



LUND UNIVERSITY
School of Economics and Management

Strategic Thinking: A Practical Perspective

A qualitative study on top managers' perception
of strategic thinking

by

Emma Bodin

Kristen Comer

June 2019

Master's Program in Management

Supervisor: Anna Thomasson

Examiner: Ola Mattisson

Abstract

This study aimed to offer a qualitative perspective on the concept of strategic thinking, the capacity to predict and anticipate problems, as well as creating plans for their solution. The subject was studied with a grounded theory-based approach. The purpose was to analyze strategic thinking through the lens of the practitioner; the top managers assumed to utilize it on a daily basis. This was done through semi-structured interviews with ten purposely sampled CEO's and other top managers at a science park in southern Sweden. Through a coding and iteration process of the gathered data, seven themes were identified to play a role in the strategic thinking process of the subjects; thinking ahead, curiosity, trial and error, gut feeling, personal background, formal experience, as well as diversity. Comparing the findings to a literature review on previous research, it is clear that the complex subject of strategic thinking has many different definitions. The themes of thinking ahead, trial and error, gut feeling, and experience (both formal and personal) aligned with previous findings; suggesting these to be core aspects. Curiosity, diversity, and the role of personal disposition were topics that seemed to contrast previous findings; advocating for further research in these new areas. This study's findings emphasize the complexity of strategic thinking as well as suggesting that the fundamental concept may consist of an interplay of internal and external factors. An overarching theme found was the ability to acknowledge and utilize any form of experience or knowledge gathered in the past. This study also highlights the need for more interdisciplinary research between management and behavioral science research, since the findings suggest a delicate interplay of gathered experience and personal disposition.

Keywords: strategic thinking, grounded theory, qualitative, management, behavioral science

Acknowledgements

We want to give a special thanks to the ten top executives who took time out of their busy schedule to help us with our master's thesis. We appreciate the valuable insight and commitment. We also want to thank our supervisor Anna Thomasson for providing valuable guidance and insight throughout the thesis process.

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1 Introduction

Faced with the complexity of a perpetually evolving global market, managers have an increasing need to be well-equipped to lead organizations through this dynamic environment. These fast-paced trends evoke greater competition and uncertainty (Barnett & Berland, 1999), making it imperative that managers possess strategy making skills and strategic thinking as a core competency (Bonn, 2001; Mason, 1986). Stemming from the military, where strategy is the allocation of resources to secure the highest chance of possible victory (Grant, 2016), its application in the business sector is more relevant than one might think. In a competitive business world, it is essential to anticipate and prepare to overcome obstacles, as well as successfully position a company in a favorable light (Porter, 1996). Therefore, a strategy is the way for the managers, the company, and its employees to collectively and successfully approach a goal. The creation of a strategy is considered a critical factor in successful management (Haycock, Cheadle, & Bluestone, 2012).

This definition of a strategy is broadly accepted, however, when it comes to the question of how to navigate and adapt this strategy to the reality of everyday obstacles, opinions start to vary. A recurring aspect of strategic decision making is strategic thinking, generally depicted as an ability to identify and analyze problems, as well as creating and monitoring plans to solve them (Covington, 2014). However, despite its apparent significance (Waalewijn & Segaar, 1993; Carlisle, 2001), the concept of strategic thinking has yet to reach a consensus on what it is or where it comes from (Liedtka, 1998; Goldman, 2007; Senge, 1992). Covington's (2014) perception of strategic thinking is shared by several (Dickinson, Farris & Verbeke, 2001; Abraham, 2005; Bonn, 2005), although through different articulations and with varying core focus points. The concept of strategic thinking seems overwhelmed by uncertainty and disagreement. However, the core question remains; How does one actually think strategically? How is it possible to create a winning formula to overcome obstacles that have yet to occur?

