

# THE FUTURE AND DYNAMIC STRATEGIES

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**Abstract:** Strategic analysis studies general and competitive environment, who gives a SWOT matrix which allows managers make strategic decisions based on the relationship between Treats, Opportunities and Strong, Weaknesses. But these decisions making process could promote investments with long term return, without considering future of this long term in treats and opportunities. This work try to associate the environment classic analysis with prospective analysis, were different assumptions of relationship between variables set up several scenarios who promote a set of new dynamic strategies.

## INTRODUCTION

### 1.1.- Decisions making.-

Making decisions never affect the past but always, there exists a certain level of uncertainty in making decisions. This greater or lesser uncertainty differentiates the types of decisions.

The decision-making system can be expressed:

*(Prieto Pérez, 1973)(Lindley, 1977)*

|                           |             |                |
|---------------------------|-------------|----------------|
| Events (Futur3),          | $S = s / s$ | } $X = f(s,d)$ |
| Ocurrence. Probabilities, | $p(s)$      |                |
| Possible decisions,       | $D = d / d$ |                |
| Consequences,             | $X = x / x$ |                |

**Figure 1 Variables for making decisions**

The lower the knowledge of the status of nature and its occurrence, the resolution of the problem will be more complex. Thus, decisions can be classified (*Own figure based on (Fernández Güell, 2004)*)

| LEVEL OF INFORMATION |         |                | NOMENCLATURE                 |           |
|----------------------|---------|----------------|------------------------------|-----------|
| Events               | Known   | With certainty | PREDICTION                   |           |
|                      |         | In probability | Known                        | PREVISION |
|                      |         |                | Unknown                      | FORECASTS |
|                      | Unknown |                | (Anticipated)<br>PROSPECTIVE |           |

**Figure 2 Information available for decisions making**

When events are known with certainty, it is called Prevision,

When probability or frequency events are known, it is considered a Forecast

When possible events are known but not its probability, they are called Forecasts,

When events are not known and obviously probabilities are not able to be known, they are called prospective.

In this work the elaboration of strategies can affirm that we know very little about the future because of this we will remain in the area of prospective

### **1.2.- Models for decision-making process.-**

Two models are studied for making decisions.

**Normative model.-** This model explains how one must make decisions. Is used in quantitative environments or mathematics and assumes that all alternatives are known and necessary information is available, that only will depend on the quantity and the quality of information available, but does not put in doubt the efficiency of the model. Always try to maximize the utility of the decision maker, and has infinite sensibility of the utility of the changes.

**Descriptive model.-** The decision maker assumes that he does not know all the alternatives, but even knowing all the necessary information, he does not have the capability to use and model it. The decision maker is searching for a satisfactory decision without worrying whether the decision is more or less optimum.

If it is possible you must use normative models to make decisions, thus they give more rationality and deepen more in its resolution, but are very rigid in information requirements and the method treatment

In this problem of strategy it is possible to use normative /quantitative models, but at the moment of final decision making, always add: a level of subjectivity, experience, or imagination to compensate the lack of information. In strategy themes always finish utilizing descriptive models.

### **1.3.- Planning Models.-**

Sometimes, problem resolutions do not depend on only one decision, but is composed of a succession of decisions linked in space and in time. This is called pacification. There exists multiple manuals of pacifications, but in this work, we pay attention only to orientation with respect to the utilization of the past and the future. (Ackoff, 1983)

| ORIENTATION | PAST | PRESENT | FUTURE |
|-------------|------|---------|--------|
| Reactive    | +    | --      | --     |
| Inactive    | --   | +       | --     |
| Proactive   | --   | --      | +      |
| Interactive | +/-- | +/--    | +/--   |

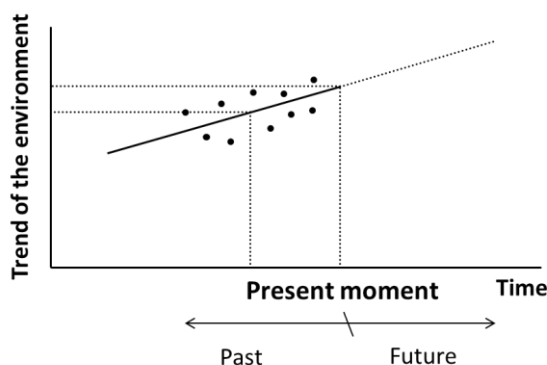
**Figure 3 Planning Models**

All planning techniques are useful for determined cases in strategy problems. We are accustomed to utilize interactive planning. We cannot forget that there are consequences from the past and without understanding the past we don't understand the present. On the other hand, in the future, predicted situations may not happen and can be completely different from past or present situations.

### **1.4.- Technics to study the future**

#### **1.4.1.- The Prevision Method**

The prevision method includes the probability of things happening. In this kind of method, we choose the trends analysis, that can be obtained using different statistic methods, in de following diagram one obtains a trend obtained by minimum squares method.



**Figure 4 The future continuation of the past**

This method equals a mobile average and other similar methods. The base shows that the future will be the continuation of the past. Following a normative model, the trend adjusts to a possible reality.

Following the correct method, it is useful for short time future studies, because it supposes to assume that, in short period of time, trends remain stable.

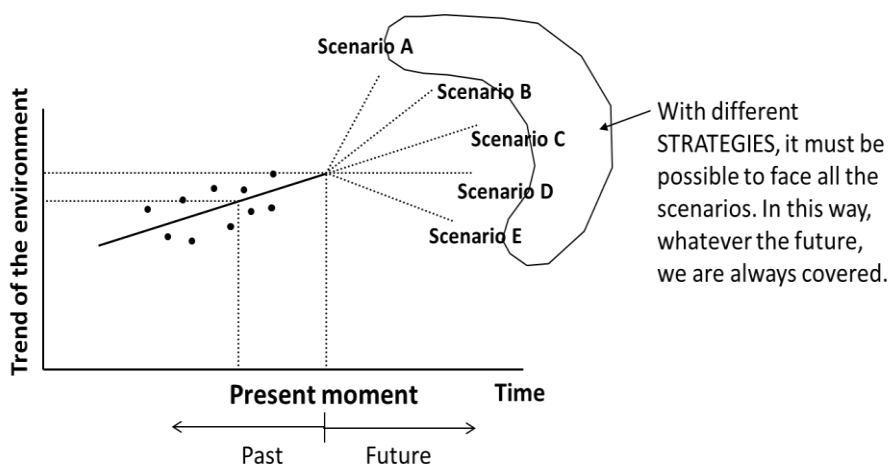
These technics are utilized for example, in marketing studies for products introduced during a short life cycle. So, the introduction will be almost immediately after the study, at the same time, the environment is changing, and the product is generating the predicted effect.

This method is not useful in strategy when it works always in a long term. This concept can be understood, more or less, in function of sector dynamics, but always exists the possibility of wide changes within the environment.

#### **1.4.2.- The Prospective Method.-**

In long term plans, like strategic direction, the scenario method results more efficient, where it recognizes the unknown future.

The diagram shows that since the actual moment, is it possible to evaluate trends for several methods (mobile average, minimum squares, etc.), that help to know the past trend, but they cannot have influence in how the future will be. (Godet, 1993)



**Figure 5 Different possible futures. Scenarios**

Prospective method supposes that the future is unknown. To find a maximum approximation, one takes a series available  $V = v$  with the following characteristics.

1. That would be influential in the environment, that a change in the variable provokes important changes in the future.
2. That it was independent. Its evolution does not depend on so much actuation or variation or other variables.
3. That was not static, perspectives that exist evolves.

From here it makes proposes of evolutions in said variable. Evolutions can mean better or worse environments for the sector.

Scenario.- Variation of the variables  $V = v/v$  can produce changes in other variables with more dependence or factor from the environment. Scenario has more detailed description than environment will have. If variables evolve following the proposed hypothesis, then the dependents will also be modified by action of the independents.

It is accustomed to realize various scenarios that are represented from better future to most aggressive. We know that the reality surely will not adjust to none of the proposed scenarios but will be between two of them and so relatively close to some of those described.

Then the resolution of the problem consists in determining one or more specific strategies for each scenario. So, thinking of the highest possibility of the reality is near of some of the scenarios, there always will be a strategy more or less adequate for this reality.

### **1.5.- Classic model of strategy analysis.-** *(Porter, 2004)(Porter, 1989)*

The classic model consists in the analysis of: the general environment, specific environment, and internal analysis with SWOT matrix. The SWOT shows a list of: threats, opportunities, strengths, and weaknesses.

One of criticisms to the M. Porter model is his excessive static character. Precisely, one of our objectives, in this work, consist in adding a dynamic character of the future model. Further on, we show, with detail, some opportunities of said model.

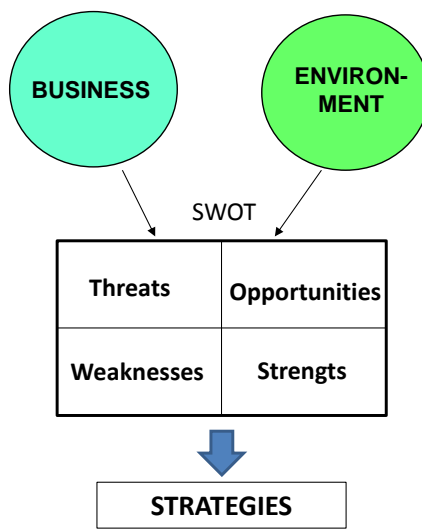


Figure 6 Classical strategic analysis

**1.6.- Proposed model.-**

The proposal consists in relating the classic model environment analysis from M, Porter or “SWOT analysis “with scenario method to place SWOT analysis in different possible futures.

