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# FUTURE STUDIES INPUTS AS THE GROUNDWORK FOR STRATEGY.

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**ABSTRACT:** Conduct a Futures Studies (FS) is a common choice when starting strategy making under uncertainty. FS impacts on all the tasks of the strategic making process. That implies that the quality of relevant organizations' decisions depends on FS. As the computer science adage of "garbage in, garbage out" illustrates, the beginning of the strategy making influences the strategy outcome. This axiom raises two important questions: (1) what is FS and (2) what are the FS inputs? Thus, the purpose of this article is to propose two conceptualizations: one for FS and the other for FS inputs. Although there is no consensus on FS definition, the literature on the subject is rich and allowed us to achieve a comprehensive understanding of FS, including origins, development, structure, and its connection to strategy making. The proposed conceptualizations for FS and FS input encompass key ideas that should be contemplated when conducting FS. Particularly for the FS input, the offered conceptualization can be used as a checklist to assist academics and practitioners at the very beginning of strategy making process.
Keywords: Future Studies. FS. Foresight. Strategy. Future Studies Inputs

**RESUMO**: Conduzir um Estudo de Futuros (FS) é uma escolha comum ao iniciar a elaboração de estratégias sob ambiente de incerteza. O FS impacta em todas as tarefas do processo de elaboração estratégica. Isso implica que a qualidade das decisões das organizações relevantes depende do FS. Como ilustra o ditado da ciência da computação de "entrar lixo, sair lixo", o início da elaboração da estratégia influencia o resultado da estratégia. Este axioma levanta duas questões importantes: (1) o que é FS e (2) quais são as entradas de FS? Assim, o objetivo deste artigo é propor duas conceituações: uma para FS e outra para entradas FS. Embora não haja consenso sobre a definição de FS, a literatura sobre o assunto é rica e nos permitiu alcançar uma compreensão abrangente, incluindo origens, desenvolvimento, estrutura e sua conexão com a formulação de estratégias. As conceituações propostas para FS e entradas de FS abrangem ideias-chave que devem ser contempladas na condução desse trabalho. Particularmente para a entrada de FS, a conceituação oferecida pode ser usada como uma lista de verificação para auxiliar acadêmicos e profissionais no início do processo de elaboração de estratégias.
Palavras-chave: Estudos Futuros. FS. Previsão. Estratégia. Entradas de Estudos Futuros

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## 1. INTRODUCTION

When making decisions or planning, we must reflect on several matters. A key question concerns the strategy to be adopted. Thus, we can ask: How does a strategy start? What are the first steps when beginning a strategy? How does strategy deals with future uncertainty? Although there is no consensus about a definition to strategy, based on military and business understanding (UNITED STATES, 2018; Mckeown, 2019), we can assume strategy as the art of employing resources to achieve desirable ends. That implies strategy is about shaping the future. Strategy It deals with the future but demands actions in the present. That is a substantial challenge because we must make inferences about uncertain matters.

Nowadays, dealing with the future seems to be more complicate than in the past. In the late 1990s, the acronym VUCA (volatility, uncertainty, complexity, and ambiguity) was created to highlight key characteristics of the environment that any strategist must face (Whiteman, 1998; Schoemaker, et al., 2018). In this context, strategic decisions are difficult (Oliver and Parrett, 2018).

To inform strategic decisions under uncertainty, the field of the Futures Studies (FS) have been developed over the last decades (Cagnin et al., 2008; Vecchiato, 2012; Gibson et al., 2018). However, FS are a different kind of research, especially because they cannot be verified (Kreibich et al., 2011). Besides, theory remains dismal, and methods remain chaotic (Spaniol and Rowland, 2018). Consultants have been used FS with commercial success, but sometimes without any academic rigor (Gidley, 2017). While FS value is perceived, there is not a perfect agreement on what FS are.

Yet, despite those issues, FS are often conducted to feed strategic deliberations. In other words, from a broad viewpoint, FS are inputs for strategy making. That means the quality of a strategy depends on the quality of the FS. Consequently, it would be helpful to have a FS robust understanding agreement. Likewise, as it is important to understand the inputs for strategy, i.e., the entire FS process, it is critical to understand the inputs for the FS activities. Ultimately, from a specific perspective, the excellence of a strategy depends on the quality of the FS inputs. Surprisingly, although FS inputs impact all the tasks carried out over the strategy making, including its results, we still lack a FS input outlining.

