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#### Article

### Strategic thinkers and their characteristics: Toward a multimethod typology development

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#### **Empirical Paper**

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## Strategic thinkers and their characteristics: toward a multimethod typology development

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#### Abstract:

**Objective:** We aimed to explore the strategic thinking concept by searching for differences within the population of strategic thinkers to contribute to the development of the "strategic thinking" concept.

**Methods applied:** To answer the research questions and achieve the research aim, we implemented the following research methods: a systematic literature review and biographical studies.

**Findings:** (1) As the first stage in researching strategic thinking, the qualitative approach is recommended. (2) The main features of strategic thinkers are a strategic perspective and a reflective style of thinking. (3) Two groups of differentiating features have been identified: features concerning the content of strategic thinking; and features concerning the process of strategic thinking.

**Originality/value:** Most academic research on strategic thinkers concentrates on the common characteristics and similarities, while little attention has been paid to features that internally differentiate the population of strategic thinkers. Our main contribution to the literature is filling this knowledge gap.

**Keywords:** biographical method, strategic thinkers, strategic thinking, systematic literature review **JEL Classification:** D22, L2

#### **1** Introduction

One of the research fields explored in strategic management concerns the role of individuals, along with their intellectual properties and ways of thinking, in the formulation and implementation of strategy, as well as in the strategic leadership process [Hambrick, 2007; Finkelstein et al., 2009; Adair, 2010]. The findings show that individuals and their strategic thinking competence have an undisputed impact on the type of organizational strategy, organizational relationships with the environment, and the overall performance [Hambrick and Mason, 1984; Olson and Simerson, 2015].

Strategic thinking is seen as an individual, open-ended, intuitive, creative, and synthetic way of thinking, in opposition to strategic planning, which is perceived as somewhat analytical, collective, detailed, and sequential [Liedtka, 1998; Graetz, 2002]. However, some approaches developed based on Ansoff's [1965] and Porter's [1980] perspectives treat strategic thinking as analytical [see, e.g., O'Shannassy, 2006]. Some approaches combine opposite views on strategic thinking (analytical versus holistic, creative versus rational, continuity versus change based, and so on), emphasizing the ambidexterity of this process [Heracleous, 1998; Hussey, 2001; Sushil, 2012]. Finally, strategic thinking is treated as the process that overreaches or precedes strategic planning [Mintzberg, 1994; Heracleous, 1998].

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Studies on strategic thinking have been given considerable interest [Mintzberg, 1994; Markides, 2012], and many different features characterizing strategic thinkers have been proposed [e.g., Liedtka, 1998]. There are several studies on the common features of strategic thinkers [e.g., Simon, 1957; Kahneman et al., 1982; Stubbart, 1989; Eisenhardt, 1990; Hanford, 1995; Steptoe-Warren et al., 2011] that stem from different perspectives (e.g., a strategic perspective) [e.g., Kaufmann, 1991; Hamel and Prahalad, 1993; Hanford, 1995; Heracleous, 1998; Liedtke, 1998] and manifestations (e.g., reflection) [e.g., Liedtka, 1998; Dhir et al., 2018]. However, there is still a shortage concerning the valid typology of strategic thinkers based on differences between them. It reveals an interesting and important gap, both in theory and in practice. A systematic literature review suggests that cognitive differences characteristic to strategic thinkers can be instrumental in influencing organizational performance and organization–environment fit, which signifies the importance of the undertaken research.

Consequently, the purpose of the paper is to explore the strategic thinking concept by searching for differences within the population of strategic thinkers to establish the types of strategic thinkers by the end stage of the whole research project. Consequently, the following research questions (RQs) have been formulated:

- RQ1: Which research methodology might be proposed to examine strategic thinking and strategic thinkers' types?
- RQ2: What is the understanding of the strategic thinking concept?
- RQ3: What are the common features of strategic thinkers?
- RQ4: What are the differentiating characteristics among strategic thinkers?

The study presented in the paper follows the research design based on a systematic literature review and biographical studies. Future research will incorporate qualitative studies based on semistructured interviews.

Our study contributes to the strategic thinking literature in several ways. Firstly, we systematize and compare various approaches to strategic thinking and strategic thinkers, developed in the past 4 decades. Secondly, we identify and describe not only the features that are common to strategic thinkers but also those that differentiate them. Finally, we use the biographical method to exemplify the identified differentiating features.

The structure of the paper is as follows. The first section presents our research design and the implemented methods. The insights on the strategic thinking concept and the strategic thinker orientation, encompassing strategic thinkers' common features, have been presented in the second and third sections. The fourth section highlights the differentiating characteristics of strategic thinkers and their exemplifications. Finally, the conclusions, including the most salient findings, limitations, and future research directions, are presented.

#### 2 Research design

This article presents the preliminary results of the first phase of the research procedure (literature review, biographical studies) as part of the project "*Types of strategists – Identification of strategic thinkers*' *types and kinds of strategic thinking*".

Due to the exploratory nature of the research problem, the main part of the proceedings was based on qualitative research–interpretative approach, which aims to comprehend the meanings given to the studied concepts by social actors in their real environment [Gummesson, 2000; Denzin and Lincoln, 2005; Creswell, 2007, 2009]. The research procedure in the current project includes the following: (1) systematic literature review, (2) biographical studies, and (3) field research carried out using the technique of a semistructured individual in-depth interview (IDI). All three methods have been described in this section; however, the findings presented in the paper refer only to stages 1 and 2, while the Stage 3 research is still in progress. The methodology we adopt is a result of reviewing relevant literature. First, as there is a lack of systematic literature review in prior studies (those selected for our review), we decided to follow such a way of reviewing. Second, since the nature and character of the field investigated is deeply embedded in cognitive science and very soft human issues, we decided to adopt a qualitative approach in line with the triangulation method. Third, for the systematic review, we mostly followed the methodological contribution of Aguinis et al. [2018].

The expected result of the research procedure is the typology of strategic thinkers and the design of a measuring tool identifying specific types, as well as the formulation of recommendations for future quantitative research.

To ensure the reliability of the results, the following strategies were adopted: data triangulation (data obtained from various primary and secondary sources), triangulation of researchers (at the stage of designing, collecting, and analyzing data), evaluation of specialists (external audit as part of the presentation at scientific seminars), and validation by interview participants (giving opinions on the report and evaluation of descriptions and characteristics).