This relationship enables robust strategies that permit us to face whatever the real future is going to be. Also, the threats and opportunities add the possibility of occurrence.

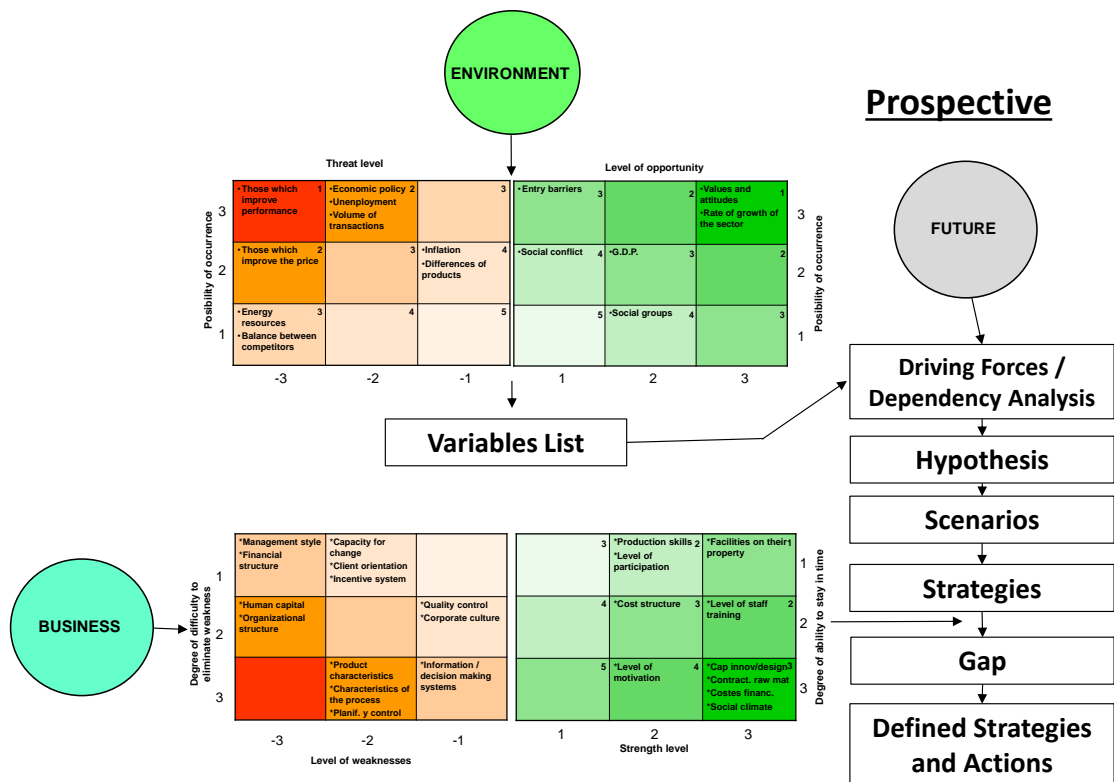


Figure 7 Proposal of strategic analysis

In the proposed procedure it is given:

- The environment from which you get a list of threats and opportunities with their chances of occurrence.

The most serious threats (or opportunities) with the greatest possibility of occurrence are chosen.

- The variables determined whether that influence of the threat is released or influenced by it.
- This group of variables is submitted to Driving forces / dependence analysis.
- With these variables, their Driving forces and their possibilities of occurrence, the impact / uncertainty matrix is prepared.
- Hypothesis of movement of the Driving forces variables is generated.
- We study the variations that the hypotheses will cause in the dependent variables. The explanation for this situation is called the scenario.
- Taking into account the scenarios and the reality of the organization determined by the internal analysis with the matrix of strengths and weaknesses, the strategies are determined.
- It determines how the organization should be to implement the strategies.
- It determines the gap between the organization needed for the strategies and the actual organization that is available.

Decide what actions to take:

- Ensure that the organization becomes the one necessary to implement the strategies.
- Apply the strategies to the extent the organization allows and as it changes.

**1.7.-Process of strategy formulation.-** (*Guerras Martín, L.A.; Navas López, 2015*)(*Dess, G.G.; Lunmpkin, 2003*)

Emphasis has been placed on the three elements of the previous table (Future, Environment, Deal), which form the strategic analysis, but the strategy process is broader. Although this work focuses on the analysis section. The following table shows the process:



**Figure 8 Strategy Process**

**Analysis.-** It is about knowing the environment positioned in the future and studying the current business, and to elaborate the SWOT matrix (Weaknesses, threats, strengths and opportunities).

**Define the strategy.-** Existing methods serve as an aid and improvement of decision making, but it requires the experience, intuition and visionary character of the decision maker to assume minimum guarantees of success.

**Strategic plan.-** The defined strategies must become specific actions embedded in a plan so that the tasks are distributed among the different organs and during a time period.

**Communication, agreement. -** Neither the definition of the strategy nor the strategic plan are tasks of a single person, but initially of a team, but then the whole organization must participate in its implementation and subsequent management. For this reason, it is important that all participants fully agree - which is very difficult – or at least, take a neutral position in front of the strategic plan. For this, a communication effort must be made, and often negotiation and concession, to reach a consensus of minimum agreement. "It is worth more a mediocre plan that is accepted by all the participants, than an excellent plan endured only by its creator".

**Control.-** "Every plan that does not have a control system is “wet paper” (not useful) ". A plan that does not know if it is running correctly and does not know if it reaches its expected objectives, can lead to disaster. The implementation and monitoring of a control system is essential in all planning.

## II.- ORIGIN AND ANALYSIS OF THE SITUATION

### 2.1.- Subject or organization affected.-

It is a matter of explaining, in some detail, the type of organization that carries out the process of the strategy. Then, the analyst has a initial idea and a positioning in front of the organization that intends to carry out the process of the strategy.

### 2.2.- Strategic analysis

**2.2.1.- The environment.-***(Guerras Martín, L.A.; Navas López, 2015)(Bueno Campos, 1996)(Dess, G.; Lumpkin, G.T.; Eisner, 2010)*

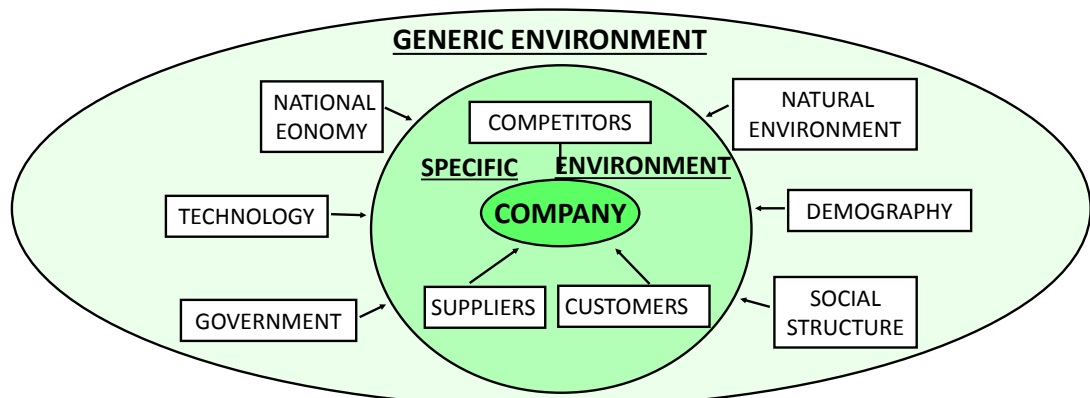


Figure 9 Environment study

The environment is everything outside that affects us. Two types of environment are studied, the general (or generic) and the competitive (or specific). The difference between them is that the relationship between the elements or organisms of the general environment and the subject of the study is, in one sense, the impacts are from the environment to the sector or organization, which can be protected from attacks but, can not modify that environment. However in the competitive environment are one-to-one, or in both directions, each action of the environment can be countered by modifying the environment.

#### **2.2.1.1.-Study of the general environment.-**

It is done through a group of variables called dimensions, which can be subdivided into other simple variables, this process can be repeated until finding variables that allow their observation and evaluation. Dimensions of the general environment

**Legal political dimension**

Political situation . . . . .  
Economic policy . . . . .  
Economic and social legislation . . . . .  
Fiscal policy. . . . .

**Economic dimension**

G.D.P. . . . .  
Inflation . . . . .  
Unemployment. . . . .  
Balance of payments . . . . .  
Productivity. . . . .  
Capital market. . . . .  
Energy resources . . . . .  
Industrial policy . . . . .

**Socio-cultural dimension**

Values and attitudes . . . . .  
Social groups. . . . .  
Social conflict. . . . .  
Job market. . . . .  
Unions . . . . .  
Consumer defense. . . . .

**Technological dimension**

R & D policy. . . . .  
Scientific and technological knowledge . . . . .  
Scientific and technical infrastructure. . . . .  
Current technologies maturity. . . . .  
Availability of new technologies. . . . .

