

## **SOME ASPECTS ABOUT PLANNING AND RISK EVALUATION**

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**Abstract:** paper presents some aspects regarding planning in project management, including risk evaluation, the profitableness analyze using the feasibility study.

### **1. Introduction**

*A victorious fighter first wins and then goes to war.  
A defeated warrior first goes to war and then seeks to win. (Sun Tzu)*

The success of a project is built on a good planning, opportune control and skilled craftsmanship.

### **2. Planning process**

Planning process is repeatable and depends on some factors, as seen in figure 1. For the very beginning we take into account some hypothesis  $I_{1...n}$  e.g.:  $I_1$  – budget,  $I_2$  – time,  $I_3$  – staff,  $I_4$  – equipment, technology,  $I_5$  – unforeseen,  $I_6$  – company advantages,  $I_7$  – company weaknesses,  $I_8$  – opportunities,  $I_9$  – threats. After it begins the matrix analyze of components, as follow: costs, team, resources, risk, feasibility, program and objectives. Between those there is a strong relationship, all of them are interdependent.

Using this analyze, we are in the position to take a decision: to do or not to do. If the solution is acceptable and realizable (resources, budget, time, participants' expectations), the decision is to do. If not, is necessary to repeat the process by analyzing the matrix elements, maybe risk, costs, team possibilities, time of realization, not at least objectives. In the case of an acceptable decision, the next stage is to accept the momentary solution. It is very dangerous to repeat the process if there are 90% of matrix elements convenient. Why? Because it is a possibility to repeat infinitely the analyze and to loose the favorable moment to do, to realize the product. The 10% remaining are to increase the value of matrix elements in the new process of product.

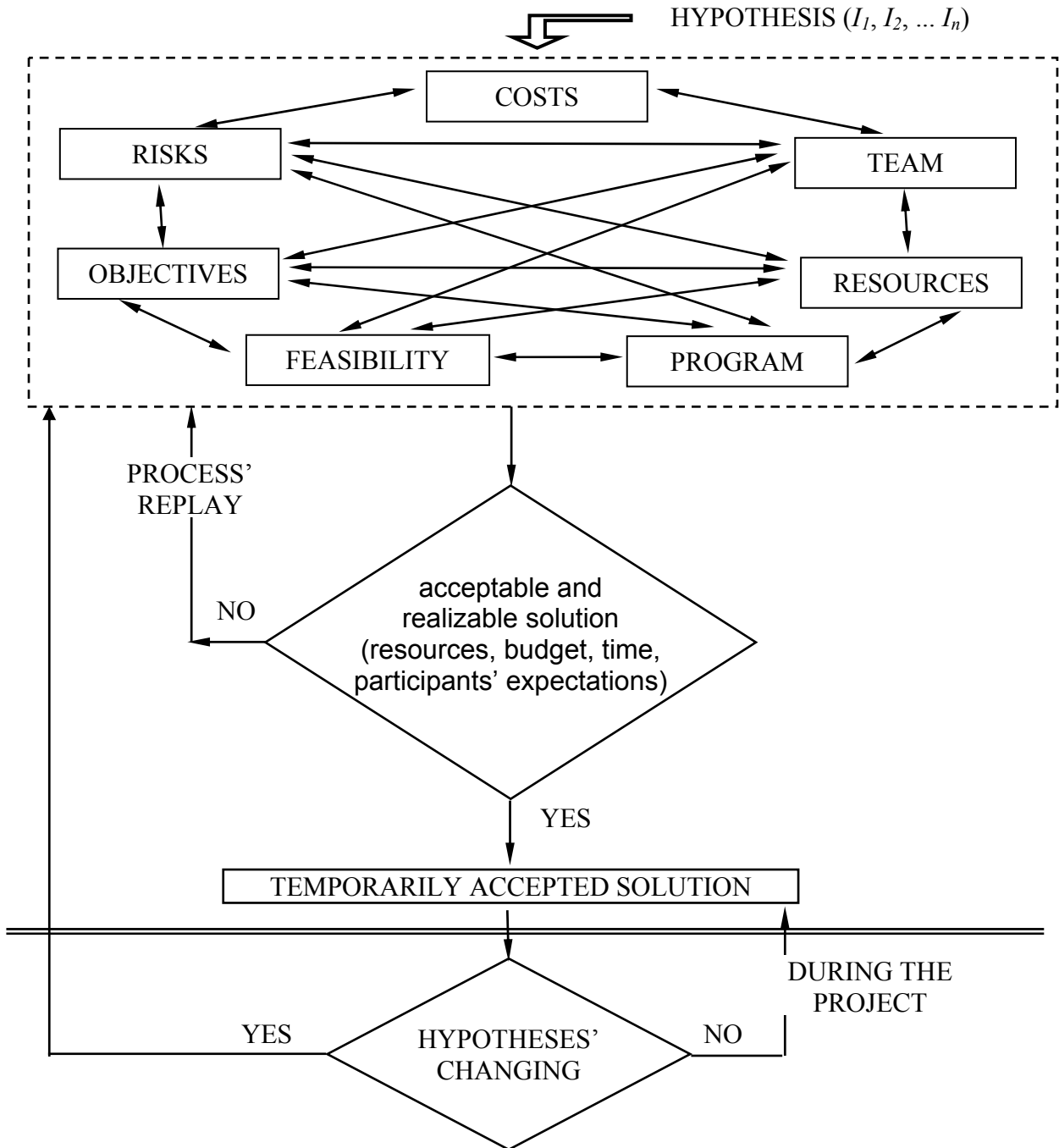
It is possible to change hypotheses, maybe during the product realization, or in recovery analyze, feedback, new experiences, a.s.o.