Thus, the goal of this work is to propose two conceptualizations: one to FS and other to FS inputs. To accomplish that purpose, we sought for a comprehensive understanding about FS, including origins, development, structure, and connection to strategy making. We think that approach is helpful to have broad understanding and from that extract the essential aspects to end up with consistent conceptualizations to FS and to FS inputs. Those two conceptualizations will contribute to shed light on some theoretical gaps regarding definitions in the FS field as well as will assist practitioners to start strategy making.

This article is organized as follow. We start offering a review of the Futures Studies historical evolution. Next, we pinpoint some conceptual issues and propose FS definition. Then, we deal with the relationship between FS and strategy. Finally, we analyse FS inputs from a strategy process perspective, underscore its critical importance and propose a definition for FS inputs.

## 2. FUTURES STUDIES HISTORICAL EVOLUTION

Over history, human beings always tried to predict the future. Astrology, Chinese I Ching, fortunetelling by cards, Delphi Oracle in ancient Greece, religious prophets, and the XVI century prophet Nostradamus are some cases. While at the beginning of the homo sapiens evolution, the future was a God's matter, after the Enlightenment the science started to replace the religious dogma. In the second half of the XVIII century, the Industrial Revolution, the American Revolution, and the French Revolution posed a strong influence on the view of the future. From that time on, technology is seen by many as capable to solve many of humankind's problems (Son, 2015; Gidley, 2017).

One of the first XX century milestones in the study of the future was the creation in 1929, in the US, of the Research Committee on Social Trends, which extrapolated past statistics to the future. But it was the Second World War (1939-1945) that ignited the quest for a way of including the future into the decision-making and strategic planning processes (Schultz, 2012; Gidley, 2017).

From the Second World War to the late '60s, military interests became the focus of state planning efforts. In the US, the RAND Corporation was created in 1945. Founded by the US Air Force and influenced by the Cold War context, it started to play

a key role in developing methods and producing reports on the future of military technology. At first, RAND tried to predict the future through mathematical methods using the new computer power available, heavily grounded on scientific positivism and a mechanistic view of the world. That technologically oriented approach was seen as objective and neutral, but on the other hand, it was too narrow, lacking contextual awareness (Cagnin et al., 2008; Schultz, 2012; Gidley, 2017).

Parallel to the RAND work, some developments in the Future Studies field occurred in the US and around the world, mainly in Europe. It's possible to highlight the foundation of the Society for General Systems Research at Stanford University (1954), the "Centre International de Prospective" in Paris (1957), and the Peace Research Institute in Oslo (1959). In that period, especially in social science, post-positivism philosophy and the idea of pluralism of knowledge replaced the positivist concept of science unity. Scientists began to see the qualitative methods as more appropriate to deal with social sciences. The RAND Corporation military and planning view started to be criticized, and the significance of a more human-centered approach increased. An important consequence was the change of the idea of only one future to the concept of multiple possible futures. In that regard, Herman Kahn (1922-1983) worked on post-war scenarios at RAND in the '60s. Over the '60s and '70s, there was an acceleration of the organic world perspective, where the organizations need to adapt to chaos and complexity. At the same period, futures studies increased their impact on the decision-making process due to the professionalization of the activity (Schultz, 2012; Son, 2015; Gidley, 2017).

The futures studies entered the commercial arena in the '70s. The use of scenarios by the Royal Dutch Shell company to deal with the oil crises was a key landmark. In the early '80s, 75% of the Fortune 100 companies used scenario methods for grounding planning processes. Later, some consulting firms used scenarios without academic rigor, and methodological chaos took place (Cagnin et al., 2008; Schultz, 2012; Son, 2015; Spaniol and Rowland, 2018).

Throughout the Futures Studies developments, among the various intellectual traditions that contributed to its modern view, systems thinking impact was critical. Systems thinking has three main aspects: (a) ''the relationship between the part and the whole,'' (b) ''a shift from thinking in terms of structure to thinking in terms of process,'' and (c) ''the metaphor of knowledge as a building''. Those aspects influenced characteristics of the modern Future Studies such as interdisciplinary

epistemology, systematic and methodological approaches, and regard to the relation of information and society (Son, 2015). In the late ’90s, as many world activities started to be digitalized, chaos and complexity theories emerged. Through the lens of those theories, systems are understood as entities that could be explored but hardly predicted (Schultz, 2012).