**Figure 10 Variables of generic environment**

| CONCEPTS   |   | Threat | Opportunity |
|--|---|--------|-------------|
| New situations that have not always existed.   | Important enough to guide the strategy.   | -3     | 3           |
|  | Weak signals from the environment. Situations that will evolve over the long term or are not clear when they will evolve. Neither know how they will be affected, but they deserve to maintain a permanent watch. | -2     | 2           |
| Critical factors of success. They are those factors of the environment that are traditional (they are not new) but that require a lot of attention, because of those factors the routine success of the business depends. A lack of attention may represent a higher cost or a lower sale in the short term. |   | -1     | 1           |
| Neutral factors are neither threats nor opportunities in the present or in the future, nor are they critical factors for success.  |   | 0      |             |

**Figure 11 Variables valuation**

The assessment, called valuation, will be done subjectively. Although different scales may be used, a Likert scale variation between -3 and 3 will be taken, where -3 is the maximum threat, 0 is indifference and 3 is the maximum opportunity.

In addition, the level of probability of occurrence should be evaluated on a simpler scale of 1 to 3.

The difficulty of this valuation does not escape that which experts required in each of the dimensions of the analysis. It is often customary to perform a Delphi of experts who should evaluate the variables. The following table shows a proposal of criteria for assigning each of the possible values.

The following is an example of how an analysis of the general environment might be.

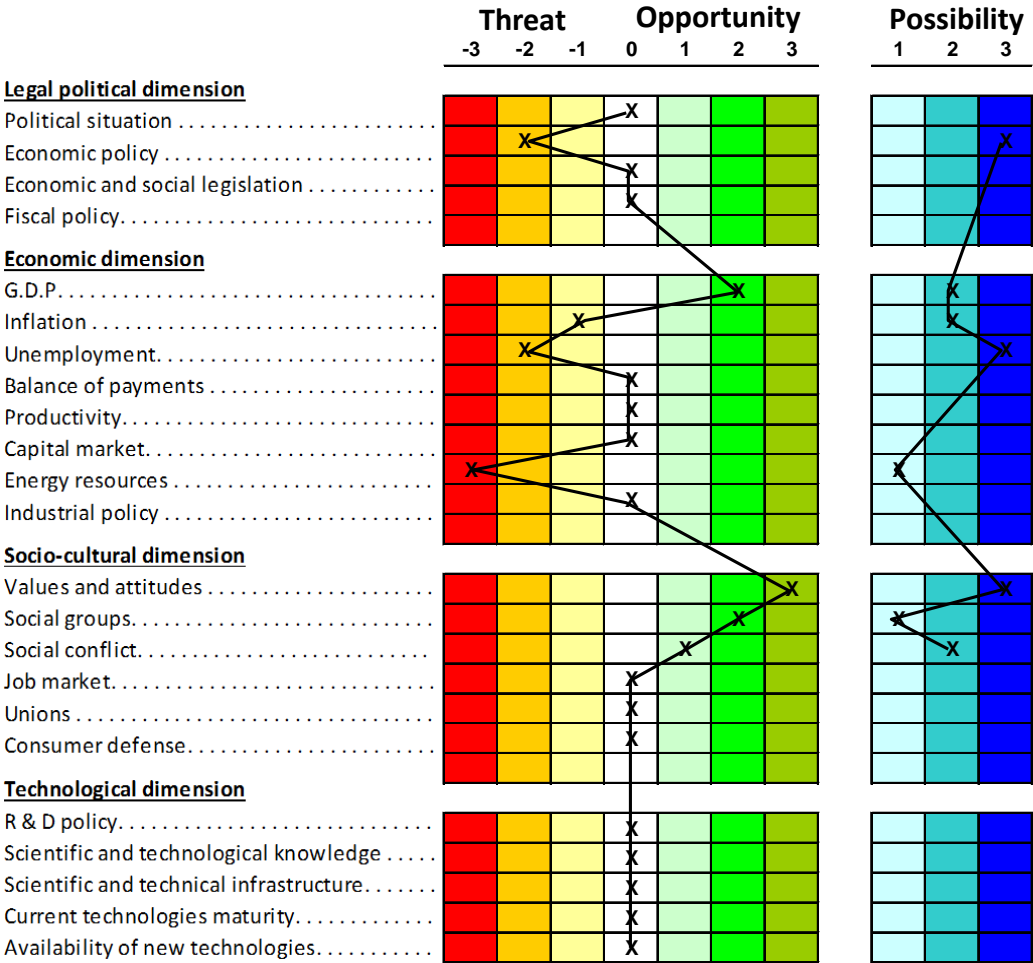


Figure 12 Strategic profile of generic environment

**2.2.1.2.- Analysis of the specific environment.-**

The analysis of the specific environment, also known as the analysis of market forces (or forces of M. Porter), is also performed through the study of a series of variables that we do not show for reasons of space. The valuation criteria and its scale would be those already studied in the generic environment.

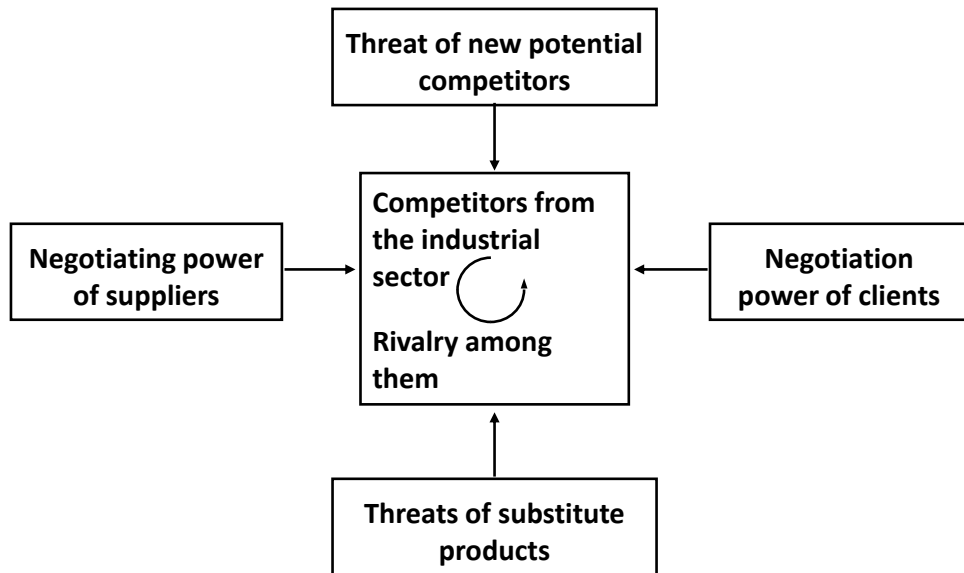


Figure 13 Analysis of specific environment

The following table shows an example of how the analysis of the competitive environment might remain. Because of the large number of variables that can be studied, only those that are in the example are considered to have some influence.

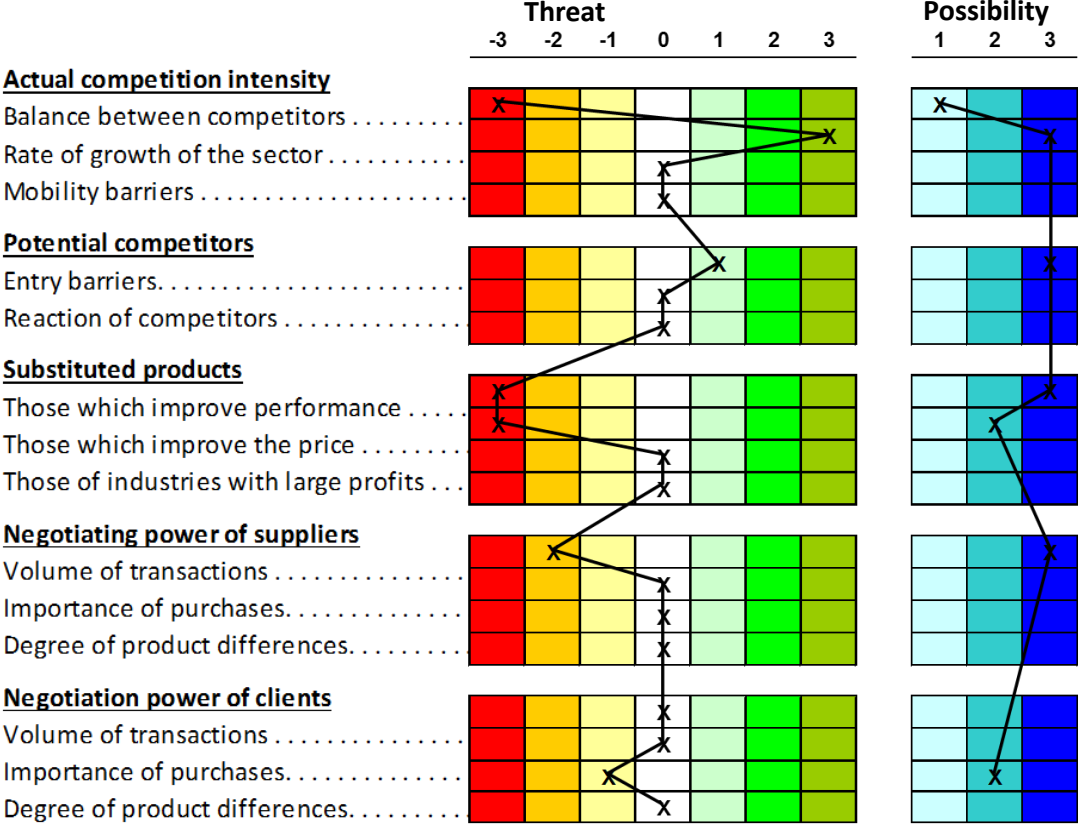


Figure 14 Analysis of the competitive environment

The result of the two analysis can be presented as a map of threats, opportunities, and possibility of occurrence.