Planning is an elastic product. Remarks like "IT'S NOT IN THE MANUAL" should not be contained in a PL's vocabulary (PL=Project Leader).

### **3. Why is planning needed?**

Some points of view are:

- Planning reduces risks: prepare, know in advance.
- Planning increases work efficiency: how is it done?
- Planning is a stationary base: time and quality deviations can be measured.
- Planning helps for better time management: diverting attention towards truly important things.
- Planning helps anticipate future situations: aiming towards a better course of action.
- Planning minimizes confusion and uncertainties points out who, where and when it should be done.



*Figure 1. The scheme of decisional planning process*

**4. Structure and stages of a project**

- *What makes God laughing?*
- *People who plan! (Art Mortel)*

The main stages of a project are:

► **Conception (initiation)**

<i><b>Incoming</b></i>	<i><b>Methods and concepts used</b></i>	<i><b>Outgoing</b></i>
<ul style="list-style-type: none"> <li>• External factors (competition, market, customer demand);</li> <li>• Internal factors (marketing, personal)</li> </ul>	<ul style="list-style-type: none"> <li>• Execution (point of view of consultants, factors of decision).</li> </ul>	<ul style="list-style-type: none"> <li>• Decision of “<i>what can be done?</i>”</li> </ul>

► **Feasibility**

<i><b>Incoming</b></i>	<i><b>Methods and concepts used</b></i>	<i><b>Outgoing</b></i>
<ul style="list-style-type: none"> <li>• Decision from the 1st point</li> </ul>	<ul style="list-style-type: none"> <li>• Gathering of primary data;</li> <li>• Primary data processing;</li> <li>• Establishing cause and effect solutions;</li> <li>• Answering ways;</li> <li>• Evaluation of alternatives.</li> </ul>	<ul style="list-style-type: none"> <li>• Feasibility study;</li> <li>• Proposal for starting of the project.</li> </ul>

► **Preliminary planning**

<i><b>Incoming</b></i>	<i><b>Methods and concepts used</b></i>	<i><b>Outgoing</b></i>
<ul style="list-style-type: none"> <li>• Feasibility study ;</li> <li>• Technical data;</li> <li>• Client needs;</li> <li>• Resources;</li> <li>• Available time;</li> <li>• Other constraints.</li> </ul>	<ul style="list-style-type: none"> <li>• Expert opinion.</li> </ul>	<ul style="list-style-type: none"> <li>• General project plan.</li> </ul>

► **Detailed planning**

<i><b>Incoming</b></i>	<i><b>Methods and concepts used</b></i>	<i><b>Outgoing</b></i>
<ul style="list-style-type: none"> <li>• Managerial decision.</li> <li>• General project plan.</li> <li>• All previous input and the result of data processing.</li> </ul>	<ul style="list-style-type: none"> <li>• Expert opinion;</li> <li>• Risk estimate;</li> <li>• Decomposition;</li> <li>• Subjective appreciation;</li> <li>• Experience of previous projects;</li> <li>• Simulation.</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed plan.</li> </ul>