#### 2.1 Literature review

The starting point of the research procedure was a systematic literature review, for which the Scopus database was used. The search quest was defined as "strategic think\*" to include results for both "strategic thinking" and "strategic thinkers" and referred to the fields of title, abstract, or keywords of English language articles in academic journals. As a result, 1,296 publications were obtained. Then, the area constraint was imposed to include only papers in the "Business, Management, and Accounting" field, which limited the list to 461 articles, out of which 146 had full-text access and were used for further analysis. Based on the abstract analysis, 56 articles were considered to be relevant to this research. Additionally, in the "snowball" procedure (publications from references), eight publications were added to the analysis. Ultimately, the analysis covered 64 publications from 1998 to 2018 (literature reviews – 10; quantitative studies – 9; qualitative studies – 16; theoretical/conceptual articles – 20; others – 9). The main findings of the literature review are presented in this paper.

#### 2.2 Biographical studies

The purpose of the biographical studies was to illustrate and exemplify the ideas derived from the literature review. The biographical method (biographical studies) is used to collect, analyze, and interpret information about individuals – their lives, traits, attitudes, and behaviors [Bornat, 2008]. It includes the analysis of memoirs and notes, diaries, correspondence, biographies, and short contextual biographical descriptions, so-called shorter biographical portraits [Gunter, 2001]. In management sciences, the method is recommended for research on the identification of traits (also pathological), ways of thinking, and understanding of hidden motives of individuals (leaders, managers), in connection with the organizational or historical context [Danzig, 1997; Brandon, 2002].

We used a purposive selection of well-known representatives of the business world to exemplify the features that differentiate the different types of strategic thinkers. They met the following specific inclusion criteria: (1) persons who occupied the highest managerial positions in organizations, thus having a real influence on the strategy and strategic behavior; (2) persons who had autonomy in shaping the organization's strategy, considered as the lack of influence of other superior institutions and bodies (e.g., group headquarters or political decisions), (3) people who demonstrated the characteristics of strategic thinkers, such as comprehensive and long-term perspective, concentration on vision and intentions, system approach, mindfulness, reflectiveness, and creativity [see: Liedtka, 1998; Palaima and Skaržauskienė, 2010; Ribeiro, 2011; Dutta, 2015; Dhir et al., 2018].

The biographical studies involved the following: (1) a description of activities and decisions taken by the examined managers; (2) keywords and citations referring to the ways of thinking and strategic behavior of the managers, allowing to identify them as specific strategic thinker types. The findings have been presented in the paper.

#### 2.3 Field research

The field research using the research technique of a semistructured individual IDI is the next phase of the research and is currently in progress; hence, both specific methodological descriptions and the findings of this stage are not presented in the paper. Nonetheless, it is worth mentioning that our respondents are owners or top managers – those who have a real impact on organizations' strategic development – with at least 5 years of managerial experience independent of the industry. The companies we are keen on are those with very dynamic growth. The selection is purposive based on the aforementioned criteria. The geographical scope of the study is Poland.

#### 3 Strategic thinking – main conceptualizations

The strategic thinking concept is rooted in many disciplines and fields, among others, in cognitive science, Organization and Management Theory (with regard to leadership), systems approach, and strategic management. The latter constitutes the theoretical perspective in which the research presented herein is embedded since strategic thinking critically complements the strategic management field [Amitabh and Sahay, 2007].

Strategic thinking, comprising synthesis, divergence, creativity, intuition, and innovativeness, concerns seeking innovation as well as imaging new and very different futures, which may lead a company to redefine its core strategies and even its industry [Haycock et al., 2012]. Linkow [1999] synthesizes these categories as the following processes: reframing challenges, scanning, abstracting, multivariate thinking, envisioning, inducting, and valuating. Strategic thinking contributes to the development of a general concept that focuses on the future direction of the organization based on anticipated environmental conditions [Goldman et al., 2015], which refers directly to the strategic leadership concept [Pisapia, 2009]. Indeed, strategic thinking – perceived as an individual strategist's thinking activity leading to changes at the organizational level, namely, alteration in strategies – reveals the premises of strategic leadership, which undoubtedly is embedded in the strategic management field. Consequently, it is also worth mentioning that strategic thinking is revealed at different levels in an organization [Mintzberg, 1994; Liedtka, 1998; Linkow, 1999], and therefore, a multilevel research methodology needs to be followed [Bonn, 2005].

Strategic thinking comprehension is a result of two subrealms in strategic management, namely, Mintzberg and his followers' approach and Porter and his followers' approach. Mintzberg [1994] refers strategic thinking to general changes in strategies and defines it as a distinctive way of thinking, balancing creativity and intuition, which leads to the so-called integrated perspective of an enterprise, enabling it to solve longitudinal problems in management. Admittedly, Mintzberg refers to the strategic thinking concept in the business context. As such, strategic thinking contributes to overarching concepts that form the future organizational direction as a result of anticipating and responding to environmental conditions (see Tavakoli and Lawton, 2005; Goldman et al., 2009], as well as revealing new mental models of markets and organizations [Rouse, 1997].

When it comes to the thought of Porter [1980] and his followers, strategic thinking concerns changes in strategies with regard to competitive position and competitive strategies. It is understood as an individual activity that enables the discovery of the competitive strategy so as to gain a desired position in the industry [Goldman et al., 2009]. Moreover, strategic thinking in terms of a creative, innovative, and unconventional way of thinking leads to sustainable competitive advantage and new rules of the competitive game, supported by novel and imaginative competitive strategies [Heracleous, 1998; Liedtka, 1998].

In addition to the conceptualizations presented here, the extant literature about strategic thinking shows many specific definitions as well. Selective instances of specific definitions of strategic thinking are presented in Table 1.

