

Investors willing to take on more risk subject to greater profits.If the profit is incommensurate with the risk that investing in business projects unprofitable. A very important aspect of the process of business plan presentation is to show the expected volume of sales dynamics over time. Thus the projections should be realistic, or you may call into question the validity of the project.

The next important step in the presentation are: explanation volumes required investment areas of use; justify return on invested capital, highlighting the opportunities and terms of repayment of the loans. If these data are carefully prepared and clearly communicated during the presentation of the business plan, they can become one of the important criteria for evaluating the attractiveness business.

During the presentation of the business plan the entrepreneur should definitely prove his ability to foresee all possible types and sources of risk, which can be found in the new business. It is very important to distinguish the most likely risks in order to upset the "bridge" to answer the question of how to reduce risks and losses. Note that frank, balanced and concise discussion of this issue during the presentation of the business plan above will characterize you as an entrepreneur with the best hand, and testify that you discover the proper care of the efficient use and protection of capital that are going to receive from your partner.

EXAMPLE

The Presentation Plan. If you take a working plan, with its low stress on cosmetics and impression, and twist the knob to boost the amount of attention paid to its looks, you'll wind up with a presentation plan. This plan is suitable for showing to bankers, investors and others outside the company.

After presentation, the entrepreneur must be ready to answer questions as the most important task is the presentation of a business plan is to establish a dialogue with potential investors. The process of presentation of the business plan will be effective if

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[34]Timothy W. Powell TW Powell Company Analysis in Business Planning and Strategy Formulation. Prepared for the Art and Science of Business Intelligence Analysis, JAI Press, Gilad and Herring, eds., copyright JAI Press Weston,C. (1992), “Financial Theory" and Corporate Policy” Third Edition, Addison Wesley Publishing Company, Inc., The USA,1992

they take into account factors that "allure" of creditors and investors to finance and co-operation.

Experience has shown that the greatest attention is drawn to the following factors: personal business as an entrepreneur, his abilities as a leader; pronounced interest entrepreneur your business, wish anything to achieve this goal; professional competence and knowledge of entrepreneur in practical organizational and economic matters of business; composition of the top managers of the company, their qualifications, experience, previous achievements and successes, balance of knowledge and skills of the management team as a whole.

Conclusion. Presentation of the business plan must demonstrate that the whole team is interested in positive results of the business idea, the staff works with the leader, the leader in one line, and individual and group interests, experience and tradition, qualification and socio-psychological characteristics of leaders and managers of firms included in the process of developing a business plan. In this case, lenders and investors need to understand that the proposed business plan organizational management structure is the most appropriate for the business and the management team has both administrative skills and skills in financial management, marketing, production.

Discussion Questions

1. What are the key elements of the financial plan?
2. Describe risks, explain the method of calculation of breakeven point of a business project.
3. Why is analysis and evaluation important to start-ups?
4. Why is it important for start-up to have a presentation of the business plan?
5. What is the total amount of time allotted for the interview?