FS evolution was rich and influenced by a dynamic context. Perhaps because of that viewpoint richness, academics and practitioners face a lack of common language and it was not possible to arrive at a definition consensus.

## 3. FUTURES STUDIES CONCEPTUAL ISSUES AND DEFINITION PROPOSAL

Futures Studies terminology has evolved over time. At the beginning of the 20th century, “forecast” was related to any sort of writing about the future. “Prospective” became popular in France in the ’50s. The term is still popular among French futurists such as Michel Godet and they see the future as a result of human desire. In USSR, the central government used the term “prognostics” for central planning. Futurology and futuristics were concepts also used, but they are not relevant today (Son, 2015; Gidley, 2017). Currently the terms “Foresight” and “Strategic Foresight” have become commonly used to encompass the wide range of approaches and activities which underlie Futures Studies and aim at supporting long-range planning (Vecchiato, 2012).

### 3.1. Future Studies: The Umbrella Term.

“Futures Studies” is considered a broad field that involves all the research and practice that deal with the study of the future (Cagnin et al., 2008; Gidley, 2017). Since World War II, various Futures Studies perspectives have been developed. According to Gidley (2017), “there is a consensus that there is a transdisciplinary field called Futures Studies. Even those people who prefer terms such as strategic foresight, scenario planning, or prospective would agree that these notions are incorporated within the complex pluralism of futures studies”. Table 1 presents some Futures Studies concepts.

| Author | Futures Studies Definition |
|---|---|
| World Futures Studies Federation[4] | "Futures Studies is the systematic study of possible, probable and preferable futures including the worldviews and myths that underlie each future. Futures Studies is a scientific research field involving scholars and researchers across many disciplines." |
| Coelho, 2003 | "Future Studies constitute a broad term that encompass all activities that improve the understanding of the consequences of present choices. They are an interdisciplinary field and are related to a wide-range of visions on possible, probable or preferable futures." |
| Kreibich et al., 2011 | "Futures studies are the scientific study of possible, desirable, and probable future developments and scope for design, as well as the conditions for these in the past and in the present. Modern futures studies assume that the future is not entirely determinable and that different future developments (futures) are possible and there is scope for design. They are based on the realization that there are indeed a great number of possible futures but that these are not arbitrary" |
| Gidley, 2017 | "Futures studies […] is a transdisciplinary academic field combining education, philosophy, sociology, history, psychology, and economic theory with real life observation to propose, for the benefit of society, not just one kind of future but multiple futures. Current researchers who are working from this broad stance use this plural term 'futures studies' to describe the overall field of research and practice." |

Table 1: Futures Studies concepts

### 3.2. Foresight

Although the term Futures Studies encompass the terms "Foresight" and "Strategic Foresight", sometimes we find them with similar meaning in the literature. The term Foresight gained importance in the '90s among the practitioners (Son, 2015; Gidley, 2017). Thus, it can be useful to verify Foresight definitions to achieve an appropriate idea about FS (Table 2). As in the FS situation, it's important to note there is no consensus on a Foresight definition among experts (Cuhls, 2019).