The chronologically ordered definitions presented in Table 1 highlight not only the aforementioned conceptualizations and perspectives (subrealms) but also the direction of content evolution. One can observe the increasing time discord in understanding strategic thinking as a strategic process versus

Table 1. St	trategic thinking –	selected definitions	(ordered by year)
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efinition	References
trategic thinking reveals a process of thinking about an organization and how to go about eveloping a strategy, which includes vision, creativity, flexibility, and entrepreneurship.	Rowe et al. [1986]
trategic planning is based on linear and rational thinking, whereas strategic thinking is based on the eed for recognition of new possibilities and the ability to pull pieces together into a big picture. trategic planning and thinking involve two distinct thought processes: <i>planning</i> concerns analysis – stablishing and formalizing systems and procedures; and <i>thinking</i> involves synthesis – encouraging ituitive, innovative, and creative thinking at all levels of the organization.	Mintzberg [1994
trategic thinking is a process that deals with futures, patterns, trends, and nuances that require ne ability to sense emerging opportunities.	Herrmann [1996]
trategic thinking includes five elements: having a system perspective, being intent-focused, inking in time, being hypothesis-driven, and acting in an intelligently opportunistic manner.	Liedtke [1998]
trategic thinking reflects the thinking of multiple issues concurrently and the ability to ynthesize them.	Boar [2000]
trategic thinking reflects the seeking of innovation and imagining new and very different futures nat may lead a company to redefine its core strategies and its industry.	Graetz [2002]
trategic thinking reflects the way in which people in an organization think about, assess, ew, and create the future for themselves and their associates.	Kaufman et al. [2003]
trategic thinking is a way to solve strategic problems, combining a rational and convergent strategic pproach with a creative and convergent thought process – systems thinking, creativity, and vision.	Bonn [2005]
ecision-makers using strategic thinking are characterized by the following traits: (1) continuous iteraction between the two brain halves, which means the use of whole-brain capabilities; (2) their isbelief in environmental determinism goes along with the essence of strategic thinking, which mphasizes the role of managers in affecting their environments; (3) obvious tendency toward he future and change; (4) since strategic thinking is the result of the interaction of all the other rpes of thinking, it must also have the characteristics of the other types of thinking.	Daghir and Zaydi [2005]
trategic thinking is thinking about possible scenarios and strategy in a creative manner that is ·latively free from existing boundaries.	Drejer et al. [2005]
trategic thinking occurs when a person contemplates the future of an organization taking into onsideration its environmental and competence variables.	Tavakoli and Lawton [2005]
trategic thinking is a distinctive management activity, whose purpose is "to discover novel, naginative strategies which can rewrite the rules of the competitive game; and to envision potential itures significantly different from the present". Furthermore, strategic thinking was specified as being onceptual, systems oriented, directional (linking the future with the past), and opportunistic.	Goldman [2007]
trategic thinking is a combination of information processing (data-driven activity) and creativity reative imagination).	Kutschera and Ryan [2009]
ne of the most important hallmarks of strategic thinking is systems thinking, comprehended s a way of understanding reality that emphasizes the relationships among a system's parts, ather than the parts themselves.	Godet [2010]
trategic thinking involves two distinct thought processes: planning and thinking. <i>Planning</i> concerns nalysis, which involves establishing and formalizing systems and procedures, whereas <i>thinking</i> involves ynthesis – encouraging intuitive, innovative, and creative thinking at all levels of the organization.	Steptoe-Warren et al. [2011]
trategic thinking involves three different processes: collecting information, formulating ideas, and anning actions.	Dhir and Mital [2012]
trategic thinking means the generation and application of business insights on a continual basis to chieve competitive advantage.	Horwath [2015]
rategic thinking reflects an ability that enables an individual to understand, visualize, and confront ne given context.	Dhir et al. [2018]
trategic thinking is a vital leadership competency, which is described as the ability to synthesize nd utilize intuition and creativity in order for an organization to achieve an integrated perspective. is also defined as a mental process that involves synthesizing, as well as utilizing intuition and reativity to identify and solve problems. The process is meant to improve organizational erformance through innovative and creative activities that enhance overall leadership effectiveness.	Muriithi et al. [2018]

Source: Own work based on literature review.

strategic thinking in terms of cognitive skills and mental processes. Moreover, the newest publications increasingly emphasize the role of strategic thinking in leadership.

Summarizing, the presented definitions lead to the conceptualization of two phenomena: strategic thinking and strategic thinker. Strategic thinking as a cognitive concept in strategic management has a practical application in the person of the *strategic thinker*, whose common and differentiating features affect the organization's strategic behavior.

#### 4 Strategic thinkers and their common features

"Strategic thinker" is most often identified as the leader who makes decisions in an enterprise [Eisenhardt, 1990] and bears responsibility for the management of the organization [Steptoe-Warren et al., 2011]. For many years, research on the individual determinants of strategic decisions has been focused on inquiry within the discipline of strategic management. The neoclassical theory of economics envisioned managers as rational utility-maximizing agents, possessing complete knowledge about the environment, cognitively similar, with the ability to act in a fully logical way, amenable to algorithmic predictions [Stubbart, 1989].

At the same time, research on managerial decision-making did not confirm the assumptions about managers' comprehensive rationality [Simon, 1957]. Unlike rational agents, today's managers do not function in an environment of fixed preferences and known choices leading to predictable results. Uncertainty, chaos, and complexity of environmental conditions make it impossible to clearly define preferences and estimate the probability of success of different options [Kahneman et al., 1982; Stubbart, 1989]. In such conditions, individual and subjective factors influencing cognition and decision-making of strategists become even more important. Hence, in recent years, strategic management researchers have shown growing interest in behavioral psychology [Bromiley, 2005; Gavetti et al., 2007; Powell et al., 2011] and cognitive science [Porac and Thomas, 1990; Weick, 1995], which find their applications in the theory of microfoundations [Felin and Foss, 2005, 2006].

Strategic thinking consists of the processes of gathering and processing information about the organization and its environment and creating mental models and heuristics, helping assess the information and make business decisions. As managers are not cognitively homogeneous, the way they think and process strategic information can be considered a differentiating factor and a potential source of the competitive advantage of the organization. The strategic thinking ability of a leader contributes to corporate outputs and business performance [Bowman and Helfat, 2001] through the organization's greater readiness to respond adequately to changes in the business environment [Tavakoli and Lawton, 2005]. Hence, the term "strategic thinker" is often associated with the person responsible for the success of the enterprise [Nuntamanop et al., 2013]. It is even suggested that successful leaders, operating in complex and chaotic conditions, present a higher level of strategic thinking than unsuccessful leaders, due to the adoption of a strategic mindset allowing them to make sense of complexities and paradoxes [Pisapia et al., 2005]. Therefore, who the strategist is and how they think is a unique resource of the organization. Deliberations regarding features that distinguish strategic thinkers from other leaders constitute an important direction of research on improving the leadership function in the enterprise.

