

jointly for our common future

**WP6**

# **INNOVATION TOOLBOX**



**ANALYTICAL TOOL**

*The Reational SWOT Analysis: the questionnaire*

## Introduction

The SWOT analysis, also known as the TOWS Matrix, is a strategic planning tool used to assess the strengths, weakness, opportunities and threats of a project or in a business or in any other situation where an organization or individual must make a decision to achieve a goal. The analysis can address the environment inside or outside an organization. The technique is credited to Albert Humphrey, who led a research project at Stanford University in the sixties and seventies.

The traditional SWOT analysis leads to the identification of strengths and weaknesses into the company and external opportunities and threats (about the context). The first and you should be able to act directly (enhancing the strengths and reducing weaknesses - not least as known), while the second can be exploited (opportunities) or be impediments conditions (threats).

The 'dynamic' (or Relational) SWOT analysis is an idea pretty simple: to create a pairwise comparison between the n elements identified in the SWOT analysis, regardless of the category they belong. This creates a square matrix in which the same elements that are in line (strengths, weaknesses, threats and opportunities) are also found in the column.

The procedure is as follows:

1. realize a SWOT with a company team consisting in a manager, a technical director and a commercial, identifying a number of strengths, weaknesses, opportunities and threats;
2. bring all the n elements identified - together - in a square matrix;
3. lead the team with the same pairwise comparison by comparing each element of row with each element of the column, one at a time, the team expressed its opinion on positive or negative synergy, on mutual estrangement between the two elements being compared and, after any discussion (possibly to reach a shared opinion), expresses the opinion as a value, eg like this:

- 2 = the element of line is hindered or almost deleted, from the one in column

- 1 = the element of line is obstructed by the one in column, but manages to develop its own impact, even if in a reduced form

0 [zero] = the two elements are independent

+ 1 = the element row increase its effects because of the synergy realized by the element of column

+ 2 = the element of line creates a very significant increase because of the element column

4. element by element the comparison is proposed; if the team shares the point of view, it switches to the next element; if the opinion is not shared among the group, this has to discuss, under the direction of the external consultant as a facilitator. As with other

techniques aimed at the group consensus, is necessary to provide exit strategies in the absence of agreement (eg, record the value proposed by the majority of the group, emphasizing that value in the array that this value is not shared).

To identify the strengths and weaknesses on which make a comparison, a questionnaire can be developed: this has to be based on an analysis of the main technical and economic issues that are found in the company when dealing with issues related to the implementation and accelerating processes innovative.

Once identified the strengths, the weaknesses and the threats that the firm should take into account in the development of an innovative project, then it goes from a strategic to an operational analysis, identifying the application context of the strategy. The product or service to be changed or improved has to be found, the one on which to perform the intervention.

## The questionnaire

### 1. Analysis of the strengths and the weaknesses

1.A For each element put a **X** on:

**-3** : if the element is a very strong weakness for the company

**-2** : if the element is a medium weak point for the company

**-1** : if the element is a quite irrelevant weakness point for the company

**0** : if the element is irrelevant for the company

**1** : if the element is a quite irrelevant strength for the company

**2** : if the element is a medium strength point for the company

**3** : if the element is a very important point of strength for the company

*For items that are deemed not relevant to the individual companies do not trace any sign.*

1. The power to influence costumers: pricing, delivery methods of product or services, products characteristics and/or of services, etc .....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
2. The number and size of clients and/or their participation in the choices of the business (co-design, market research, marketing tribal).....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
3. The power of suppliers to determine the price of products, materials, commodities and services, the methods and delivery times, quantities, etc.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
4. The number and size of suppliers and/or their participation in the choices of the business (co-design, market research, marketing tribal)....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
5. The training of employees and/or their qualifications .....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
6. The planning and periodic review of corporate objectives and strategies adopted by management to achieve them	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
7. The ability to innovate products, services and/or production processes...	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
8. Ability to offer products and/or personalized services for the costumer needs.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
9. Ability to exploit the patent, trademark, product design of the company and its know-how .....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>