[4] http://www.wfsf.org/

| Author | Foresight Definition |
|---|---|
| Ben Martin, 1995 (cited in Cuhls 2019) | "Foresight is about the systematic view into the long-term future with implications for decisions and policies in the present." |
| Voros, 2003 | "Foresight is an element of strategic thinking, aiming to augment the perception of strategic options available. Foresight explores alternatives and is not concerned with plan steps and actions, which are in the strategic planning area." |
| Miles, 2008, p. 37 (cited in Cuhls 2019) | "Foresight is set of approaches to bringing longer-term considerations into decision-making, with the process of engaging informed stakeholders in analysis and dialogue being important alongside the formal products that can be codified and disseminated" . |
| Mendonça et al., 2012 | "Foresight can be seen as a social cognition process involving a complex set of methods and interactive processes intended to assist policy in becoming more adaptive and forward oriented in unpredictable environments." |
| Son, 2015 | ''Foresight is the strategic forward-looking technology analysis for policy-making''. Foresight is ''to look into the longer-term future of science, technology, and economy and society with the aim of identifying the areas of strategic research and the emerging generic technologies likely to yield the greatest economic and social benefit'' |
| Gidley, 2017 | "The High-Level Expert Group for Foresight in the European Commission describes it like this: 'Foresight can be defined as a systematic, participatory, future intelligence gathering and medium-to-long-term vision-building process aimed at present-day decisions and mobilizing joint actions.'" |
| UNDP, 2018 | Foresight is the umbrella term for those innovative strategic planning, policy formulation and solution design methods that don't predict or forecast the future, but work with alternative futures. Foresight has been defined as "a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building process aimed at enabling present-day decisions and mobilizing joint action." |
| Cuhls, 2019 | Foresight is a systematic approach by applying methods of futures research, science-based, and based on new theories of futures research. It includes interaction of relevant actors, active preparation for the future or different futures, and orientation towards shaping the future. It includes the consideration of systemic interdependencies, takes a holistic view. Futures is plural: it is an open view on different paths into the future with thinking in alternatives. |
| European Foresight Platform (EFP)[5] | "Foresight is a systematic, participatory, future-intelligence-gathering and medium-to-long-term vision-building process aimed at enabling present-day decisions and mobilizing joint actions." |

Table 2: Foresight Definition

[5] European Foresight Platform website: www.foresight-platform.eu/community/forlearn/what-is-foresight/

Though the use of the term Foresight is commonly interchangeable with the term Future Studies (Son, 2015; Gidley, 2017), there are differences, as shown in Tables 1 and 2. To determine those differences, it is helpful to understand the Foresights focus, objectives, and subfields.

Foresight is strongly connected to strategic management and decision-making. It's a tool that organizations use to set priorities regarding science and technology and formulate long-term strategies. The World Economic Forum and the World Bank are two examples of institutions that employ Foresight towards planning and innovation. Foresight has a practical utility (Son, 2015).

According to Son (2015), the main Foresight objectives are: "(a) ''science and technology priority setting,'' (b) ''the connectivity and efficiency of the innovation system,'' and (c) ''shared awareness for future technologies, opportunities and strategies''. Foresight objectives are diverse but generally seek to open broad discussions before strategy formulation. Cuhls (2019) identifies the following Foresight objectives:

> "Enlarging the choices of opportunities, setting priorities and assessing impacts and chances; Prospecting the impacts of current research and technology policy, or of societal and other developments; Ascertaining or even testing new needs, new demands and new possibilities as well as new ideas; Focusing selectively on looking at the economic, technological, social and ecological areas as well as to start monitoring and detailed research in these fields; Defining or starting the definition and formulation of desirable and undesirable futures; Working out objectives (goals) for strategy processes; and Starting and stimulating continuous discussion processes with motivating the participants." (Cuhls, 2019)

Foresight has some subfields, such as "transnational foresight", "national foresight" (public foresight), "regional foresight", "corporate foresight" (company foresight), "sectorial foresight", "environment foresight" and "technology foresight". What differentiates each subfield is not the study outcome, but the players, objects, and scope. For instance, "technology foresight" emphasizes ''the likely or already observable effects of new technologies". It's also known as future-oriented technology analysis (FTA) and includes a diversity of technology-oriented forecasting methods and practice. "National foresight" has a national scope and consider technological, economic, and social aspects. "Corporate foresight" uses the futures studies tools to assist in strategic formulation for businesses purposes (Son, 2015).

### 3.3. Is Foresight a Futures Studies Subset or a Substitute?

The emphasis on practice places Foresight as a Futures Studies subset. Comparing Table 1 and Table 2, it's clear, in this sense, Futures Studies has a wider scope, including aspects not prioritized by Foresight, especially a moral commitment to a good future for humankind, future generations, and their needs (Son, 2015).

Nevertheless, the Foresight practical utility made Foresight become the mainstream approach in the FS field, attracting attention from scientific journals and institutions. For example, the Canadian Association for Futures Studies is now Foresight Canada, as well as, at the University of Houston, Clear Lake's Futures Studies program changed its name to Foresight program. This growing significance induces futurists to limit their work to match strategic planning requirements and the "traditional" Futures Studies was sidelined (Son, 2015).