According to the assumptions adopted in this paper, the strategic thinker can be distinguished from other leaders based on two criteria: (1) the criterion of the adopted perspective; and (2) the criterion of the applied thinking style.

A strategic thinker is a person who adopts a strategic perspective (as opposed to the operational perspective) and applies a reflective style of thinking.

The most important manifestations of the *strategic perspective* are as follows: (1) a long-term approach and the ability to plan in time [Hanford, 1995; Liedtke, 1998]; (2) holistic view of the company in the prevailing environment [Kaufmann, 1991]; and (3) vision and openness to change, leading to groundbreaking solutions [Hamel and Prahalad, 1993; Heracleous, 1998].

It is characteristic for a strategic thinker to adopt a long-term perspective [Daghir and Zaydi, 2005], in line with Sun Tzu's proposal that the strategy not be "shallow and nearsighted" but "deep and farreaching" [Pellegrino and Carbo, 2001]. Adopting a strategic perspective also means the ability to think holistically and systemically about the organization and its environment. A strategic thinker does not see an organization as a set of independent elements – a "splintered conglomerate of disassociated parts" competing for resources – but looks at the organization through the prism of relationships between these elements and functions that they perform in a larger whole [Kaufmann, 1991]. Similarly, he or she perceives the environment of the organization and understands the relationship between the enterprise and its stakeholders. The strategic thinker – perceiving a company in a broad context – can simultaneously adopt multiple perspectives, frames, and mental models, which helps generate new insights and nonobvious developmental ideas [Pisapia et al., 2005]. He or she is a leader seeking new approaches, better solutions [Bonn, 2005], innovative strategies, and discoveries that are used to redefine the rules of the competitive game [Goldman, 2007]. The strategic thinker participates in the process of creative destruction and transforms the environment in the most useful way using the full abilities of the human brain [Ohmae, 1982].

The second criterion that differentiates strategic thinkers from other leaders is the reflective thinking style, which is based on the following: (1) awareness, insight, and reflection [Dhir et al., 2018]; and (2) double-loop learning [Liedtka, 1998].

The strategic thinker makes decisions consciously, based on reflection both on their previous decisions and on the very reasoning process of which he or she is the subject. In this way, he or she constantly learns and makes decisions in a purposeful, nonaccidental, and insightful manner. The strategic thinker knows his or her thinking [Casey and Goldman, 2010]. Reflection is a disciplined and active process of seeking meaning, leading to a deep understanding of the relationship between experiences and ideas [Dewey, 1933]. It involves perceiving, criticizing, restructuring, and testing an intuitive understanding of experienced phenomena, often taking the form of a reflective conversation with the situation [Schon, 1983]. In this way, the strategic thinker becomes a "reflective practitioner", applying reflection-in-action [Schon, 1983], moving from experience to experience in a continuous, conscious learning process. Hence, in the case of strategic thinkers, we can talk about the process of double-loop learning, the characteristic of which is challenging existing assumptions and beliefs to develop innovative solutions [Heracleous, 1998]. The strategic thinker is a learner, not a knower [Liedtka, 1998].

The strategic thinker, i.e., a person who adopts a strategic perspective and uses a reflective thinking style, is the main agent of change in an enterprise [Daghir and Zaydi, 2005]. It is the cognitive abilities of the strategist and the motivation to explore new opportunities that give direction and developmental drive to the organization. At the same time, multiple industry studies indicate that deficiencies in strategic thinking among the top management's members negatively and significantly affect the company's performance [Mason, 1986; Zabriskie and Huellmantel, 1991; Bonn, 2001]. Hence, the question about the possibility of developing strategic thinking skills among executives is important. Is it a skill that can be acquired, or is it an innate and permanent feature of the strategist's profile?

Numerous studies present strategic thinking as a manageable competence [Ohmae, 1982; Pearson, 1990; Hanford, 1995; Liedtka, 1998; Goldman, 2007, 2008; Casey and Goldman, 2010] that is not reserved only for a specific group of employees [Torset, 2001]. Research on the determinants of strategic thinking suggests that there are specific practices that can support the development of strategic thinking skills in managers [Moon, 2013]. Strategic thinking can be learned and can become a habit [Ohmae, 1982; Pearson, 1990; Hanford, 1995; Liedtka, 1998] through daily practice and mental training [Casey and Goldman, 2010], especially through the practice of reflection [Schon, 1983], i.e., consciously developing insights into every experience associated with strategic decisions. The strategic thinker deliberately and intentionally reflects on experiences and builds knowledge about what worked and what did not, in addition to analyzing how the decision-making process took place [Steptoe-Warren et al., 2011].

#### 5 Features differentiating strategic thinkers

The systematic literature review on strategic thinkers leads to the conclusion that most researchers focus on similarities and common characteristics that distinguish strategic thinkers from operational managers, strategic planners, or executors (see, e.g., Dutta, 2015; Yoffie and Cusumano, 2015], mentioned in the previous section. Researchers point out rather general characteristics such as holistic perspective [Dutta, 2015], systems approach [Palaima and Skaržauskienė, 2010], reflective thinking [Ribeiro, 2011; Dhir et al., 2018], focus on intent [Liedtka, 1998], or creativity. At the same time, little attention has been paid to features that internally differentiate the group of strategic thinkers. This perspective seems to be interesting and important since Olson and Simerson [2015] observed that strategic thinkers are diverse. The differences concern not only personal traits but also cognition and ways of thinking and are manifested in the variety of both strategies and strategic behavior (see, e.g., Mintzberg, 1979; Porter, 1980]. In our research project, we identify the differentiating features and analyze relationships between them in order to develop the strategic thinkers' typology.

Based on the literature review, we have identified two groups of differentiating features:

- features concerning the content of strategic thinking, i.e., attitude to change and acceptance of uncertainty, information processing and decision-making style, perception of environmental hostility, and reliance on data;
- 2. features concerning the process of strategic thinking, i.e., level of participation, reliance on purpose, and orderliness of the process.