1.1 Background and problem statement

Previous research seems to struggle to create a single cohesive theory regarding the nature of strategic thinking that will hold its shape when tested in practice (Scroggins, 2015; Koskela, 2016). A recurring perception, though, is that successful managers should possess the ability to strategically think in general, at least to some degree (Bonn, 2001; Zabriskie & Huellmantel, 1991; Liedtka, 1998). This is where the study finds its starting point. How do CEOs, founders,

and top executives at a Science Park in Southern Sweden perceive the concept of strategic thinking and what insight can this give to the nature of the concept?

Studies from a deductive perspective are common and often very applicable in research in general; however, the inconsistent findings and disagreeing reflections around the theory and nature of strategic thinking (Liedtka, 1998; Goldman, 2007) might imply that there are other ways of investigating this phenomenon (Heracleous, 1998; Scroggins, 2015). Disagreement regarding the concept has also shown to be problematic when trying to teach or develop the ability to think strategically (Moon, 2013; Liedtka, 1998; Heracleous, 1998). Henry Mintzberg (1994; 2008), a well-known strategy and management researcher, also highlights the need for management research to be based upon real-life data (Mintzberg, 2008). Much of the previous research performed within the field of management show discrepancies to what has been observed when it is practiced in real life (Mintzberg, 1990). This disconnect between theory and practice presents a gap in knowledge and research. Additionally, it highlights the need for a deductive research approach, which was implemented in this study. Therefore, the motive for using a qualitative approach lies within the study's aim to seek an understanding for the world that is being studied (Charmaz, 2006), as opposed to relying on previous theories or understandings of the concept.

1.2 Research Purpose

This qualitative study will try to offer some clarity to this subject by adopting the perspective of the practitioner. The aim is to study how the topic of strategic thinking is interpreted by top managers to gain insight into the real-life practice and value of strategic thinking. The intended outcome of this report is also to help future researchers better comprehend the multifaceted phenomenon, as well as the importance of real-life application in the topic of strategic thinking. Through providing a more exploratory and open-ended approach, the aim is to contribute to a more nuanced vision of what strategic thinking can mean and how it can be applied in management. This report additionally hopes to supplement existing research by discovering relevant concepts related to the area of study, rather than perpetuating the overemphasis on theory verification (Glaser & Strauss, 2006).

By performing a qualitative study interviewing CEOs, founders, and top executives, the aim is to build a foundation of data, anchored in the real-life experience from those who could be

assumed to possess the skill of strategic thinking. This was done by allowing the managers to lead themselves through a multitude of questions, in which prominent themes and concepts were identified in relation to the notion of strategic thinking. Proceeding this, the data has been compared to existing research within the field of strategic thinking in a managerial setting. Through this grounded theory approach, the purpose of this study was to provide a practice-based perspective on the elusive topic of strategic thinking. This objective is intended to be addressed through the following research questions:

1.3 Research question

- How do top managers perceive the concept of strategic thinking?
 - What can this tell us about the nature of strategic thinking?

1.4 Delimitations

Qualitative studies on the phenomenon of strategic thinking is not an entirely new concept; research on the practical side does exist (Goldman, 2007; Mintzberg, 1987). Therefore, delimitations made in this study include interview subjects were chosen to be exclusively "top managers," limited to CEOs, founders, or regional managers. The intended purpose of this selection was to gain insight from those in a position believed to require aspects of strategic thinking, as well as to understand its relevance to executive management.

The subjects were chosen from a science park located in the south of Sweden, to provide a shared environment for comparison, as well as the geographical proximity to be able to perform the interviews in person. In addition, the innovative and entrepreneurial ambiance of a science park hopefully provided the study with an environment where the ever-evolving idea of strategic thinking has had a place to grow and be applied. This creates a new area, in which to explore the possible meaning of strategic thinking and how it can be utilized in everyday life. It consisted of many diverse people and backgrounds, both social and business-related. Moreover, it could be argued that working at a science park requires a flexible and open mind, as well as an aptitude for handling new situations—aspects related closely to the concept of strategic thinking (Goldman, 2007; Mintzberg, 1994).