It is not clear if the Foresight remains a FS subdivision or has increased to the point to become a replacement. Anyhow, factors such as globalization, information technology, and environmental issues induced the fragmentation of the FS, especially in the lack of disciplinary consensus and in the growing number of subfields, especially in Foresight. Today, the terminology is varied, there is no academic background among futurists, and methodology is chaotic (Son, 2015). What is clear is FS still need a definition.

### 3.4 Futures Studies Proposed Definition

To come to a FS definition, one legitimate option is to combine main ideas from the literature (Fig. 1). Assuming Foresight as FS subset, it seems reasonable to include Foresight aspects in this definition. Accordingly, essentially grounded on Tables 1 and 2, we propose the following Future Studies concept:

> Futures Studies is the systematic scientific research process conducted by an interdisciplinary team of stakeholders that craft a variety of methods to creatively looking into the uncertainty and the complexity of multiple futures to augment the perception of strategic options available in order to produce a formal report to inform present decisions as well as to propose multiple futures for the benefit of humankind and future generations.

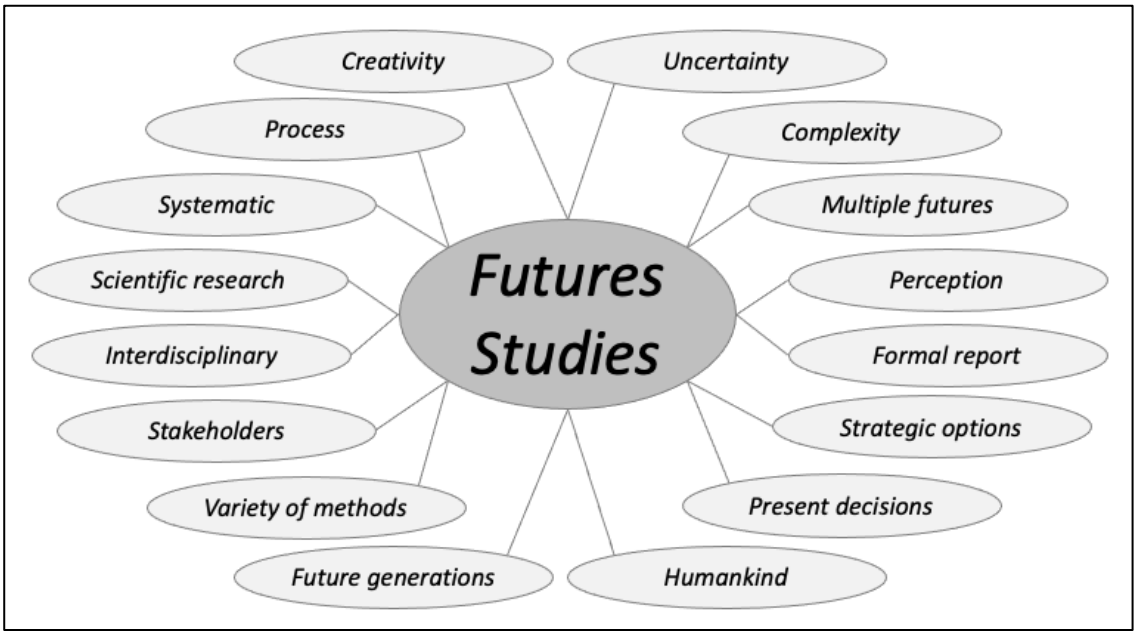


Figure 1: main ideas on Futures Studies from the literature. Source: authors.

## 4. FUTURES STUDIES AND STRATEGY RELATIONSHIP

According Mckeown (2019), “Strategy is about shaping the future. Strategy is the best route to desirable ends with available means.” To shape the future, one must think about the future in the present. Hence, there is a logical link between the study of the future and the building of a strategy.

To properly understand what Futures Studies is, it’s primary to distinguish it from the various strategy nuances. Eventually, the whole strategy making process aims to make decisions. But we need to separate strategy thinking from strategic planning. Strategic thinking involves synthesis, intuition, and creativity. It tries to integrate a diverse range of knowledge to understand the organization's context and where it should be heading. On the other hand, strategic planning demands a logical analysis, deduction, setting goals, and concrete steps (Mintzberg, 1994; Liedtka, 1998). While strategic thinking is associated to problem understanding, strategic planning is linked to solution building. A good problem comprehension increases the chance of finding a proper solution (Wadovski e Oliveira, 2016). Voros (2003) summarizes: “strategic thinking is about exploring options; and strategic planning is about implementing actions”.