Features of both aforementioned groups are described below and exemplified using the biographical analysis, which – on the one hand – identified actions, behaviors, and decisions described in biographies and short biographical portraits (interviews, articles) of the chosen managers and, on the other hand, led to the analysis of the keywords.

The differentiating features concerning the content of strategic thinking are initially presented. The first identified feature is the leader's attitude to change and his or her acceptance of uncertainty [Hamel and Prahalad 1993; Liedtka 1998; Johnson 2007; Godet 2010; Olson and Simerson 2015]. This dilemma has two opposite states: exploitation (focus on continuity) versus exploration (focus on change).

The strategic thinker who is the exploiter has a low acceptance of uncertainty and focuses on searching for stability or evolutionary growth. It results in developing rather conservative and tested strategies, based on a "fit" approach and long-term perspective. He or she is focused on exploitation, foreseeing the future, and exhibits a low acceptance for mistakes. An example of a strategic thinker searching for stable and predictable growth and showing low acceptance of uncertainty (exploiter) can be Andy Grove [Miller, 2010]. He developed Intel's strategy based on simple rules, such as Moore's law or economy of scale. The strategy was based on cost leadership and could be described as defensive: protection against radical technological changes, narrow domain, and limited product portfolio, as he said, "It's harder to be the best of class in several fields than in just one" [Grove, 1998]. He did not enter highly competitive markets (e.g., computer hardware) and sought to build high entry barriers in the microprocessor market. By voicing his famous sentence "only the paranoids survive", he acknowledged that organizations should be continuously prepared for environmental instability and change (fear of uncertainty). He also tried to avoid implementing radical changes in the organization, which is reflected in his statement: "A common rule we should always try to heed is to detect and fix any problem at the lowest-value stage possible" [Grove 2015]. To describe his actions and the way of thinking, terms like gradually, smooth, improve, compete, costs, survive, limited, and analyze are used in his biographical descriptions [Heller, 2001; Yoffie and Cusumano, 2015].

The explorer, on the other hand, has a high acceptance of uncertainty and sometimes even provokes instability in his or her environment by developing groundbreaking and innovative visions, sometimes blurry and unbelievable. He or she is focused on introducing radical changes and develops strategies based on the "stretch" approach (resources are not a limit). Learning by experimenting and mistakes are accepted. He or she focuses on exploration and creating the future, not only on foreseeing it. A good example of the explorer is Steve Jobs (Apple, Pixar, Next) who focused on developing products that can change the world and peoples' lifestyle, innovation and design prevailed over profitability, and the quality was more important than quantity: "When you're a carpenter making a beautiful chest of drawers, you're not going to use a piece of plywood on the back, even though it faces the wall and nobody will ever see it. You'll know it's there, so you're going to use a beautiful piece of wood on the back. For you to sleep well at night, the aesthetic, the quality, has to be carried all the way through" [Isaacson, 2011]. He was implementing new technologies, entering completely new markets where no one offered products (e.g., iTunes; computer animation in a movie), inventing new products constantly, experimenting, and making mistakes (e.g., supercomputer Lisa, Apple Cloud). As he said: "Sometimes when you innovate, you make mistakes. It is best to admit them quickly and get on with improving your other innovations" [Young and Jobs, 1988]. He did not believe in market research and followed the principle of not asking customers about their needs, but to anticipate and create those needs [Yoffie and Cusumano, 2015], which is symbolized by the quote: "Some people say, 'Give the customers what they want.' But that's not my approach. Our job is to figure out what they're going to want before they do. I think Henry Ford once said, 'If I'd asked customers what they wanted, they would have told me, "A faster horse!"". People don't know what they want until you show it to them. That's why I never rely on market research. Our task is to read things that are not yet on the page" [Isaacson, 2011]. In Steve Jobs's biographies, authors often use terms such as revolutionary, surprising, groundbreaking, innovative, visionary, and so on [Gillam, 2008; Isaacson, 2011].

The second characteristic that differentiates strategic thinkers is information processing and decisionmaking style [Eisenhardt 1990; Heracleous, 1998; Hodgkinson and Sparrow, 2002; Steptoe-Warren et al., 2011; Goldman et al., 2017]. Its two opposite states are the holistic view and fast decision-making style versus the analytical view and slow decision-making style.

A strategic thinker with a holistic approach takes the "bird's-eve view" and bases decisions on general information and informal, often ad hoc gathered data, rather than analytical tools [Heracleous, 1998; Goldman et al., 2017]. Processing information is a preconscious process that involves using heuristics, and many alternatives are quickly analyzed by comparisons [Hodgkinson and Sparrow, 2002]. An example of a fast decision-maker with a holistic approach is Jeff Bezos (founder and chief executive officer [CEO] of Amazon). He is known for his ability to make fast decisions with limited data. Amazon, as a company, is founded on three core pillars: "lowest price, fastest delivery, biggest selection". These three stable priorities constitute the foundation of the long-term strategy of the company and are enough to maintain a birds-eye view. As long as the decisions are aligned with the strategic focus, no further information is needed [Stone, 2013]. Bezos divides companies into two categories: "Day 1 and Day 2 companies". As he explicitly said in his 2016 letter to shareholders: "Day 2 companies make high-quality decisions, but they make high-quality decisions slowly. To keep the energy and dynamism of Day 1, you have to somehow make high-quality, highvelocity decisions. Easy for start-ups and very challenging for large organisations. The senior team at Amazon is determined to keep our decision-making velocity high. Speed matters in business – plus a high-velocity decision-making environment is more fun too. (...) most decisions should probably be made with somewhere around 70% of the information you wish you had. If you wait for 90%, in most cases, you're probably slow. Plus, either way, you need to be good at quickly recognizing and correcting bad decisions. If you're good at course correcting, being wrong may be less costly than you think, whereas being slow is going to be expensive for sure". Bezos always attaches a letter from 1997 mentioning: "it remains Day 1" [Bezos, 2016]. Moreover, one of the key leadership principles, mentioned on the Amazon website, is, "Bias for Action. Speed matters in business. Many decisions and actions are reversible and do not need extensive study. We value calculated risk-taking" [Amazon, 2019]. Bezos is often described as focused on vision, quick and decisive, implementing fast, moving quickly, relentless, experimenting, bold, risk-taking [Galloway, 2018].

