



## Open the analyst's toolbox

### What do we need to scan strategic phenomena?

What are the strategic analysis tools? What about their importance in the process of strategic analysis? The process of strategic analysis is a rational and technical procedure that requires specific competences, skills and a high methodological rigor. Hence, scanning the strategic phenomena is a complex activity, which

requires for example understanding the development of macro and micro scenarios, the resources' constraints, and so on. In such a situation, the expert initiates a process of sense-giving and sensemaking of the complex and dynamic reality, and opens his strategic "toolbox". This toolbox encompasses a range of very different

tools that may be employed through the different steps of strategic analysis, depending on the nature of the information and the object of analysis. What's more, within the strategic analysis process, the usage of quantitative and logic - qualitative instruments allows critical variables (internal and external to the firms) to be assessed

and assumptions to be made in relation to the possible future evolution of each element of analysis.

## Selecting Tools: Criteria and techques

Given the multitude of problems to tackle in the process of strategic analysis, the choice technical instrumentation is the outcome of a **wide range of factors** that the analysts must weight up carefully. How do the analysts

the analysis represents the **final step** in a reasoned decisionmaking framework; by this stage, the fundamental paradigms of research, methodology and techniques of inquiry have already been established. For the sake of simplicity, the tools of strategic analysis can be divided into two macro classes:

1. **quantitative instruments** using a methodology based on variables analysis and quantitative techniques involving mathematical modeling of the phenomenon un-

classification, strategic analysis process cannot be wholly and exclusively identified with one kind of tools, but **rather it is drawn through both the quantitative and qualitative approaches**. Taking this logic a step further, it is possible to open the toolbox and list several instruments belonging to one of the two complementary categories of analytical tools more in deep. This passage allows us to better **understand the techniques that inform the creation of a tool**. With reference to the

## In selecting tools, the analyst makes a choice of method and language

choose the right tools that fit with the specific object of the analysis? For instance, explaining the future trajectories of interest rates may involve different instruments respect to grasp how organizational structures impact on performance.

Moreover, the sources of information further affect the toolbox. Therefore, in selecting tools the analyst makes a **preliminary choice of method and explanatory language** to be used in processing the overall flow of information. That is to say that the choice of tools used to perform

der investigation;

2. **logic - descriptive instruments** seeking to describe analytically the objects and phenomenon a unde investigation through qualitative research. Doubtless, depending on the overall objective of the analysis and the available information, the analyst mayopt either for a quantitative approach, which delivers numerical data as the final research outcome, or for a logic qualitative approach that indeed focuses on descriptive aspects. However, the choice is not always so linear and rational. Despite the above straight

first category, the main goal of the expert is **giving a number** to a specific situation and questions. What is the value of the future sales? What is the trend of the saving rate in Europe for the next ten years? Does the company gain a positive return on the investments? Are the plants obsolete and inefficient? Numbers and graphs are the best option to deal with these question and manage the complexity in an efficient way. Thus, mathematics and statistics play a crucial role. Within this kind of instruments it is possible to identify the following

strategic tools:

- Tools based on the identification of **compound measures**, such as **elementary indexes** (e.g. retail prices index), industrial plants exploitation), **symbol** (e.g. index of a basket of producer goods), and **composite indexes** (e.g. compound index of the number of worked hours per month/year). These tools are based on ratios and calculation of mean values.

economic and financial implications deriving from the strategic project implementation). **The second kind** of tools (logic-descriptive tools) aim at **describing** and **representing** in an immediate and clear way a specific phenomenon. What is the relationship among the organizational design, politics, and stakeholders expectation? What are the options of business expansions, given the industry life cycle? How can we

examples of these instruments are the “flow diagrams” and the “impact wheels”.

2. **Tools** reflecting a **static logic**, that allow the analyst to understand a phenomenon with reference to a **precise moment in time**. As before, the variety of logic-descriptive tools is broad and we may recognize:

- **tools aiming at schematizing** relevant concepts and variables related to some crucial

## Rigor and creativity in strategic analysis are complementary to tools' knowledge

- Tools based on the study of **variability and mutability**, (e.g. the variance).

- Tools based on the analysis of **relations between two or more variables** (such as correlation and regression);

- Tools based on **deductive logic** that enable the analyst to highlight relations between variables and the effects of their interaction resulting from competitive phenomena (e.g. game theory tools);

- Tools based on **capitalization and actualization** processes (e.g. NPV measurement, which is particularly relevant for the analysis of the eco-

relate organizational capabilities with firm's performance? The analyst cannot just use numbers for answering these questions, but the best choice consists in adopting logic descriptive tools and using ancillary the quantitative approach. Logic-descriptive tools can be grouped into two macro classes:

1. **Tools** reflecting a **dynamic logic**: that allow the analyst to interpret information in order to describe and represent the **relationship existing among different variables**. They are useful to describe, for instance, the implications of a strategic decision, and

dimensions identified by the analyst, but without synthesizing them in a number (e.g. the **PEST analysis** and the **SWOT analysis**);

- **tools** aiming at **describing** the **bidimensional relation** between two variables in a specific range of time. They are often represented by **matrixes** such as, for example, the **Boston Consulting Group matrix**.

## An agenda for future discussions

The strategic analysis of an organization is a **creative, dynamic and complex process**, based on specific compe-

tences, skills and on a high methodological rigor. The need of specific competences and the high methodological rigor are **not in contrast with the creativity** of the process, but rather they are functional to it. The **knowledge** and the **exploitation of adequate technical in-**

**struments** (i.e. the strategic tools) are examples of the **complementariness between rigor and creativity**. Finally, it is just through an appropriate knowledge and implementation of the tools that the analyst can design a strategic process in order to reduce risks and to grasp the oppor-

tunities coming from the competitive arena. In the following concept papers we will analyze in detail the strategic implications of the choice and the use of specific quantitative and logic-qualitative strategic analysis tools.