2 Methodology

2.1 Research Approach

In line with the exploratory purpose of this study, an inductive approach was chosen (McKenzie & Knipe, 2006; Krauss, 2005; Golafshani, 2003). The inductive approach to research implies that no prior understanding of the concept was used when forming the method. This allows for the research to be unaffected by earlier theories. Additionally, this enables the qualitative research to follow a path set by its own findings, rather than being led astray by conventional notions on the subject. It should be emphasized that there is an importance of letting inductive research be led by its own findings (McKenzie & Knipe, 2006). Some researchers even suggest that management research, especially in a quantitative way, may be obsolete altogether (Koskela, 2017; Scroggins, 2015) since the phenomenon is so anchored in the fast-moving reality of management practice that new research becomes irrelevant almost instantly. In the rapidly changing world of competition and strategy making (Barnett & Berland, 1999), the study may be doing a disservice by developing stagnant models of what strategic thinking is, primarily since it is often based on theories crafted several years ago that are no longer relevant today. The design of this study was therefore created to follow the approach of grounded theory; the practice of continuously revisiting and comparing the theory to the empirical data gathered to that point. Grounded theory was constructed as an alternative way to study the world by discovering emerging theories through research grounded in data (Charmaz, 2006; Glaser & Strauss, 2006). This approach offers the ability to produce and describe abstract notions, then identify relationships between them, in order to understand the issue across multiple contexts (Charmaz, 2006; Glaser & Strauss, 2006).

2.2 Research Design

The structure of the data collection consisted of semi-structured interviews (see Appendix 1. Interview outline) about the manager's perception of the subject strategic thinking. The managerial subjects of this study consisted of CEOs and top executives at a Science Park in Southern Sweden. The subjects were chosen primarily based on geographic proximity to be able to perform the interviews face-to-face. Furthermore, through a contact at the park, there was a higher potential to reach as many respondents as possible. This proved to be advantageous when contacting and finding time in the often-packed schedules of CEOs and top managers. Since this research aims to uncover personal experiences and accounts regarding

the concepts of strategic thinking, interviews were selected as a means of data collection to provide an understanding into everyday life (Bloch, 1996) through natural conversation. The interviews were constructed in multiple sections, consisting of open-ended questions and leaving room for improvised follow-up questions. Each section focused on various topics related to strategic thinking, to understand different aspects of how they interpret the concept, as well as the application to real-life practice.

The questions were selected without much prior knowledge about the subject, which aligns with the method of grounded theory (Glaser & Strauss, 2006). However, it is essential to note that it is most often difficult to go into a study without any prior impressions or knowledge completely (Goulding, 2002; Prasad, 2017; Seale, 1999). The study conductors acknowledge that the commonly accepted idea of strategic thinking could be considered common knowledge. Additionally, the conductors also acknowledge the fact that condensed versions of the most popular theories of strategic thinking have been taught in the one-year master's program leading up to this study. These theories of strategy include that of Grant (2016), Porter (2008), and Mintzberg (2013). Minimal research on the general topic of strategic thinking was also conducted in the early stages of the research, in order to provide a scope in which this study could offer the most relevant impact. This prior knowledge prevents the application of a purely grounded theory, although this is also argued to be often unavoidable (Goulding, 2002). This study assumes the existence of strategic thinking as a concept in the first place, instead of focusing on the nature of such a concept in contrast to proving its existence at all.