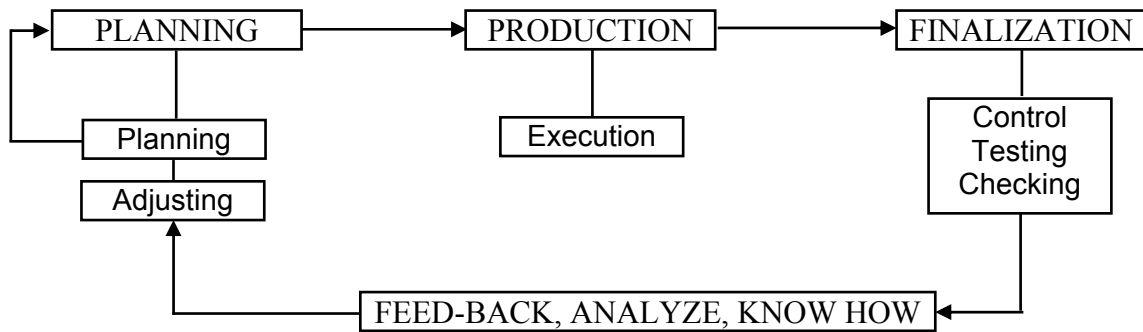
► **Execution**

<i><b>Incoming</b></i>	<i><b>Methods and concepts used</b></i>	<i><b>Outgoing</b></i>
<ul style="list-style-type: none"> <li>• Plan’s acceptance decision;</li> <li>• Detailed plan.</li> </ul>	<ul style="list-style-type: none"> <li>• Specific, project related.</li> </ul>	<ul style="list-style-type: none"> <li>• Product.</li> </ul>

► **Finalization**

<i><b>Incoming</b></i>	<i><b>Methods and concepts used</b></i>	<i><b>Outgoing</b></i>
<ul style="list-style-type: none"> <li>• Product.</li> </ul>	<ul style="list-style-type: none"> <li>• Inspection;</li> <li>• Checking, testing;</li> <li>• Control;</li> <li>• Evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>• Formal acceptance of product;</li> <li>• Finalizing decision;</li> <li>• Learning.</li> </ul>

More simple is the scheme presented in figure 2.



**Figure 2. The way from planning to finalization**

There are situations when planning contents two stages: preplanning and planning (e.g. in buildings field: winter, summer). The preplanning stage represents what we intend to realize doing this project (home reckoning). In fact there is RISK. and must be accepted.

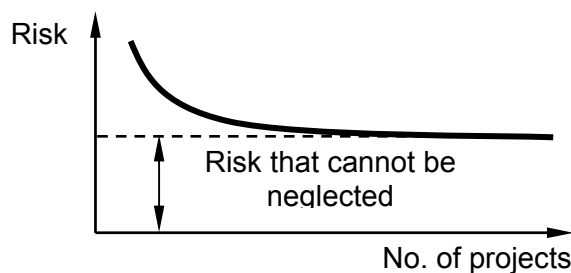
**5. Profitableness - risk**

Each project has to take into account the two aspects: profitableness and risk. The instrument used in this way is the matrix presented in table 1

*The first risking factor is to ignore it. (Alvin Toffler)*

Table 1

<b>Matrix P – R</b>	<b>PROFITABLENESS RISK</b>	<b>High</b>	<b>Low</b>
	<b>High</b>	Aggressive organizations	Unacceptable situation
	<b>Low</b>	Ideal situation	Prudent organizations



**Figure 3. Risk depending of number of projects**

To minimize the risk it has to have many as possible of simultaneous projects (≈ 20). For evaluation as instrument can be used SWOT analyze and his extension- PEST analyze, which includes answers at questions such as:

- How are **environmental factors influencing** the company?
- Which of those are **important**?
- How is the organization **adapting** to PEST?

What is **PEST** (**P**olitical- **E**conomical- **S**ocial-**T**echnological)?