The strategic thinker with the analytical style bases his or her decisions on formally gathered analytical data and information and takes the "on the ground view". Processing of information and the decision-making process are more conscious and deeper, involving detailed thinking [Hodgkinson and Sparrow, 2002]. He or she looks for various options and analyzes them sequentially, relying on multiple sources of information, confirmed data, and in-depth analysis. An example of such a thinker is Bill Gates, the founder of Microsoft, a billionaire and philanthropist known for his detailed, analytical

approach toward problem-solving. He strictly follows the following axiom: "beauty of its logical rigour, something that he had cultivated in his own thinking. When you use a computer, you can't make fuzzy statements. You make only precise statements" [Isaacson, 2014]. When he is in the strategic thinking process, e.g., working on a new, previously unknown topic, he tries to meet with the experts, read as much as possible about the concept, and think about the problem from different perspectives, even if it takes time. Bill Gates goes on a trip that he calls "Think Week" at least two times a year. He moves to a detached house in the woods to read and think about the current situation and the next steps that need to be taken. During such trips, he invented a new strategy for Microsoft, regarding new ways of communication with the Internet, leading to the creation of the Internet Explorer web browser [Gates and Ottavino, 1995]. He even mentioned his biggest fear as follows: "I don't want my brain to stop working." People describe him with the following statements: "his brain is a multiprocessor", "he can read 150 pages an hour, and I would say it's 90% retention", "there is something always on in his head, something is happening all the time", "he remembers everything with details", "he studies everything very carefully, takes notes, asks questions" [Guggenheim, 2019].

The next differentiating feature is the perception of environmental hostility and the approach to other actors [Crouch, 1998; Horowitz and Kenerly, 2014]. It can have two states, i.e., focus on competition (environment perceived as hostile) versus focus on cooperation or game (environment perceived as friendly).

In the first approach, the strategic thinker sees the environment as hostile, and threats are dominating in his or her perception. Other actors are perceived as real or potential rivals, and competition on the market is seen as an unfair battle or war. Such thinking results in a low level of trust and highly competitive strategies. In terms of game theory, the "win–lose" mindset is dominating. An example of hostile perception and competitive approach is Travis Kalanick, ex-CEO and founder of Uber. He assumed that winning at all costs is critical to the company's success. In the company's culture code, established in 2009, he mentioned such values as "Winning: Champions Mindset", "Principled Confrontation", or "Toe-stepping". Kalanick also noted that "fierceness" was one of the most important qualities of employees. To win, Uber also performed unethical actions, such as hacking competitors' apps or ordering false rides. Kalanick is described as *dangerous, wartime-all-the-time*, and *one of the most competitive people in the world* [Horowitz, 2019].

On the opposite side, there is a strategic thinker who sees the environment as friendly and dominated by opportunities. He or she develops cooperative relationships and builds both interpersonal and interorganizational networks. The other market actors are seen as fair competitors or even potential business partners. Competition is perceived as a game with the rules established and respected by all the actors. Such an approach manifests itself in the pursuit of networking and the development of various cooperative or competitive relationships [Bengtsson and Kock, 2000; Luo, 2004], as "win-win" strategies are preferred. An interesting example of the strategic thinker representing this approach is Dirk Rossmann, the founder of Rossmann, the chain of drugstores. His perception of the market and competitive environment shows a high level of trust in business partners and competitors. The market is perceived as a kind of game with established rules. As Rossmann himself says, "you have to act fairly despite the competition. My rule is: not to be ruthless, pay attention to other people" [Rossmann et al., 2018]. This orientation leads to various activities, including joint purchases or sharing the market with his main German competitor (Drogerie Markt [DM]), or organizing common charity campaigns. Dirk Rossmann initiated and organized a charity event in Moscow in 1991, emphasizing that this action "proves that competitors can cooperate with each other when there is a need for that". For decades, he built and maintained private and friendly relationships with his competitors and other large companies operating in the same market. In his descriptions concerning market and activities, he often uses terms like rules, game, relationships, friendship, trust, and fair [Rossmann et al., 2018].

The last feature concerning the content of strategic thinking is a reliance on data in the decisionmaking process [Mintzberg, 1994; Heracleous, 1998; Jelenc and Swiercz 2011]. The two opposite states are the rational and calculating approach versus the generative and intuitive approach.

A strategic thinker of the first type works like intelligent machines, basing decisions on data and information [De Witt and Meyer, 1998; Jelenc and Swiercz 2011]. Problems are analyzed consciously and

rigorously, and all possible alternatives are considered. This is a scientific, logical, and rational approach. Emotions and experience are not the primary factors in the decision-making process. Elon Musk, the founder of Tesla, SpaceX, PayPal, and Hyperloop, can be presented as a rational and calculating strategist. This entrepreneur is known for his hyperrationality and scientific approach. He uses modern technologies (solar energy, tunnels, autonomic vehicles) to drive the growth of his businesses, and, alongside, he runs thought experiments (e.g., "how much does the rocket need to cost, so it is affordable for commercial use"). He tends to be technocratic, with frequent "inhumane" behavior. When described, Musk "comes at the world through strategy and intellect (...), most people who are under that sort of pressure fray. Their decisions go bad. Elon gets hyperrational. He's still able to make very clear, long-term decisions. The harder it gets, the better he gets" [Vance, 2017].

The generative and intuitive strategic thinker, on the other hand, uses lateral and divergent thinking, which focuses more on values and culture than on hard data [Nasi, 1991; De Witt and Meyer, 1998]. Strategic thinking is treated as an act of creative imagination. Strategic thinkers of this type prefer reliance on hunches and premonitions over logical and rigorous analysis; hence, emotions, intuition, and experience play a vital role in the decision-making process. An example of a generative and intuitive thinker who leads by experience, feelings, and hunches is Howard Schultz, ex-CEO and founder of Starbucks. He stated that "*when it comes to business, you need to pour your heart into it*," focusing on customer experience and service. His decision-making process, when it came to product development, was highly intuitive and based on tests, in addition to being guided by experience. Schultz described the process of launching "Frappuccino", the popular bottled coffee product, in the United States in 1996 as follows: "*we didn't do any heavy-duty financial analysis on Frappuccino beforehand. We didn't hire a blue-chip establishment consultant who could provide 10,000 pages of support material. We didn't even conduct what major companies would consider a thorough test. No corporate bureaucracy stood in the way"* [Schultz, 1997].