For processing and analyzing gathered data, theoretical sampling was used. Due to the nature of probability sampling—in relation to qualitative research—theoretical sampling was used as an alternate approach (Bryman, 2016). Through theoretical sampling, data was collected from interviews and subsequently coded and analyzed. The data was coded into various concepts and categories that imply any interrelationships that can be formed into a theory (Bryman, 2016). Through iteration processes, the growing supply of gathered material was continuously revisited to develop or revise the conclusion, in line with the current findings. For qualitative research, coding is an analytical process that allows qualitative material to be reduced, reorganized, and integrated to lay the base for a theory (Sekaran & Bougie, 2016). Coding was performed in this study through a text analysis of the acquired transcriptions, which identified sections of the respondent's answers regarded to be the most representative of their opinion on the topic. These sections were then collected and sorted after the current code categories,

identifying the degree of coherency to the latest iteration process. Discrepancies between current codes and collected data were then addressed by adding, changing, or revising the set of codes. See Figure 1 for an illustration of the iteration process throughout the study, as well as the development of themes in the data.

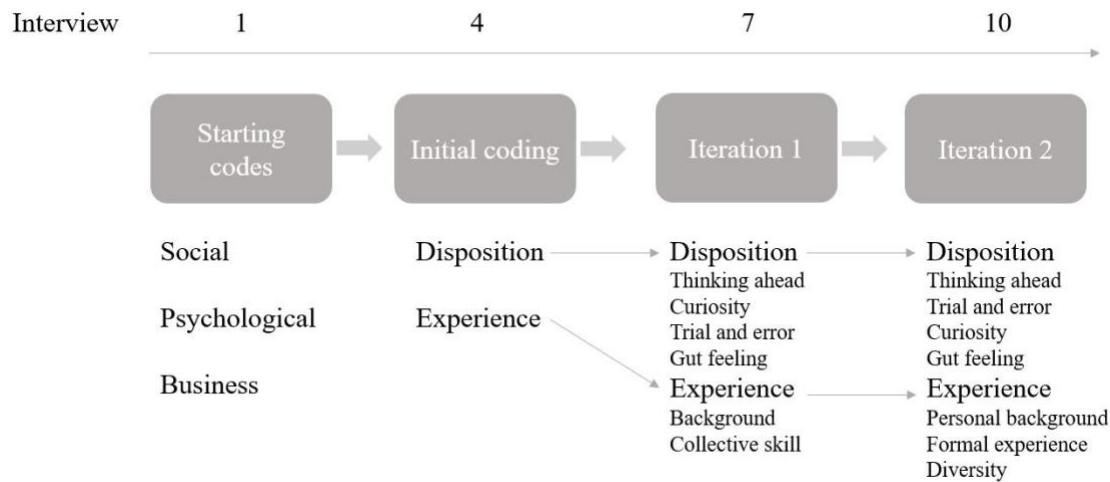


Figure 1. The iteration process of gathered data

Grounded theory approach often requires an iterative process, and therefore, the data that had been collected and analyzed was then subsequently adjusted to reflect any perpetual trends (Miles & Huberman, 1994). Through this constant comparison of codes, categories were then produced. Once several categories had been noted, the relationships between them were examined, to develop grounded reflections regarding the connections (Bryman, 2016). When a trend has been cited in various interviews, the researchers adjusted successive interviews to reflect these new notions, intending to continuously uncover new aspects and tendencies. A conclusion is then reached once a strong relationship between well-developed categories has been established (Strauss & Corbin, 1998).

Step 1. Before the first interview, three general codes were decided to provide a framework fitting to the purpose of the study. These were based on the objective to uncover the perceptions and aspects of strategic thinking, as well as the study conductors' previous general knowledge on the subject of strategic thinking. The starting codes were: 1) Social aspects of strategic thinking, referring to traits such as networking and managing social relationships, 2) psychological aspects of strategic thinking, referring to cognitive processes of handling uncertainty and 3) business aspect of strategic thinking, referring to the focus on corporate application and company competition.