Strategic thinking should precede strategic planning and strategic thinking can be enriched by using Futures Studies (Voros, 2003; Cuhls, 2019). Thus, it's clear that FS is not strategy planning, although it can be used to inform strategy thinking. In other words, FS can be seen as a first phase of strategy making, i.e., FS are inputs to strategy making (Fig. 2). Although the Figure 2 is an oversimplification and strategy making activities are cyclical and demands permanent updates, the logical conclusion is the strategy quality depends on the FS quality. The computer science adage of "garbage in, garbage out" illustrates that idea.

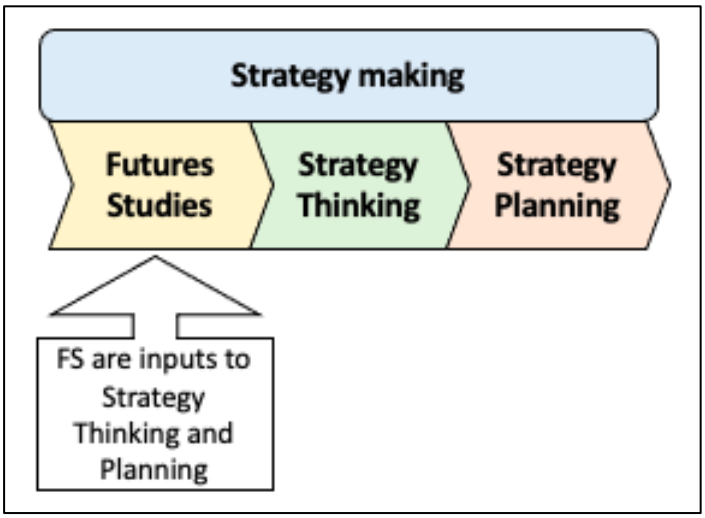


Figure 2: Futures Studies as strategy making input. Source: authors

## 5 FUTURES STUDIES INPUTS

As strategy making can be seen a sort of process (Fig. 2), Futures Studies work can be seen as a sequence of procedures. According to Gibson et al. (2018), "a foresight study is a project with a beginning, an end, a specific purpose, and outcomes requiring multiple processes and activities". Voros (2003) also describes FS as a process of phases and proposes a generic framework which ends with an output. The process starts with the inputs when the researchers "look and see what is happening". Then during the analysis, the question is "what seems to be happening". The interpretation phase looks at "what's is really happening?". The next phase deals with "what might happen?" Finally, the FS process is consolidated in an output to feed

strategy thinking and planning. The generic framework is flexible to allow “crafting” the methods according to the situation (Voros, 2003; Kreibich et al., 2011; Gidley, 2017).

The result of a FS work, i.e., its output (a report, for example), is an input for strategy formulation. That strategy input (the Futures Studies output) should not be confused with the inputs needed to start Futures Studies research. Figure 3 presents an overview of the strategy making continuum, where FS activities are inputs to strategy thinking and shows FS have their own inputs.

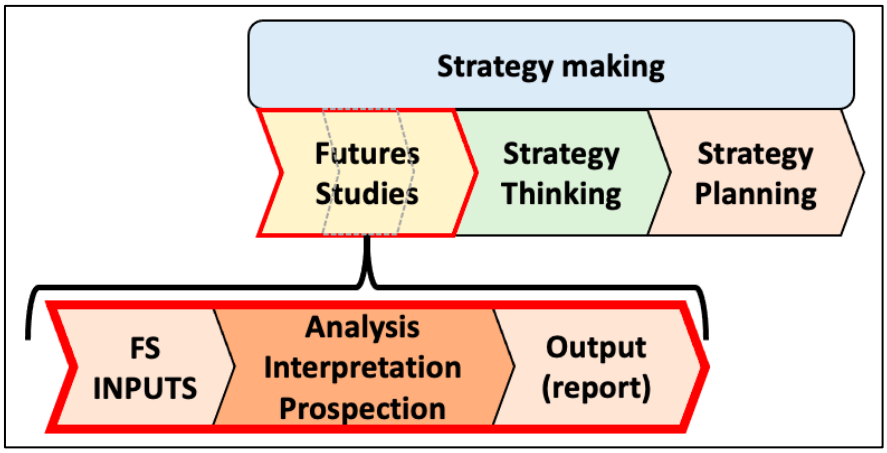


Figure 3: Futures Studies activities. Source: authors, adapted from Voros (2003)