The literature review also revealed three differentiating features concerning the process of strategic thinking. The first one concerns the level of participation in strategic thinking [Bonn, 2005; Johnson, 2007; Godet, 2010; Goldman et al., 2015; Olson and Simerson, 2015]. It has two possible states: individual versus collective thinking.

According to the first approach, the process of strategic thinking is individual and is seen as an elite activity [Goldman et al., 2015]. All ideas come from the "guru", while other managers give informational and analytical support only. This type of thinking can be associated with directive leadership [Olson and Simerson, 2015]. An example of an individual strategist is Mark Zuckerberg, the founder and CEO of Facebook. He is known for his charismatic, guru-like visionary approach to the company's growth. He surrounds himself with a narrow team of most trusted, loyal managers, called "lieutenants". He resides at the center of the Facebook headquarters in an office called "Aquarium" – the closer someone sits to Zuckerberg's office, the more important this person is as an employee. When it comes to strategic decisions regarding, e.g., the type of advertisement on various platforms, Zuckerberg prefers to micromanage and is highly precise about the outputs [Martinez, 2016]. Mark Zuckerberg always had a strong individual will and belief about being exceptional: "always thought this was important—giving people the power to share and stay connected, empowering people to build their own communities themselves. When I reflect on the last 10 years, one question I ask myself is: why were we the ones to build this? We were just students. We had way fewer resources than big companies. If they had focused on this problem, they could have done it. The only answer I can think of is: we just cared more" [Weil, 2015]. The Facebook founder is known for his guru slogans as well, which were highly popular in the tech world: "move fast and break things", later "move fast with stable infra", "done is better than perfect", and "the journey is only 1% finished". Most popular descriptions of Zuckerberg refer to him as dominating, imperial, fundamentally sure, indisputable, and confident. He described himself once as "Founder, Master and Commander, Enemy of the State" [Walter, 2013].

In the opposite approach, the process of strategic thinking is collective and involves different members of the organization: senior managers, middle-level managers, as well as external consultants. In this approach, various forms of methodological support are used at different organizational levels, e.g., open discussions or workshops for managers, and so on [Johnson, 2007]. Strategic thinking is seen as a general

and culturally bound activity. An example of this approach is Phil Knight, the founder of Nike. He was known for giving a lot of freedom to his employees and managers and preferred a laissez-faire approach to strategic decision-making. Communication at meetings was always two-sided, candid, and honest as it made everyone feel included and important. According to him, people from the main Nike management team were "nearly all merciless self-loathers, which kept the egos in check. There was none of that smartest-guy-in-the-room foolishness. (...) each would have been the smartest guy in any room, but none believed it of himself, or the next guy" [Knight, 2016]. Moreover, employees were regularly asked about important strategic matters, e.g., the brand name "Nike" was coined after a long process of employee surveying and multiple brainstorming sessions. Knight regularly hired external consultants who helped with strategic decisions, e.g., when locating factories in Asia or during first endorsement deals [Knight, 2016].

Based on Mintzberg's [1994] and Olson's and Simerson's [2015] distinction of deliberate and emergent strategic management processes, the last differentiating criterion of strategic thinkers was identified as reliance on purpose and orderliness. The two opposite states are strategic thinker as a deliberate process planner versus emergent (incremental) strategic thinker.

In the first approach, the process of strategic thinking is deliberate, planned, sequential, and ordered. There is one dominant scenario, and most activities are gathered around it. By definition, strategic thinking precedes strategy formulation, changes in the strategy are rare, and the general approach is to follow the plan. This attitude is associated with the "strategy making as ritual" approach, in which thinking about strategy, analyzing, and planning is a part of day-to-day activities. In such a case, some special routines related to strategic thinking and strategy formulation are in place [Johnson, 2007]. An example of a planning strategic thinker is Tim Cook, the CEO of Apple, who took the wheel after the death of Steve Jobs. Steve Jobs created a general vision of the company's next steps, and Cook decided to keep it. He prefers evolution over revolution: *"unlike Jobs, Cook wasn't going to tear down what wasn't working and rebuild; he had been a steady captain in his role and planned to keep the ship on its existing trajectory. Unsurprisingly, he did not immediately announce any major changes that would cause investors or fans concern"* [Kahney, 2019]. To ensure the company's growth and deliver higher shareholder value, he invented and planned new values of the enterprise, which were not officially announced but describe his leadership style. Diversion from them is not tolerated, and as a CEO, Cook is highly focused on that. The most common descriptions of him as a person are *steady, stable, harmonious, works within the previously established system, unchanged* [Kahney, 2019].

According to the opposite approach, the emergent process of strategic thinking can be iterative and infiltrating, sometimes even chaotic. No dominant scenario exists, and multiple options may function simultaneously and intertwine with each other. Strategic thinking and strategy formulating are two mixed processes, which result in emergent strategies. As a consequence, changes and redefinitions of strategy are natural and frequent and are triggered by events such as crises or new opportunities. There are no routines related to strategic thinking and planning. Sam Walton, the founder of Walmart, is an interesting example of an emergent strategic thinker, especially in the first years of the company's growth. He described his strategic thinking style in the following words: "stock has forced us to manage differently, to think more short term at the expense of long-term strategic planning. The answer is that we've always had to do a good bit of both. When you're opening 150 stores a year the way we do these days, a lot of your planning is necessarily short term. But to sustain that kind of growth, you constantly have to consider what you're going to be doing five years out. I think that the stock market pressure has driven us to plan further out so that there will be some consistency next year, and the year after-not only to our profitability but to our operating sales, our gross margins, and those sorts of things" [Walton, 1993]. Walton mentioned that Walmart's strategy was based on constantly leveraging market opportunities; city centers were not planned; and activities were started when the opportunity was spotted. Moreover, Walton was highly opportunistic: "I'd get down low, turn my plane up on its side, and fly right over a town. Once we had a spot picked out, we'd land, go find out who owned the property, and try to negotiate the deal right then" [Walton, 1993].

The features presented above are the initial findings, as the study is in progress, and we believe that the qualitative research will provide the basis to enlarge or modify the set of differentiating features and ultimately lead to typology development.