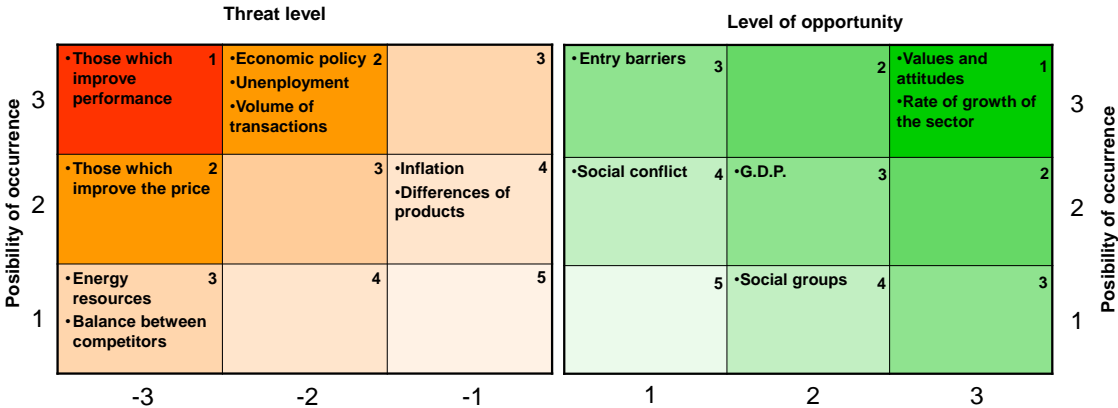


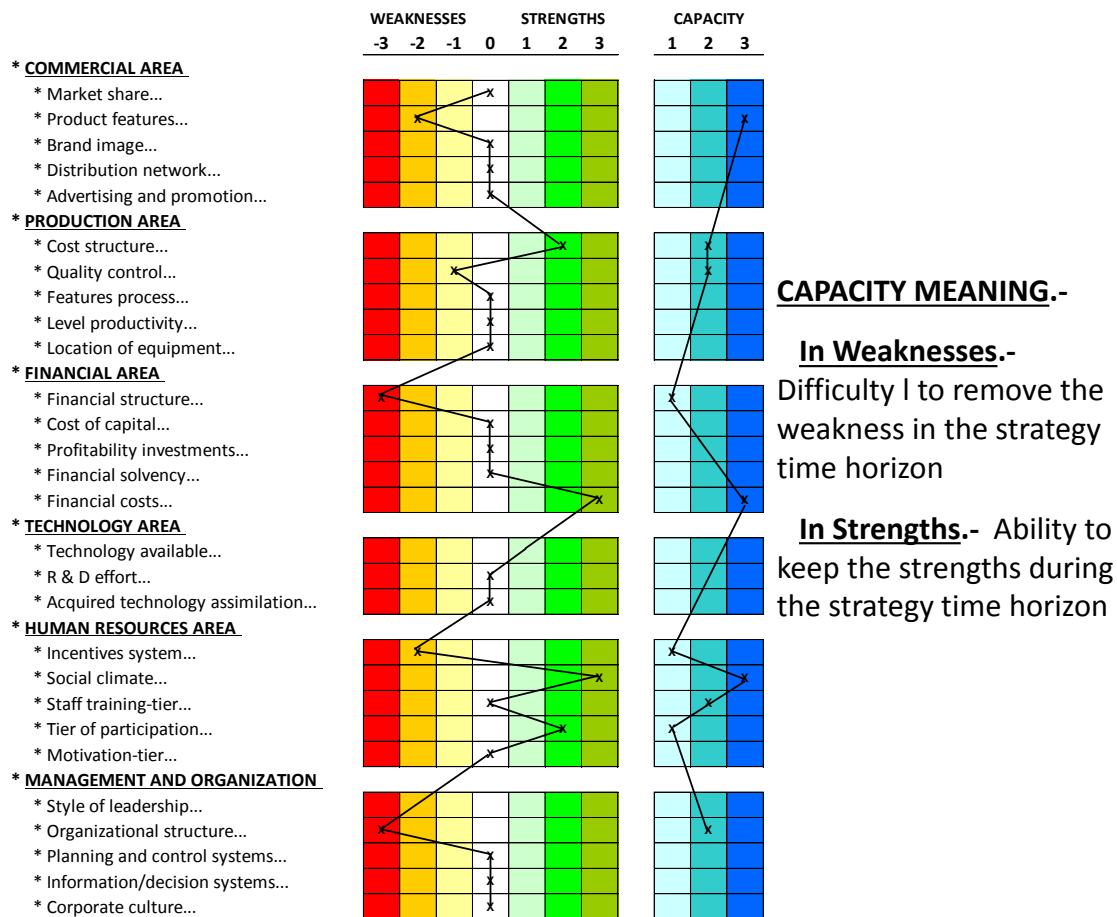
Figure 15 Threats and opportunities

**2.2.1.3.- Internal analysis.-** (Grant, 1996) (Hamel, G.; Prahalad, 1995)(Hax, A.; Majluf, 1997)

functional analysis of the organization

Result of the analysis of resources and capacities:

Functional analysis is one of the most comprehensive covering all the functions and tasks of the organization. This analysis should be performed by an external body, due to the involvement of executives in achieving a favorable outcome of their self interests.



**Figure 16 Functional analysis**

The result of the internal analysis can be presented as a map of weaknesses and strengths:



**CAPACITY MEANING.-**

**In Weaknesses.-** Difficulty to remove the weakness in the strategy time horizon.

**In Strengths.-** Ability to keep the strengths during the strategy time horizon.

Figure 17 Resources and capabilities

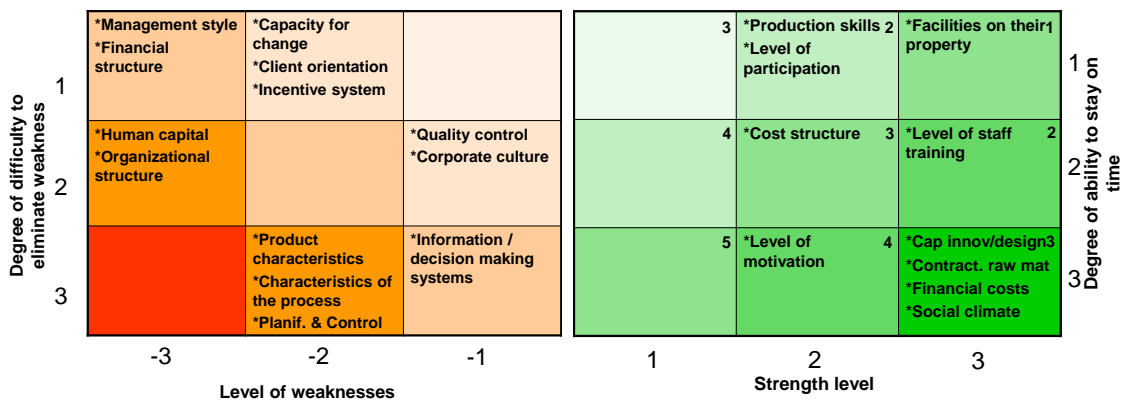


Figure 18 Strength and weakness

### **III.- VARIABLES OF THE SYSTEM AND ITS POSSIBLE EVOLUTION**

#### **3.1.- Driving forces analysis / Dependence**

##### **3.1.1.- Variables and actors of the system**

In the map of threats and weaknesses, those that represent impact (threat level) = -3 and possibility of occurrence = 3 which are the most dangerous. The threat can be explained through narration that the reader understands. But, from a more analytical point of view, the threat may come from the combination of a series of variables that are taking certain values or that are evolving in a certain direction.

Actors are individuals, institutions or other organizations with the capacity to act, and are related to the threat or opportunity being studied. The difference between the variables and the actors are people who have the capacity to observe our strategies. They can change their positioning and react to our strategies eliminating part of the desired effect in their launching.

Our position in front of the actors can be:

- A priori.- Consider their possible reactions before defining our strategy
- A posteriori.- Determine new strategies to put into practice based on the reactions that the actors have.

They are accustomed to being actors: competitors, customers, suppliers, government institutions, and anyone who can take position and reaction to our strategies.

These actors do not always behave as such, for example, when clients are very fragmented they behave as system variables, but without the actors' own reaction capacity.

##### **3.1.2.- Matrix of relations.- (Godet, 1993) (Kaufmann, A; Gil Aluja, 1987)**

To these effects, the actors will also be considered as variables, since they have capacity of influence and of dependence. The only thing that is different is that the actors can have a willingness to react to the strategies put forward.

The relationship matrix expresses the relationship between the different variables. It is a square matrix where the variables play all against all. Rows indicated the power of influence of the row variable over the column variable, and the column variables express the dependence of each column variable

with respect to each one of the row variables. Different types of valuation can be used:

- Likert scale from 1 to 7
- From 1 to 5 as it is customary to do in strategy work
- From 1 to 3 as Godet proposes in his works
- 0 to 1 (0, 0,1, 0,2, 0,3, ...) system of 11 positions, understanding that 0 is absence of relation and 1 total ratio, as proposed by A. Kaufmann and J. Gil Aluja.

In our case the scale of 0 to 1 of 11 positions will be taken.

The valuation of the influence of each variable row on the variable column will be subjective due to the inability to find objective bases that support it. It is about taking advantage of years of experience and expert knowledge to provide a valuation of the relationship. In any case, the relation of a row variable on itself in the column will be equal to 1

This means that because of the different nature of the matrix variables, experts in different branches of knowledge must be involved. The different experts must maintain some kind of relationship to reach agreements on valuations. Since it is a subject where accuracy should predominate over efficiency, it is advisable to perform a Delphi among the experts to reach conclusions.