10. Ability to identify and acquire patents, trademarks and useful know-how for business development.....	-3	-2	-1	0	1	2	3
11. Investments on R&D.....	-3	-2	-1	0	1	2	3
12. Presence of a R&D department in the company, of a design office and/or a laboratory .....	-3	-2	-1	0	1	2	3
13. Price of products or/and services offered.....	-3	-2	-1	0	1	2	3
14. Technical performances and/or multi-functionality of the products and/or services offered.....	-3	-2	-1	0	1	2	3
15. Length of the life cycle of products offered .....	-3	-2	-1	0	1	2	3
16. After-sales services of accessories to products and/or to services offered.....	-3	-2	-1	0	1	2	3
17. Adoption of modern ICT systems and/or their level of use.....	-3	-2	-1	0	1	2	3
18. Economies of scale and/or scope performed in house	-3	-2	-1	0	1	2	3

1.B Identify maximum three **Strength** and three **Weakness** of your company :

**-3** : if the element is a very strong weakness for the company

**-2** : if the element is a medium weak point for the company

**-1** : if the element is a quite irrelevant weakness for the company

**0** : if the element is irrelevant for the company

**1** : if the element is a quite irrelevant strength for the company

**2** : if the element is a medium strength point for the company

**3** : if the element is very important strength for the company

1. _____	_____	-3	-2	-1	0	1	2	3
2. _____	_____	-3	-2	-1	0	1	2	3
3. _____	_____	-3	-2	-1	0	1	2	3
4. _____	_____	-3	-2	-1	0	1	2	3
5. _____	_____	-3	-2	-1	0	1	2	3
6. _____	_____	-3	-2	-1	0	1	2	3

## 2. Analysis of opportunities and threats

2.A For each element put a **X** on:

**-3** : if the element is a very strong threat for the company

**-2** : if the element is a medium threat for the company

**-1** : if the element is a weak threat for the company

**0** : if the element is irrelevant for the company

**1** : if the element is a little opportunity for the company

**2** : if the element is a medium opportunity for the company

**3** : if the element is a big opportunity for the company

*For items that are deemed not relevant to the individual companies do not trace any sign.*

1. Small or limited number of competitors.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
2. Dissemination of new technologies that have affected the sector's reference (eg: internet, wireless, web,...).....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
3. Improve performances and/or features of products.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
4. Reduce production costs and/or improve the production processes...	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
5. Improve products design.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
6. Develop new products.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
7. Produce bespoke products and services and/or provide ancillary services.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
8. Valorise the know-how of the company (patents, trademarks, intangibles, etc.).....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
9. Invest in professional training of employees.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
10. The slowdown in growth demand or its contraction in the market in which you operate .....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
11. The power of suppliers to impose prices, delivery times, characteristics of raw materials, materials and services.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
12. Performances and/or features of products and services of competitors.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
13. The products price of competitors.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
14. The power of costumers in deciding: prices, ancillary services, time of delivering....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>

15. The possibility of the actual or potential competitors to use the innovations introduced by the company in the market .....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
16. The cost of raw material and/or services that the company buys.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
17. Labour cost.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
18. Need to innovate continuously.....	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>

2.B Identify maximum three **threats** and three **opportunities** of your company :

**-3** : if the element is a very strong threat for the company

**-2** : if the element is a medium threat for the company

**-1** : if the element is a weak threat for the company

**0** : if the element is irrelevant for the company

**1** : if the element is a little opportunity for the company

**2** : if the element is a medium opportunity for the company

**3** : if the element is a big opportunity for the company

1. _____	_____	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
2. _____	_____	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
3. _____	_____	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
4. _____	_____	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
5. _____	_____	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>
6. _____	_____	<b>-3</b>	<b>-2</b>	<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>