**POLITICAL - LEGAL:** environmental legislation, commercial and work policies, continuous governmental change.

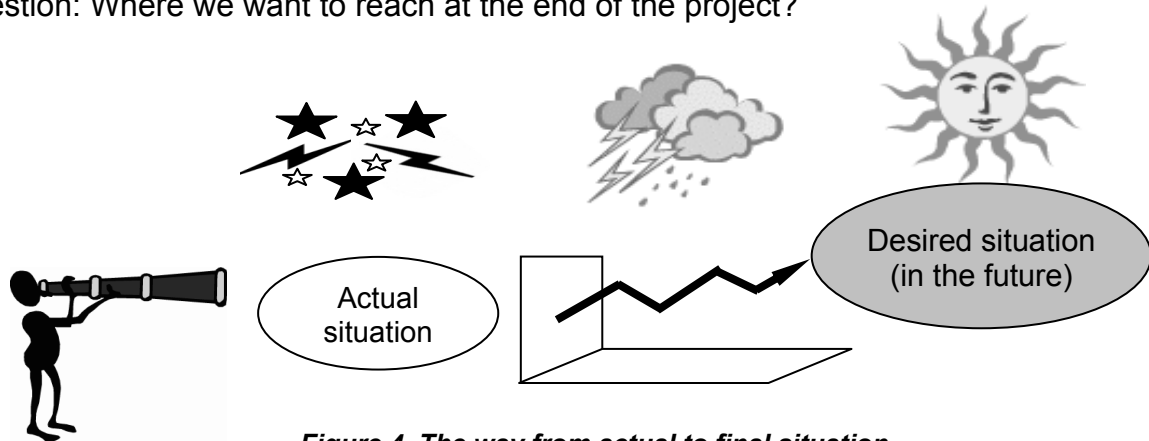
**ECONOMICAL:** interest rates, inflation, financial resources, unemployment rate, income, business place, energetic costs.

**SOCIAL:** population increase, lifestyle, culture rating, income, special skills, social tendencies, consumption index.

**TECHNOLOGICAL:** technologic exchange rate, technologic investment rate, research and development, age of existing technology.

The *PEST* analysis helps identify the principal factors that lead to long term change: external influences, political, economical, energetic crisis.

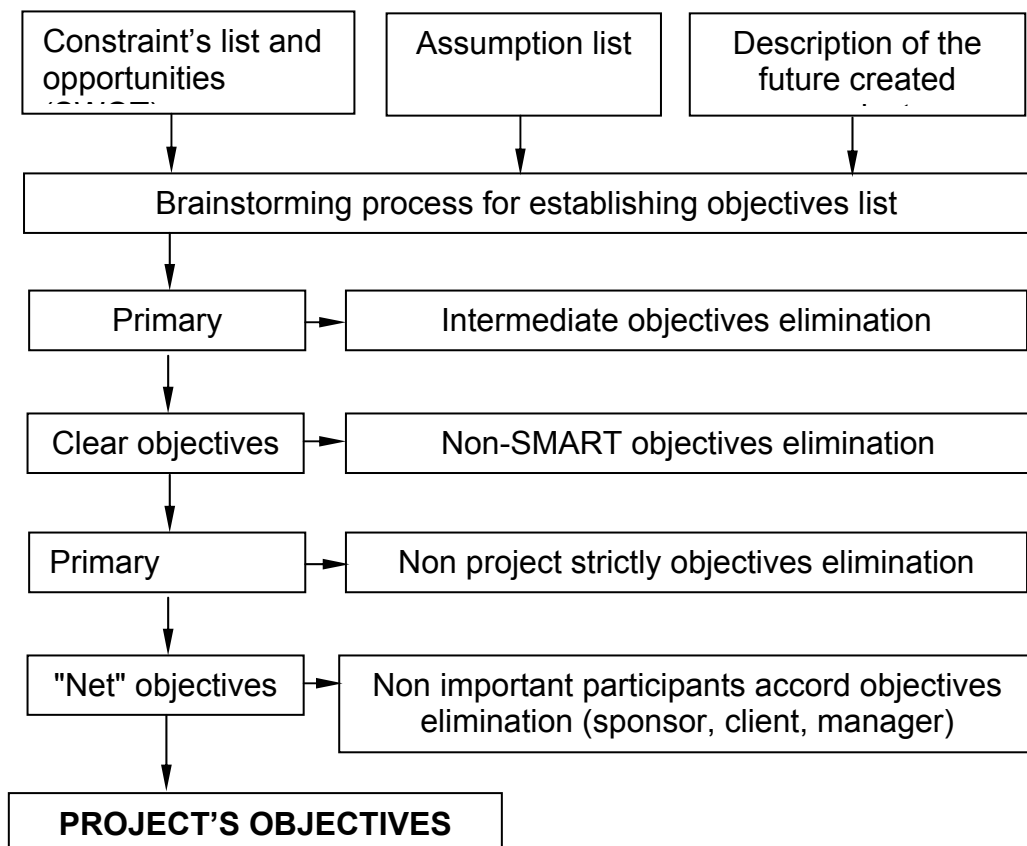
Objective's establishment includes an assembly of activities that have to answer to the question: Where we want to reach at the end of the project?