Step 2. After four interviews, the initial grounded coding was performed. At this point, approximately a third of the data had been collected, and the process was performed to alter or refine the codes to fit the data. To “ground” the research in the data (Sekaran & Bougie, 2016; Charmaz, 2006) the three general codes were revised to two new codes, 1) Disposition, referring to innate predispositions within the respondent contributing to their ability to think strategically and 2) experience, referring to the previous education, training, or instances in the respondent's life contributing to their ability to think strategically. After this iteration process, modifications of the interview outline were made to tailor the following interviews to the findings grounded in the current data. Follow-up questions to all questions except 2, 6, 7, and 9 were apparent to be leading too far away from the new initial coding and were therefore removed. The question of “What role does that [strategic thinking] play in your management” was added to provide more precise answers on the topic, and the question “have you heard of strategic thinking” was changed to “what comes to mind when you hear strategic thinking,” after finding this question had been perceived as expecting a “right” answer. The change was made to allow the respondent to answer more freely, rather than leading them towards answering ‘yes,’ simply because they felt they should.

Step 3. After three additional interviews, an iteration process of thorough coding was performed on the current initial codes. The process indicated that the two initial codes still held, although could now be divided into six sub-codes to illustrate more specific recurring themes. In the general theme of disposition, these were: 1) Thinking ahead, the ability to make short-term decisions towards a long-term goal, 2) Curiosity, the importance of keeping a flexible and open mind, 3) Trial and error, not being afraid to fail, as well as seeing it as a natural part of life to learn from, and 4) Gut feeling, the feeling of doing the right thing even when there is no single, concrete fact to base it on. The theme of experience could also be divided into the sub-codes of 1) Background and its significance for how to process information and data, and 2) Collective skill, the importance of diversity among perspectives, opinions, and experiences to think strategically. Modifications to the interview questions were made after the second iteration process as well, adding the question "how do you think your background plays into your ability to think strategically." This was made after finding the connection to be continuously formed by the respondents, to allow for a more specific definition of their interaction. The question “is there a difference between making a strategy and thinking strategically” was also added, since the data to this point showed an interesting divide in this regard. Some mentioned them as the same concept, whereas others purposely separated them.

Step 4. After the remaining four interviews, another iteration process was performed correspondingly to step 3. This iteration process still indicated no significant discrepancy to the two general themes of disposition and experience. However, the sub-codes were revised. The code background was divided into two distinct definitions, 1) Personal background, experience such as upbringing or personality traits, and 2) Formal experiences, such as education or work life experience. The sub-codes were also rearranged (see Figure 1) to be divided under their respective general theme and then listed according to prevalence from most to least mentioned throughout the interviews.

The conclusion, consisting of the codes produced from the second and last iteration, was then compared (through a literature review) to the existing research in the field of strategic thinking. By comparing and contrasting the themes found through the grounded approach to current theories, reflections about the real-life application and relevance of strategic thinking in management were made to offer an alternative perspective to the quantitative strategic research existing today. Through cross-referencing these findings to the existing theories, a more in-depth look into the relationship between the practice and the theoretical perception of strategic thinking was allowed. Where do the findings and theories overlap? What sets them apart? Which theory (if any) can explain the qualitative findings the best?

2.3 Limitations

Limitations regarding generalization are constantly prevalent when performing qualitative studies. Since the sampling and research method are created to reflect the individual and contextual experiences of a particular individual, generalizing the findings are only possible to a certain extent. Qualitative studies are argued to be often substantive, or non-generalizable, although could be applicable in similar situations, as well as for reflection material for further developing the understanding of a complex phenomenon (Seale, 1999; Sekaran & Bougie, 2016). Observation bias, the effect of the researcher's previous perceptions or personal interpretations of the findings (Allwood & Erikson, 2017), could also be considered a limitation in this instance. Although this bias presents a challenge that is hard to avoid, the findings show that awareness and self-reflection tend to lessen its impact on the research (Allwood & Erikson, 2017). Therefore, continuous reflection sessions were set in place during the data collection and analysis period to allow time for critical reflection on the effect of the researchers' observation bias.