#### 6 Discussion and concluding remarks

The aim of the paper was to explore the concept of strategic thinkers and their characteristics, with particular emphasis on the discovery and exemplification of common and differentiating features. Our deliberations are part of the project in which we aim to develop strategic thinkers' typology. We designed our research using a multimethod approach, starting with a systematic literature review (Stage 1), followed by qualitative research in the form of biographical studies (Stage 2) and IDIs with strategists (Stage 3), ultimately leading to large-scale quantitative studies, which test and verify the proposed strategic thinkers' typology. The research is in progress, and this paper reports the findings of the first two stages, namely, the systematic literature review, encompassing the concepts of strategic thinking and strategic thinkers, and the biographical studies, exemplifying the theoretical findings.

Our key findings regarding strategic thinkers' characteristics can be divided into two parts. Firstly, we established the common features of strategic thinkers, distinguishing them from other types of leaders (i.e., executors or strategic planners). We found that strategic thinkers are characterized by the following traits: (1) a strategic perspective, understood as a long-term approach and the ability to plan in time, a holistic view of the company in the environment, and openness to change leading to groundbreaking solutions; and (2) a reflective style of thinking (understood as awareness, insight, and reflection) and double-loop learning.

Secondly, we identified several features that can be seen as differentiating factors among the population of strategic thinkers. We grouped them as follows: (1) features concerning the content of strategic thinking (attitude to change and acceptance of uncertainty, information processing and decision-making style, perception of environmental hostility, and reliance on data); and (2) features concerning the process of strategic thinking (level of participation, and reliance on purpose and regularity of the process).

We also applied the biographical method to exemplify all the distinguishing features with real-life examples of well-known CEOs. The summary of our findings with regard to differentiating features of strategic thinkers is presented in Table 2.

We found that most academic research on strategic thinkers concentrates on the common characteristics and similarities, while little attention has been paid to features that internally differentiate the strategic thinker population [Olson and Simerson, 2015]. Our main contribution to the related literature is filling this gap.

#### 6.1 Limitations and research directions and challenges

Most of the available biographical data concerns leaders from the European-American cultural circle, who are mostly men who achieved success. The strategists mentioned by the authors also belong to this group; therefore, their examples should be analyzed as preliminary, and often extreme, illustrations of the studied phenomenon. In further research, it is necessary to expand the previously mentioned group to include people from outside the collection and to reach out through qualitative research (currently in progress) to less-known managers who also make strategic decisions. Moreover, after completing the field research (the third stage of the procedure presented), our future research will concentrate on the development of a validated scale that measures strategic thinkers' differentiating features. It will then be applied in the quantitative study of top managers as part of the typology development process. This constitutes a real methodological challenge, as, in the past, different authors identified particular features based on comparable methods. Some authors treat the features as dichotomies [Liedtka, 1998], and others treat them as opposite "extreme" states on the continuum [Olson and Simerson, 2015]. When it comes to the literature review, we implemented only a qualitative approach. We did not include a quantitative analysis in the form of, for instance, meta-data analysis, citation analysis, or quantitative content analysis [see Jaklič et al., 2020], which we find worth incorporating in future research. In a similar vein, we consider some doubts about the results we obtained from the systematic literature review. We noticed that some papers concerning crucial aspects of managerial thinking and behavior were omitted. This is why we added eight papers incorporating the "snowball" procedure, which we reported in the paper. In future research, we plan to deepen the review. Finally, some authors propose to plot the degree of both "opposite" states in a matrix or a grid, which seems to be in line with scholars who argue about the importance of dialectics and ambidexterity in strategic

Table 2. Synthetic view on strategic thinkers' differentiating features and their examples

Features/characteristics	Values/states	Examples
Attitude to change and uncertainty [Hamel and Prahalad, 1993; Liedtka, 1998; Johnson,	Exploiter/focus on continuity/low acceptance of uncertainty	Andy Grove (Intel)
2007; Godet, 2010; Sushil, 2012; Olson and Simerson, 2015]	Explorer/focus on change/high acceptance of uncertainty	Steve Jobs (Apple, Pixar, Next)
Information processing and decision-making style [Eisenhardt, 1990; Heracleous, 1998; Hodgkinson and	Holistic view/fast decision-making	Jeff Bezos (Amazon)
Sparrow, 2002; Steptoe-Warren et al., 2011; Goldman et al., 2017]	Analytical view/slow decision-making	Bill Gates (Microsoft)
Perception of environmental hostility and approach to other actors [Crouch, 1998; Horowitz and Kenerly, 2014]	Focus on competition/environment perceived as hostile	Travis Kalanick (Uber)
	Focus on cooperation or game/environment perceived as friendly	Dirk Rossmann (Rossmann)
Reliance on data [Mintzberg, 1994; Heracleous, 1998; Jelenc, Swiercz, 2011]	Rational/calculating	Elon Musk (SpaceX, Tesla, PayPal, Hyperloop)
	Generative/intuitive	Howard Schultz (Starbucks)
Level of participation in strategic thinking [Bonn, 2005; Johnson, 2007; Godet, 2010;	Individual thinking	Mark Zuckerberg (Facebook)
Goldman et al., 2015; Olson and Simerson 2015]	Collective thinking	Phil Knight (Nike)
Reliance on purpose and orderliness [Mintzberg, 1994; Johnson, 2007; Olson and	Strategic thinking as a deliberate process/ strategy making as a ritual	Tim Cook (Apple)
Simerson, 2015]	Strategic thinking as an emergent process/ strategy making as an event	Sam Walton (Walmart)

Source: Own work based on literature review and biographical studies.

thinking [Sage et al., 2010; Sushil, 2012]. Furthermore, in future research, one should consider not only the specified common and distinguishing characteristics of strategic thinking but also its antecedents and outcomes visible in strategic behavior. Some of the other antecedents/criteria might include, for instance, increased volatility, complexity, and the ambiguity of the environment; industrial characteristics such as the need for fast building, reorientation, reintegration of company resources/competencies within regenerative dynamic capabilities in a turbulent environment (e.g. Lippman, Rumelt 2003); the specificity of strategic management in firms' network structures; roles of managers as orchestrators of firm strategies and the managers' background and experience. Those criteria might constitute important variables in the quantitative study following the field study that is in progress.

We hope to contribute to the discussion with the conclusions derived from both qualitative and quantitative studies, planned as the completing stages of our project.

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