**3.2.- Forgotten effects of the matrix.-** (Godet, 1993)\_(Kaufmann, A; Gil Aluja, 1987)\_(Kaufmann, A; Gil Aluja, 1988)

In the following example, 0 means absence of relationship, 1 relationship or influence of the variable row over the variable column. In these valuations, the experts have difficulties evaluating the relationship between two variables, but, however, indirect relationships can exist as in the following matrix

|   |   |   |   |
|---|---|---|---|
|   | A | B | C |
| A | 1 | 1 | 0 |
| B | 0 | 1 | 1 |
| C | 1 | 0 | 1 |

Figure 19 Example of matrix of relations

It is obvious that one action of A will have influence and will provoke changes in B, given that the relationship  $(A \rightarrow B) = 1$ , but at the same time the action provokes one action in C, as in  $(B \rightarrow C) = 1$ . Then, whatever action or movement of A will provoke a movement in C, an indirect form through B

$(A \rightarrow B \rightarrow C)$ . This is known as indirect effect or “Forgotten effects”, that can be in the larger order, for example, if there were 4 variables A, B, C, D, could have a sequential effect  $(A \rightarrow B \rightarrow C \rightarrow D)$ .

We estimate these forgotten effects using  $R^2 = R \circ R$  which is “maxmin” composition.  $R^2$  represents the union of effects of first generation plus the forgotten effects of the second generation.

We see an example how the maxmin composition functions, we take a matrix of relations R:

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
|     |     | A   | B   | C   | D   | E   |
|     |     | 1   | 2   | 3   | 4   | 5   |
| R = | A 1 | 1   | 0,3 | 0   | 0,4 | 0,8 |
|     | B 2 | 0,2 | 1   | 0,7 | 0,2 | 0,5 |
|     | C 3 | 0,3 | 0,6 | 1   | 0,3 | 0,6 |
|     | D 4 | 0,1 | 0   | 0,3 | 1   | 0,5 |
|     | E 5 | 0,4 | 0,1 | 1   | 0,7 | 1   |

Figure 20 Example of matrix of relations

That this maxmin composition converts into:

|                  |     |     |     |     |     |     |
|------------------|-----|-----|-----|-----|-----|-----|
|                  |     | A   | B   | C   | D   | E   |
|                  |     | 1   | 2   | 3   | 4   | 5   |
| R <sup>2</sup> = | A 1 | 1   | 0,3 | 0,8 | 0,7 | 0,8 |
|                  | B 2 | 0,4 | 1   | 0,7 | 0,5 | 0,6 |
|                  | C 3 | 0,4 | 0,6 | 1   | 0,6 | 0,6 |
|                  | D 4 | 0,4 | 0,3 | 0,5 | 1   | 0,5 |
|                  | E 5 | 0,4 | 0,6 | 1   | 0,7 | 1   |

Figure 21 Square matrix

One observes that the position row 1 column 3 has passed from  $R_{1,3} = 0$  to  $R^2_{1,3} = 0,8$ . This value is obtained from maxmin composition.

$$R^2_{(1,3)} = \max_{a=1...5} \min(X1, Ya ; Y3, Xa):$$

|   |    |   |   |     |     |     |     |    |
|---|----|---|---|-----|-----|-----|-----|----|
|   |    |   |   | C   |     |     |     |    |
|   |    |   |   | y1  | y2  | y3  | y4  | y5 |
|   |    |   |   | 1   | 2   | 3   | 4   | 5  |
| A | x1 | 1 | 1 | 0,3 | 0   | 0,4 | 0,8 |    |
|   | x2 | 2 |   |     | 0,7 |     |     |    |
|   | x3 | 3 |   |     |     | 1   |     |    |
|   | x4 | 4 |   |     |     | 0,3 |     |    |
|   | x5 | 5 |   |     |     |     | 1   |    |

Figure 22 Calculation of row 1 column 3

In practice one can make facing the vector row A with vector column C put in row:

|                          |   | a=1 | a=2 | a=3 | a=4 | a=5 |     |                   |
|--------------------------|---|-----|-----|-----|-----|-----|-----|-------------------|
|                          |   | 1   | 2   | 3   | 4   | 5   |     |                   |
| Row A = X1, Ya           | A | 1   | 1   | 0,3 | 0   | 0,4 | 0,8 |                   |
| Column C = Y3, Xa        | C | 3   | 0   | 0,7 | 1   | 0,3 | 1   |                   |
| Max(Min(X1, Ya; Y3, Xa)) |   | 0,8 | 0   | 0,3 | 0   | 0,3 | 0,8 | Min(X1,Ya; Y3,Xa) |

Figure 23 Calculation of row 1 column 3 (in row)

Then, last row of the table takes the least of the pairs of each column and the value of the last row at the left take the maximum of this row. This permits you to know the motive of having passed from  $R_{1,3} = 0$  to  $R^2_{1,3} = 0,8$ , thus row 1 (A) has an influence of 0,8 over column 5 (E) and at this time this variable in row 5 (E) has influence of 1 over column 3 (C). Thanks to this indirect influence whenever action from A will take a sequential effect, first in E and this in C generating a final effect of 0,8.

|   |   | 1   | 2   | 3   | 4   | 5   |
|---|---|-----|-----|-----|-----|-----|
|   |   | A   | B   | C   | D   | E   |
| 1 | A | 0   | 0   | 0,8 | 0,3 | 0   |
| 2 | B | 0,2 | 0   | 0   | 0,3 | 0,1 |
| 3 | C | 0,1 | 0   | 0   | 0,3 | 0   |
| 4 | D | 0,3 | 0,3 | 0,2 | 0   | 0   |
| 5 | E | 0   | 0,5 | 0   | 0   | 0   |

Figure 24 Final matrix

Given that  $R^2$  is the final matrix that include second order effects, one can obtain the forgotten effects  $R^2 - R$  where one can see that relationship (A→C) = 0,8 as had been obtained.

### 3.2.1.- Matrix of driving force / dependence.-

**Driving variables,-** These are very independent variables (they are not affected by others, but they exercise a strong influence on the rest of the variables.

**Dependent variables.-** They are influenced by other variables. Its value depends on the value from other variables.

**Intermediate variables.-** They are variables with dependence of the rest and at times have influence over other variables. They are intermediate variables or transitional, because they make a connection between other variables, from which they are dependent and which ones they influence.

**Variables to eliminate.-** Variables that are not driving forces nor dependent, then they do not affect the system, no participation no activity, so you can eliminate them.

In our example, variable E makes a connection between A and C, in order to generate an effect of 0,8 so it will be an intermediate variable or connective variable.

The driving force of a variable can be very different from each of the other variables, because it can have a lot of driving force over one and a little driving force over others, then one will take as driving force the average of driving forces of other variables, its the average of the row. In the dependence, study occurs the same, one variable can be very dependent with respect to a variable and the little respect to the other. For this reason, we also take the average of the dependent column.

Then this remains

|         |   |      |      |     |     |     |      |      |
|---------|---|------|------|-----|-----|-----|------|------|
|         |   | A    | B    | C   | D   | E   |      |      |
|         |   | 1    | 2    | 3   | 4   | 5   | M    |      |
| $R^2 =$ | A | 1    | 0,3  | 0,8 | 0,7 | 0,8 | 0,72 |      |
|         | B | 2    | 0,4  | 1   | 0,7 | 0,5 | 0,6  | 0,64 |
|         | C | 3    | 0,4  | 0,6 | 1   | 0,6 | 0,6  | 0,64 |
|         | D | 4    | 0,4  | 0,3 | 0,5 | 1   | 0,5  | 0,54 |
|         | E | 5    | 0,4  | 0,6 | 1   | 0,7 | 1    | 0,74 |
|         | D | 0,52 | 0,56 | 0,8 | 0,7 | 0,7 |      |      |

|   | DRI  | DEP  | DIF   |
|---|------|------|-------|
| A | 0,72 | 0,52 | 0,2   |
| B | 0,64 | 0,56 | 0,08  |
| C | 0,64 | 0,8  | -0,16 |
| D | 0,54 | 0,7  | -0,16 |
| E | 0,74 | 0,7  | 0,04  |

Figure 25 Driving and dependents Variables

The last column of  $R^2$  is the mathematic average of the row and represents the average driving force of the variable. The last row of the matrix is the mathematic average of the column and represent the average dependence of the variable.

The M / D table shows in the first column the driving force and in the second column the dependence, normally the variables are driving forces and dependent at the same time. Rarely does one find a variable that is totally driving force or totally dependent. In reality all the variables are intermediate or connected with other variables. We try to search for the driving forces in relationship to their dependence. The third column “DIF” is the difference between the driving force and the dependence of each variable.

The objective of this analysis consists in finding the variables that are more driving forces (less dependent) because they are the ones that will be chosen to generate hypothesis of autonomous movements, that generate scenarios explaining the behavior of the environment to its required influence over the dependent variables.

If in its place, one takes dependent variables to generate hypothesis, the described scenario will not be coherent, because if these variables depend of other driving forces the variation has few possibilities of being real, because its movement will depend on other variables with more driving forces. On the other hand, using the most driving forces there will not be other variables that

have an affect, but only having the induced effect of movement of the matrix over the other dependents.

### 3.2.2.- Matrix of impact / uncertainty.-

Definitely, hypothesis must be generated supposing autonomous variations in variables with more difference. In our example will be A and B.