3 Findings

Findings from the ten interviews performed are displayed below and sorted into seven identified themes, based on the codes of recurring topics between two or more respondents. Individual opinions only held by one respondent are not included in the findings, diverging views are however represented (when present) within the themes discussed below. See Table 1 for an overview of the findings for this study, succeeded by a more in-depth analysis of each code. There appeared to be a diverging perception between the respondents in regards to the interplay of the concepts ‘strategy’ and ‘strategic thinking.’ Some respondents seemed to make no differentiation between the two, answering questions about strategic thinking as if they required an answer of how to create a successful strategy. To remedy this confusion, the study conductors added a question to the interview regarding whether a difference exists between making a strategy and thinking strategically. Even though a majority answered this question without aid before the question was added, the conductors believed it to be safer to add into the interview, in order to avoid misunderstandings or misinterpretations.

	<i>Code</i>	<i>Mentioned</i>	<i>Definition</i>	<i>General theme</i>
1	Thinking ahead	9 times	Strategic thinking as the way to navigate towards a goal	Disposition
2	Curiosity	6 times	A desire to explore new interests and alternative solutions	Disposition
3	Trial and error	5 times	Failing fast and using it as a learning opportunity	Disposition
4	Gut feeling	2 times	Basing decisions on an intrinsic feeling of being right	Disposition
5	Personal background times	10	Applying personal life experience in managerial situations	Experience
6	Formal experience	8 times	Applying previous work-life experience in managerial situation	Experience
7	Diversity	6 times	Utilizing the heterogeneity of perspectives and expertise in one’s surroundings	Experience

Table 1. Summary of the study’s findings. Divided by the two general themes seen on the far right, sorted after prevalence within each.

3.1 How do top managers perceive the concept of strategic thinking?

3.1.1 Thinking ahead

As mentioned, most respondents noted the importance of separating the concept of making a strategy from strategic thinking. Summarized from the nine interviews where it was mentioned, it could be said that according to the respondents, a strategy is deciding where to go long-term. Contrastingly, thinking strategically was considered more about making every day, short-term, decisions to steer in that general direction. Creating a strategy was considered to be more of a financial decision—an end-goal for competitive advantage on an organizational scale. In order to synthesize this into more tangible parts and handle unexpected hurdles along the way, strategic thinking is needed.

Strategic thinking was described in multiple ways as a quality that exists in a leader or a manager continuously, being practiced over and over as new information or new scenarios happen on the way to a goal or a vision. Noted by two of the respondents, strategic thinking is a day-to-day ability to overview current facts as well as potential paths forward:

"strategy is the compass, but then the tactics are the map because you can do all the strategy you want, but the reality will never be exactly as you think it is."

"It's the ability to view things with a helicopter view and also short-term and long-term."

Similar statements regarding the difference between a strategy and strategic thinking were made by other respondents, also mentioning strategic thinking as a continuous practice:

"We need to know the point we want to go to, and then we will make our way, we'll go that way, then we'll try that way. We'll go a little bit down and then a little bit up again."

The continuous, day-to-day aspect of strategic thinking into the future appears to be a common factor between most respondents. The ability to combine and utilize short-term action for a long-term goal was a recurring definition of the respondents' strategic thinking. In contrast to the company strategy, strategic thinking was perceived as the ability to make daily decisions on a lower level—not always directly connected to the overall strategy or goal, although the

outcome should still lead in the same general direction of where the company should be heading.

3.1.2 Curiosity

Another shared theme among the interviews was that of curiosity. This theme was mentioned in various forms by six of the respondents, all agreeing that it plays a role in their strategic decision process. Curiosity, as a mindset, was considered useful for the managers to keep an open mind, allowing time to explore individual interests or innovative ideas. Three of the six respondents in total who mentioned this aspect saw it as part of their personality. One respondent thought of curiosity as a disposition allowing them to try new things and find alternative solutions:

“I am built to be curious about different things. /.../ So, I do different things. And I think that’s some kind of personality things”

Another respondent answered similarly, attributing their personality for reaching out into unknown territory:

“...I have always been looking for being the face of a company where it's still undefined. I find it much more interesting when you don't have all the answer”

Others noted curiosity concerning gaining additional insights from areas or perspectives where one may not naturally find them. One respondent said that their company works to subsidize employees to receive education in a different field than the one that they are in, anything that might interest them. The manager believed that there will always be some sort of additional insight that can be gained from doing so. In close relation, two other respondents emphasized the need to be open-minded, stating that crucial information can arise from various sources.