Figure 3 shows clearly that all the strategy making activities start with the inputs to the FS process. The better the quality of the FS inputs, the better the quality of the FS work and consequently the better the strategic decisions. Thus, it is vital to have proper FS inputs and one critical issue is to have a good understanding about what FS inputs are.

There are understanding of FS inputs in the literature. According to Voros (2003), FS inputs are “the gathering of information and scanning for strategic intelligence”. Gidley (2017) point out that “input methods are essentially about gathering information”. Gibson et al. (2018) state “initiating a foresight study includes developing and documenting a clear purpose, articulating expected outputs, outcomes, impact, and structuring an approach”; they also highlight the importance of selecting experts with different backgrounds, experiences, and viewpoints.

Those understanding places Futures Studies inputs in the beginning of the strategy development process and highlight the gathering information undertakings. However, due to the vital FS inputs importance to the final strategic decisions, it seems necessary to improve the FS inputs definition to provide a better guideline for starting

the entire strategy making process. To grasp a broader view, it might be useful to consider the main FS inputs themes and methods.

What are the main FS inputs themes? After World War II, leaders in the public and private sector begun to see science and technology as critical Inputs for Futures Studies. In the 70's and 80's, the oil crises showed that other dimensions should be included as Futures Studies Inputs, especially the ones related to the political, geopolitical, and economic environment. From the 90's, as the world became even more complex, societal, psychological, and cultural aspects also needed to be considered as Inputs for Futures Studies (Gibson et al., 2018). According to Cachia et al., (2007), "systematic efforts are used to collect data that will provide a holistic picture required to examine the future interactions of science, technology, society, and the economy".

Regarding FS inputs methods, there are many and they are constantly evolving. Each Futures Studies requires a specific data collection process design, which can combine different quantitative and qualitative methods (Gibson et al., 2018). Typical methods for obtaining information prior to analysis are environmental or horizon scanning, the futurescan method, the Delphi method, surveys, and technology assessment (Gidley, 2017). Other methods to gather information are analysis of public opinion, benchmarking, cross-impact analysis, decision matrix, experience curves, enterprise environment analysis, literature review, lead users, network plan technique, number of publications, option pricing, patent analysis (number of patents, patent network), structural analysis, and technology-portfolio analysis (Gräßler et al., 2020). The work dynamics in those method include brainstorming discussion in workshops to openly generate ideas and insights about the future, online questionnaires, and organizational interviews (Voros, 2003; Gidley, 2017). Among those methods, Voros (2003) highlights Delphi and environmental or horizon scanning are the best-known way to gather information.

Delphi, according to Mullen (2003) is "a method for structuring a group communication process so that the process is effective in allowing a group of individuals, as a whole, to deal with complex problems". Delphi comprises of rounds of feedback to the individual contributions, assessment of the group vision, opportunities for the individuals to confirm or modify their previous opinions, and some anonymity degree. Some Delphi strengths are the employ of many experts, the interaction among

expert to allow opinion refinement, and the anonymity to reduce the influence of high-status activists (Ogden et al., 2005; Popper, 2008).

Horizon Scanning "is applied for identifying 'things to come', often new science and technology". Considering the entire Futures Studies process, the product of Horizon Scanning can be used as initial input for the next process phases. According to Cuhls (2019), Horizon Scanning aims to systematic explore all kinds of signals and emerging issues to early detect potential trends, opportunities, threats, and risks, "including matters at the margins of current thinking that challenge past assumptions". Horizon Scanning is commonly conducted by a small team of experts.