**Figure 4. The way from actual to final situation**

The instrument used (the telescope) includes (see figure 4): company policies, company culture and aspiration, personal ideals, behavioral rules, means of communication, training and delegation used techniques.

**6. Steps towards objectives' establishment (see figure 5)**



**Figure 5. Project's objectives**

## 7. Major risk sources

### ► Project planning

- Conception is not feasible/possible;
- Absence of a detailed plan;
- WS does not contain a budget plan;
- It is not known who does what in case of problems.

### ► Team

- Key staff is not available;
- Reduced professional skills;
- Team is not sufficiently motivated, unsatisfactory work organization;
- Defective communication, low information flow.

### ► Structure

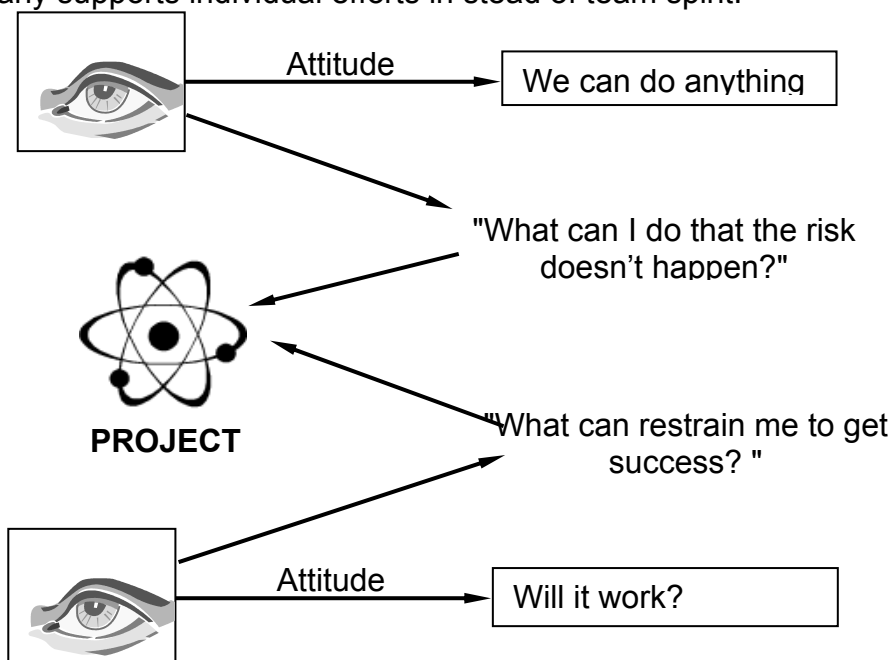
- Finite objectives in sight;
- Scarce resources due to multiple projects;
- Constraints are not applied;
- Undefined work procedures.

### ► Client

- Unclear onset to the project;
- Uninformed client;
- Client changes position towards project;
- Unclear specifications, incomplete;
- Client needs have not been assessed;
- PL does not communicate with clients;
- Performance figures are unclear.

### ► Managerial support

- Top managers do not sustain the project;
- Budget, time and objective have been set but an PL has not been established;
- Undefined objectives;
- PL does not present credibility towards top managers;
- Company supports individual efforts in stead of team spirit.



**Figure 6. Some attitude reflections**

During the planning project leader, PL, have to look at risks through two points of view:

- a) A positive attitude like “WE CAN DO ANYTHING”
- b) A realistic and a little bit pessimistic view like “WILL IT WORK?” – risking attitude.

## 7. Conclusions

Planning process is repeatable and depends on some factors. For the very beginning we take into account some hypothesis, it continue with a matrix analyze, in which is presented the risk factor, depending on a lot of external or internal influences. Planning helps anticipate future situations: aiming towards a better course of action. Planning minimizes confusion and uncertainties points out who, where and when it should be done.

Each project has to take into account the two aspects: profitableness and risk.

Objective’s establishment includes an assembly of activities that have to answer to the question: Where we want to reach at the end of the project?

The major risk factors can be particularized using two points of view: a positive or a realistic attitude.

„ The problems are opportunities in working clothes” (*Anonymous*)

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