“I think one is; you have to keep an open mind because you can’t design those things. I don’t think so, the ideas that come up, they come from different sources”

Additionally, several respondents attributed curiosity as a direct connection to strategic thinking. They identified the need to be curious about the world in order to explore different opportunities. Two of the respondents mentioned the word "curiosity" out-right, and when

asked, one respondent defined it as a broad notion of interest for the future, and to be open towards where it might develop.

“I’m coming back to curiosity that you have to...if you should be able to think strategically you have to be...you have to be curious of where the world is heading.”

Similarly, another respondent saw it as a general interest and fascination with one’s surroundings:

“To be curious about whatever thing. Be curious about the world and not be afraid of the world.”

Six respondents overall saw curiosity as a way to gain insight, collect new ideas, and nurture the ambition to learn new things. This, in turn, helped them think strategically, to search for an innovative solution in times where the answer might not be so clear.

3.1.3 Trial and error

Upon further discussion of the topic of strategic thinking, a recurring theme among the ten respondents mentioned the importance of trial and error. Half of the respondents, when asked about the key aspects of strategic thinking and where it might come from, mentioned the importance of trial and error. Since strategic decisions seldom come with the insurance of success, many managers still see the value of trying. If the decision turns out to be wrong, it can still hold value for future decision making, according to the respondents.

Multiple respondents mentioned that strategic thinking is like steering a ship. The end goal can appear straight ahead; however, the way there is often not predictable. Reaching a goal or fulfilling a strategy requires continuous strategic thinking to figure out the smoothest way there, continually re-evaluating and recalibrating the course when decisions fail or have an unpredictable outcome. One respondent discusses the importance of trial and error because one can never fully anticipate the result:

"it's better to try and if it's wrong let's do it another way /.../ Dare to try it, and if you do it right that's perfect, then it will work. But we don't know that beforehand."

Likewise, two additional interviewees stated that this could enable a person to improve their ability to strategically think when asked about the importance of trial and error as a leader and manager:

“I think one thing I think is important is to allow yourself to try and try to fail fast. If you’re gonna fail, fail fast.”

When asked how this affects being a manager, one respondent answered that it allows the team and company to move forward, adding:

"I would say just try. Go out there and try. Don't be afraid of failure. Cause if you don't try, you will never succeed."

Trial and error allow the manager a chance to assess the real-life application of their decision, which provides the experience they then use to correct or re-evaluate based on the new findings. Some did not see it as a chance, but rather a necessity, noting that today's world is moving fast, and so is a company's competition. This, in turn, means that a manager cannot always sit and wait until the decision feels safe and well thought through. Some decisions need to be made anyway. In these situations, it is vital to appreciate and utilize the opportunity to try. Learning for the future by creating a base of real-life experience was perceived as the core benefit of strategic decision making by two of the respondents. Since there is often a minimal chance to accurately predict what will happen with a company or a team in the future, there is instead, an opportunity to learn from collecting experience with previous decisions. Collecting and taking advantage of these experiences is crucial to realistically advance towards the goal, and therefore, should not be seen as a failure but rather a learning opportunity:

“You try different things and learn what is working and what does not work.”

3.1.4 Gut feeling

Two respondents, when asked about the character of their strategic thinking, referred to the colloquial term "gut feeling." Another term used was intuition, the way to simply sense when something is right or wrong. Both contributed to the success of their strategic decision making and thinking to this; a sort of innate intuition that told them what to do and how to steer towards their goal:

“Guts, I would say. Quite much I do in life, both personally and even in my profession, I use my guts.”