We suppose that the 5 variables of our example A, C and D, pertain to a threat that in SWOT have a level =3 of importance and level = 2 of occurrence. But the variables B and E show in SWOT matrix as threat =2 and occurrence = 3.

This gives a new matrix named impact / uncertainty, formed by corresponding variables as threats or more important opportunities, with its level of driving forces, its impact level and its level of uncertainty.

|   | Drivers | Threat | OCU |
|---|---------|--------|-----|
| A | 0,2     | 2      | 3   |
| B | 0,08    | 3      | 2   |
| C | -0,16   | 2      | 3   |
| D | -0,16   | 2      | 3   |
| E | 0,04    | 3      | 2   |

Figure 26 Impact / uncertainty, matrix

## IV SCENARIOS MAKING PROCESS (Fernández Güell, 2004)\_(Bas E., 1999)\_(Godet, 2001)\_(Quiroga Parra, 2008)\_(Ortega, 2014)(Godet, 2007a, 2007b)

### 4.1- Elaboration of hypothesis

Given that all of the variables of the Impact / uncertainty matrix pertain to threats at the highest level, doesn't show any criteria for choosing one or the other, everything that are driving forces can be utilized to generate an autonomous movement hypothesis.

### 4.2.- Definition of Scenario.

A scenario is an explanation of how the world will be under the effects of a hypothesis. Given a hypothesis or movement of a variable, will have consequences over all variables depending on it. The interpretation of those changes in all these variables provoked by the movement of driving force, this would be a description of the scenario.

The description of the scenario is important for the reader to make an idea of how the world will be, than the subjectivity of the free interpretation of each person over the numeric valuation of the dependent variables, one can be led to different visions of the scenario.

### **4.3.- Consequences.**

#### **4.3.1.- General consequences.**

The generated hypothesis about driving force variables, have influence over dependent variables (Explained in the matrix of relationships). According to the subjective interpretation of the relationships of dependence one can visualize consequences in the society, industry, and strategic market segment or strategic group where we are or want to be.

A good description of scenario depends on a good estimation of consequences. When one says “General consequences” one refers to the elements of the environment that affect us, in similar form or differentiated for each one of us.

#### **4.3.2.- Particular consequences.**

Particular consequences are those that affect our organization, in the margin of our weaknesses or strengths to confront them.

Many times the particular consequences coincide with the general consequences, but other times due to characteristics of size, location, strategic market segment or other circumstances can affect us in different ways.

## **V GAP STUDY**

### **5.1.- Objectives.**

One says that objectives are “a commitment between our wishes and our resources to achieve them” . Before defining strategies, one must consider objectives of the organization so that strategies will be oriented toward achievement of objectives.

Normally, one starts with wishes, but when we have the SWOT and know reality, one must decide realistic objectives in function of how the world is and what our reality is.

### **5.2.- Internal analysis.-** *(Porter, 2004)(Porter, 1989)(Grant, 1996)*

When we know our objectives, we need to know our possibilities, which are defined by the map of strengths and weaknesses, that we made in the strategic analysis and now is an essential element for a feasible defined strategy.

### **5.3.- Special circumstances.**

In the organization, there could be special circumstances not being weaknesses nor strengths requires special attention and consideration to avoid taking a wrong way.

## 5.4.- Strategies to be protected from threats and to be oriented to objectives.

One say that “strategy is to establish the relationship with the environment, to be protected from their threats and take advantage from opportunities. Then if:

-Impact / uncertainty matrix give a clear idea of threats and its possibilities of existence.

-Organization objectives are well defined

-Internal analysis reflects possibilities of the organization.

Strategy guide the way to achieve objectives (In this case will have a strong influence the protections of threat studied) considering the real possibilities of organization, into the time line.

It is difficult to give guidelines about strategy, given that they must be adapted to situation circumstances and organization.

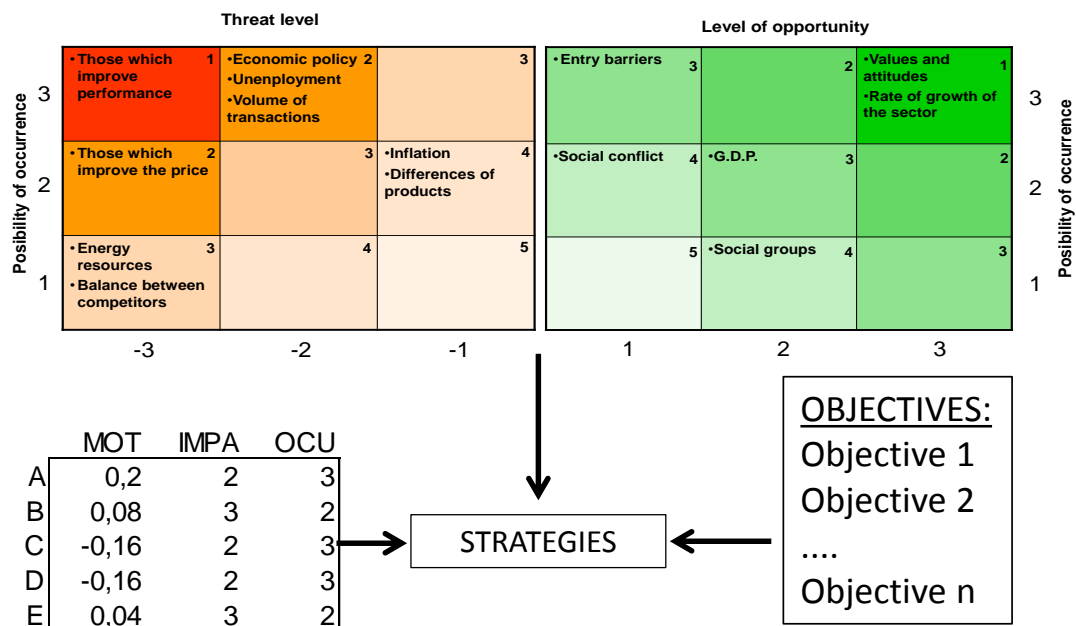


Figure 27 STRATEGIES

## VI.- APPLYING STRATEGIES.-

### 6.1.- Strategy requirements of one scenario about our organization.- (Fernández Güell, 2004)

Strategy implementation could require internal conditions in the organization, different than they actually are.

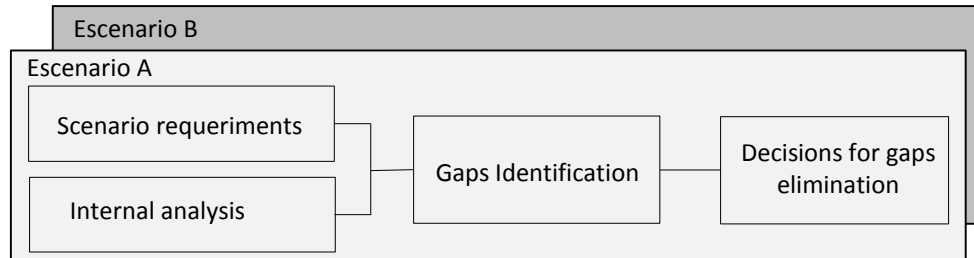


Figure 28 Gaps identification

Internal gap is the distance or difference that exists between the organization model necessary to launch strategy and the actual model that exists.

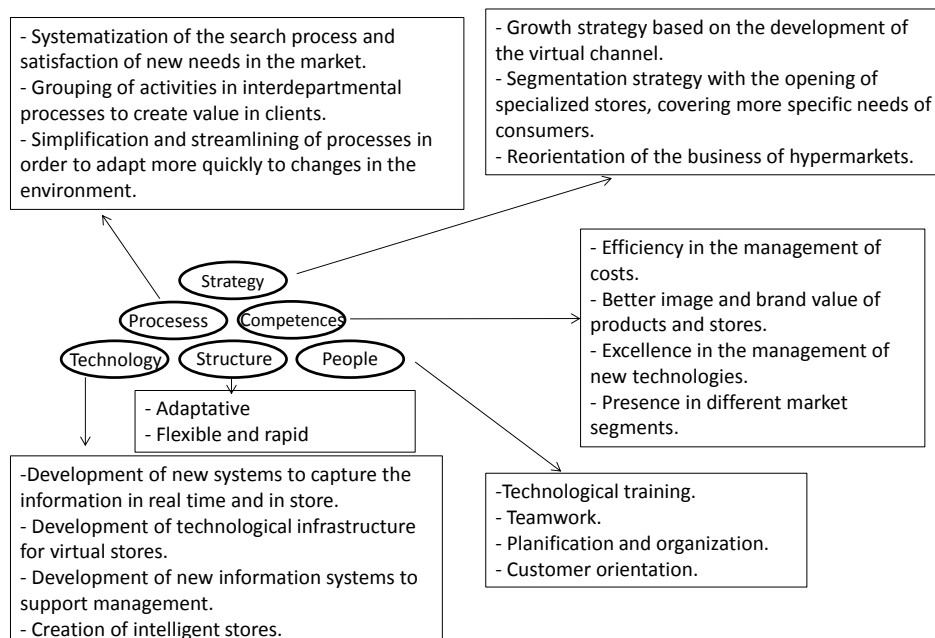
Three situations must be determined

- a).- How should our organization face strategies
- b).- How is the actual organization.
- c).- What is the gap between them.