Reflecting on the above points, we advocate a FS input definition should include aspects beyond the idea of gathering information. Such definition should assist researchers to begin a FS work by indicating specific aspects to be taking into account. As we combined ideas from the literature (Fig. 4) and proposed a definition for Futures Studies, we can do the same for offering a definition for Futures Studies Inputs:

> Futures Studies Inputs are the very first step of the strategy making and consist of the purpose definition, the expect outcomes delineation, the expert selection, the methods combination choice, the establishment of the intelligence scanning process, and all useful information gathered over the intelligence collection process.

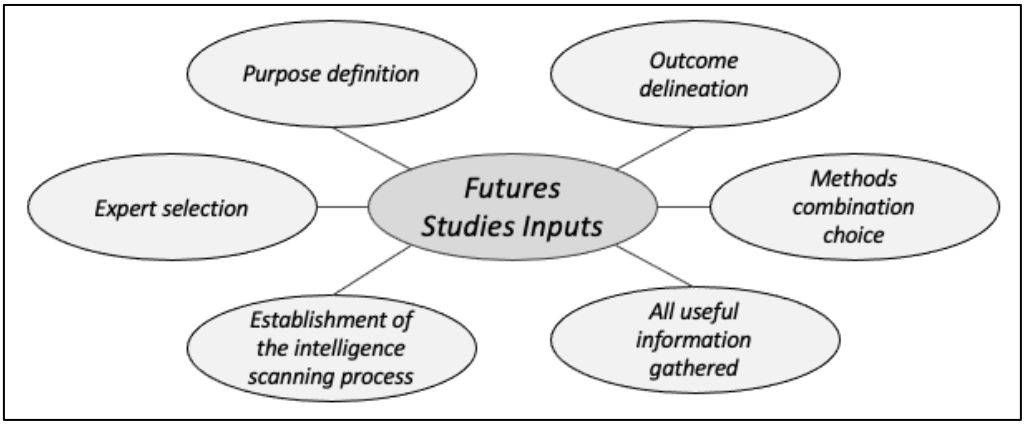


Figure 4: main ideas on Futures Studies inputs from the literature. Source: authors

The proposed definition encompasses the activities carried out before the FS analysis. As it is expressed in our proposed definitions, the researcher should pay attention to six aspects, which to not follow a rigid sequence.

- Purpose definition. It is set by the final decision-maker and will guide all other activities.
- Outcome delineation. It will outline what is expected from the FS work, including the kind of final report.
- Expert selection. It will start with the selection of the first experts by the study sponsor. Then, other experts can be included as per previous expert suggestion.
- Methods combination choice. The experts will agree upon the methods and procedures for the FS work.
- Establishment of the intelligence scanning process. It is a permanent activity that demands an exclusive effort keep the work updated.
- All useful information. It is the raw product to feed the analysis phase.

## CONCLUSION

Considering strategy making as a process, understanding its critical points is essential, particularly those at the beginning, since they ground all subsequent activities and impact on the organization's results. FS and their inputs are key first steps in strategy making. This study presented the FS historical evolution, the lack of consensus on concepts, and showed the important connection between FS and strategy.

The provided conceptualizations for FS and FS input were elaborated by examining a relevant range of the literature. The produced unambiguous FS conceptualization constituted six fundamental elements that not only clarified the relationship between FS and strategy but also presented central ideas about FS inputs as the very first step of the strategy making. As a result, it was reached a broad understanding of the FS concept and its influence on strategic studies, including their inputs and their importance.

The proposed conceptualizations for FS and FS input encompass key ideas that should be contemplated when conducting FS. Particularly for the FS input, the offered conceptualization can be used as a checklist to assist academics and practitioners at the very beginning of strategy making process.

FS impact on all the tasks of the strategic making process. That implies that the quality of relevant corporate and business decisions depends on FS. In its turn, strategic decisions generally impact on stakeholders, including society. Therefore, FS provide better conditions for identifying social implications of the decisions made by the ones responsible for the organization's strategy, thereby this paper may also help to understand how FS assists stakeholders' management.

This article displayed originality by shedding light on the best and most recent knowledge about the relation between FS and strategy, advancing not only a concept but also offering a relevant and interesting perspective on the practice of strategic management in organizations.

Although the FS inputs and their relationship with strategy making were conceptually well clarified, this study did not include an analysis of FS outputs and their respective relationship with strategy. Along with empirical evidence that would also enrich the knowledge of this topic, these conceptual elements are suggested to be a target for future research.

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