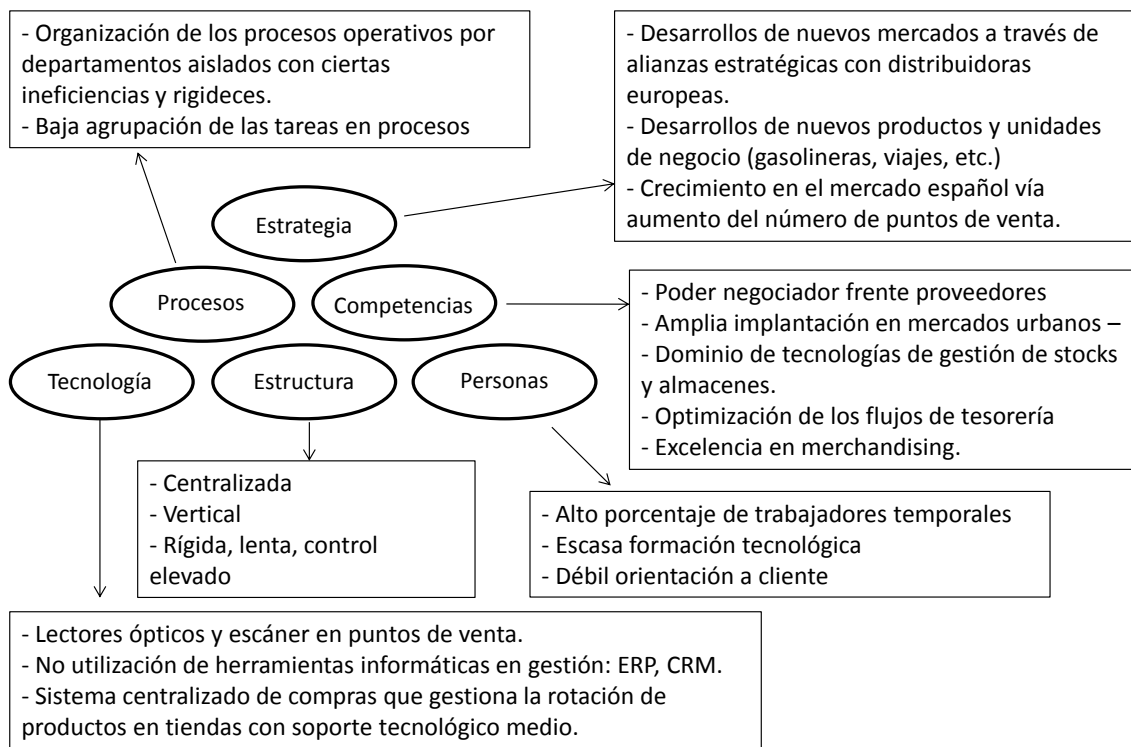
To show these points, one takes as an example a case proposed by José M. Fernández Güell "El Diseño de escenarios en el ámbito empresarial". Pirámide. 2004 about a big warehouse selling food products:

Strategy requirements of one scenario about our organization.-

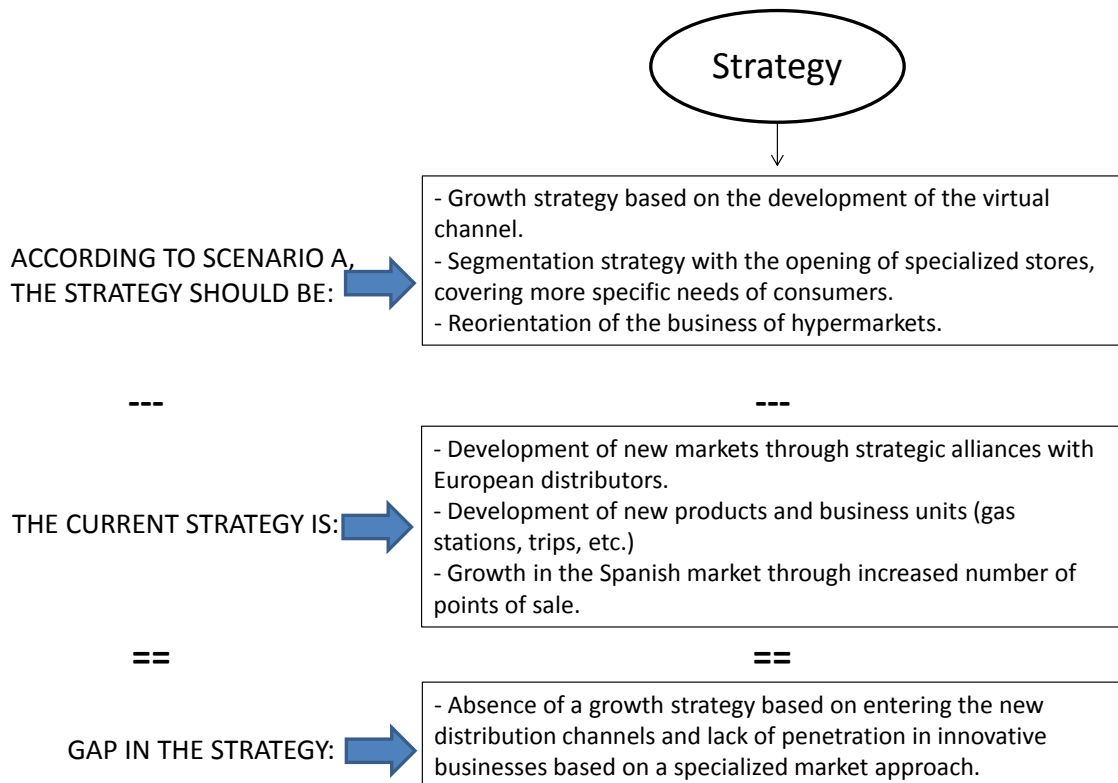
### 6.2.-How should the organization be.- (Fernández Güell, 2004)



**6.3.- How is our organization at this moment. (Internal analysis).-**  
 (Fernández Güell, 2004)



**6.4.- Organization gaps.-** (Fernández Güell, 2004)



# Processes

ACCORDING TO SCENARIO A, PROCESSES SHOULD BE:



- Systematization of the search process and satisfaction of new needs in the market.
- Grouping of activities in interdepartmental processes to create value in clients.
- Simplification and streamlining of processes in order to adapt more quickly to changes in the environment.

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PROCESSES ARE CURRENTLY:



- Organization of operational processes by isolated departments with certain inefficiencies and rigidities.
- Low grouping of tasks in processes.

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GAP IN THE PROCESSES:



- Lack of efficient and flexible grouping of different tasks and activities in an interdepartmental and coordinated process map.

# Competences

ACCORDING TO SCENARIO A, COMPETENCES SHOULD BE:



- Efficiency in the management of costs.
- Better image and brand value of products and stores.
- Excellence in the management of new technologies.
- Presence in different market segments.

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COMPETENCES CURRENTLY ARE:



- Bargaining power with suppliers.
- Broad implementation in urban markets.
- Mastery of stock and warehouse management technologies.
- Optimization of cash flows.
- Excellence in merchandising.

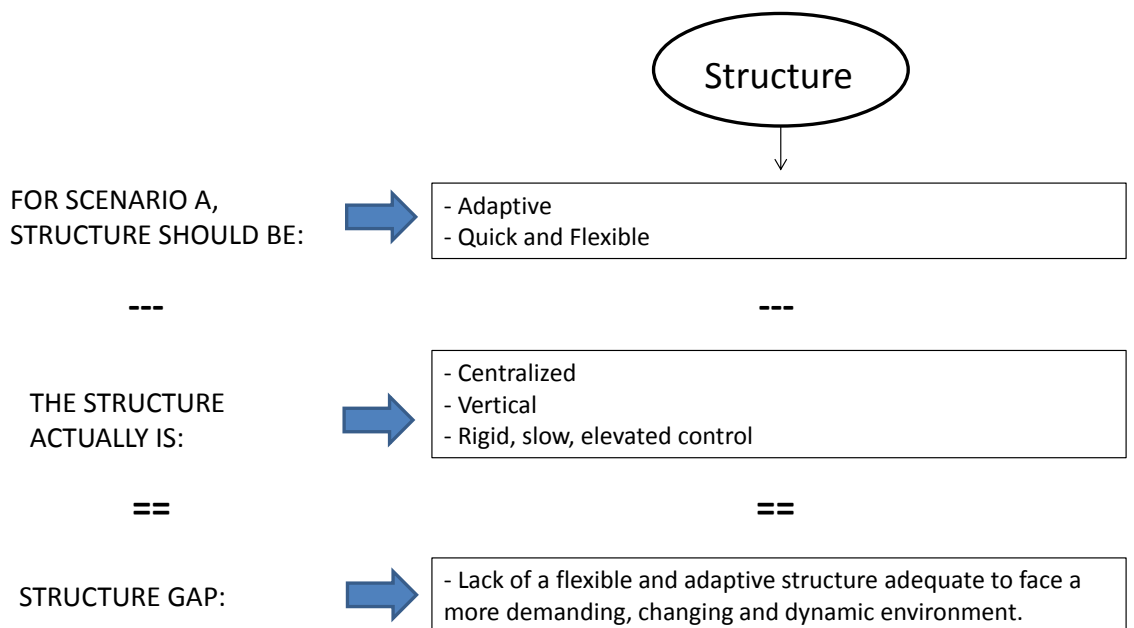
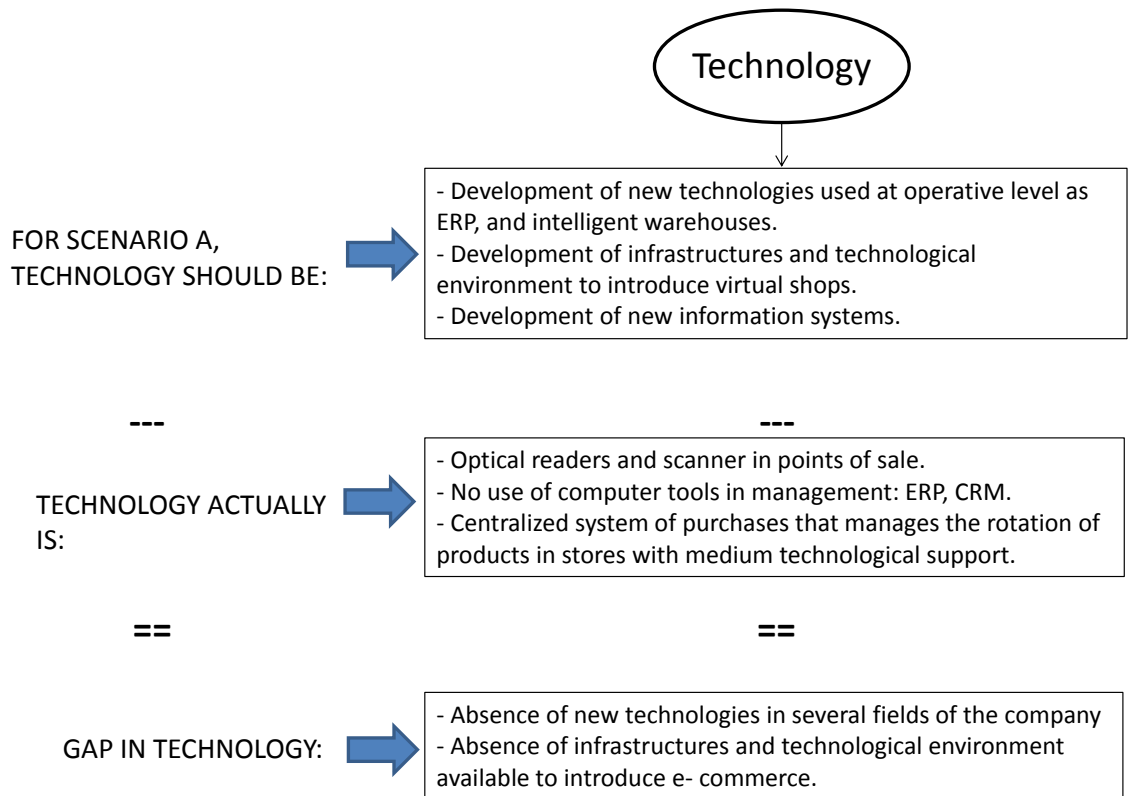
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GAP IN COMPETENCES:



- Absence of basic skills, such as excellence in the use of new technologies, strong brand image, better management of costs, and greater orientation to different market segments.



Staff



FOR SCENARIO A, PROCESSES SHOULD BE:



- Technology training
- Task force
- Planning and organization
- Client orientation

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PROCESSES ACTUALY ARE:



- High % of temporary workers
- Limited technological training
- Weak client orientation

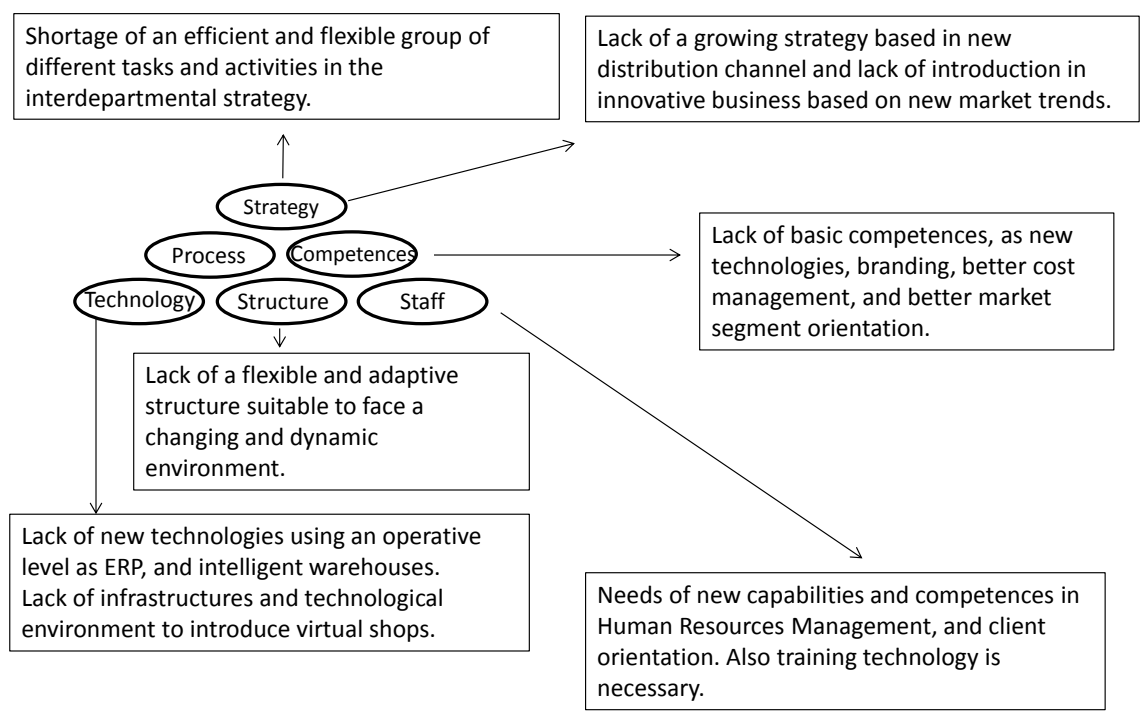
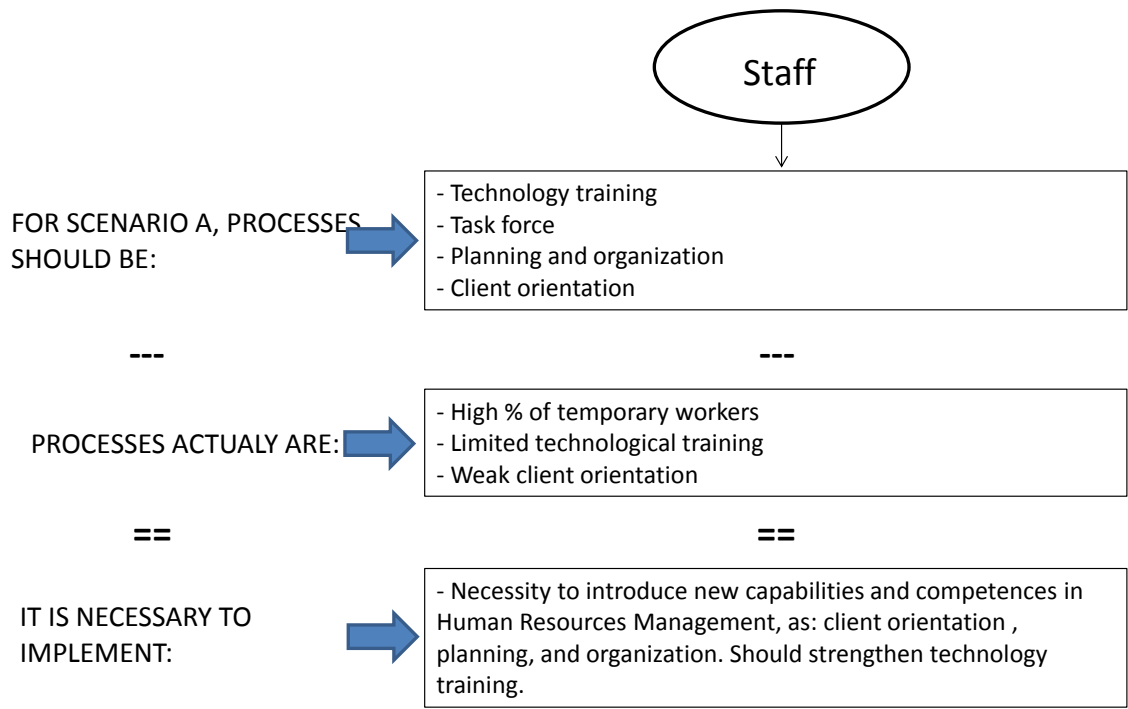
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IT IS NECESSARY TO IMPLEMENT:



- Necessity to introduce new capabilities and competences in Human Resources Management, as: client orientation , planning, and organization. Should strengthen technology training.



**6.5.- Actions to cover gaps and apply strategies.-** (Fernández Güell, 2004)  
(Godet, 2001)

**6.5.1.- Strategy families.-** (Fernández Güell, 2004)

The subject cannot have financial, technical, human, etc. media to answer all strategies from all scenarios. Thus, it can adopt a position of:

**1.-Robust bid.-** When it uses strategies needed to produce profit in all scenarios. Normally, it means minimize losses in its business.

**2.- Bid for most probable scenario.-** In this case it designs a strategy facing most probable scenario (in subjective orientation), with the risk that it never happens. This decision makes sense when a scenario has a reduced uncertainty. This is a risky option, but cheaper.

**3.- Bid for best scenario.-** Design the strategy for a scenario where it can achieve better competitive advantage and/or more sustainable, considering resources and initial position of the company. This is a high-risk option, because the best scenario for the company could be with less possibilities happening .

**4.- Combination of family strategies.-** It could be useful to combine two or more families of strategies. For example, it could design strategies for the best scenario while it adopts flexible strategies for other scenarios.

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