When asked how this plays a role in their strategic thinking, one respondent answered that it is an integral part, adding:

“Strategic thinking is a way to communicate both gut feeling and things that you kind of have a feeling of”

One respondent believed that the world of research is often too quick to name and define terms for abstract notions that may not have such a simple answer, and noted:

“I think strategic thinking is just a label in the business world to talk about gut feeling”

This answer indicates that the respondent thinks of strategic thinking as a notion too wide to set a specific definition, that the concept might have too many influences to simply be attributed to one thing. The use of the idea "gut feeling" further illustrates this, since it is commonly known as an abstract and indescribable way of reaching a conclusion. The likeness of gut feeling to the concept of strategic thinking indicates that, to some of the respondents, the process of making a strategic decision may follow the same pattern. This first impression of strategic thinking as something inexplicable and almost self-propelled proposes a new notion of strategic thinking as a nearly natural occurrence. The question of where this gut feeling might come from did not receive a firm answer, with one respondent thinking it must come from their personality since this is something they have had as long as they can remember:

“As long as I can remember, I've always had that. I've always been, in some sense, walking my own road.”

3.1.5 Personal Background

Interestingly, all ten respondents attributed their ability to strategically think to personal background. When asked about their experience, respondents often recognized their personality and disposition as playing a role. These backgrounds were outlined in personality traits, behaviors, and personal experiences. Some of the interviewees viewed strategic thinking

as something that a person is born with, demonstrating that it relates to their own character. When asked about whether a difference exists between making a strategy and thinking strategically, one respondent notes that strategy is something that can be learned from books while they believe:

“I have a natural strategic thinking and I think some things you can’t learn by books”

Another interviewee described how they came to a successful strategic decision by touching upon a natural ability to see patterns.

“I get impressions from different things. /.../ I think I have an ability to grasp a lot without having all the details. So, then I seek patterns and I think I have this...this is a gift, I would say I got it from my father. So being interested in certain things, not all, but on a very shallow level gives me input into pattern making.”

In addition, one respondent discussed their thoughts on the difference between thinking strategically in eastern versus western cultures, by attributed this variance on what humans had to do over the centuries to survive.

“That indicates that there is something we are partly born with...but I don’t know.”

While respondents viewed strategic thinking as something a person is born with, they additionally perceived it as something that can further be developed from experience. When discussing their thoughts on how a person can develop their strategic thinking abilities, one respondent states:

“I think by experience. And I think also it’s a skill you develop /.../ I think it is the same with strategic thinking, either you have an easy time to see the whole picture or you’re more detailed oriented. But you can definitely develop it”

Another interviewee goes on to describe how their background has played a role in their ability to strategically think by expressing:

"I think it's partly...I mean it's education, it's personality, and its experience. I think those three like a mix that gives you the capability. And you can be stronger in some areas. I mean, there are people with excellent strategic skills without any education at all. And then there are people with splendid education but not the personality and maybe lacking also the experience."

In close relation, another respondent notes how they believed their background plays into their strategic thinking capabilities by mentioning:

"I had my background of traveling and a lot of practical experience of problem-solving in very stressful situations made me realize that strategy is a life saver rather than a choice"

Though it appears that many believe that personal experiences can further one's ability, another cited the limitations of using experience to leverage their strategic decision choices.

"I think experience gives you the ability to ask the right questions. /.../ I'm trying to say that: experience is good if you understand the limitations of your preconceptions, so I think it's more important to ask the right questions then try to give the right answers"

Personal experience seems to provide a database of information, where one can pull relevant information from when making strategic decisions. One respondent discusses the importance of constant learning, believing that gaining insight from fields different than their own could potential provide use when coming up with the next computer innovation. It is possible that pulling from one's experience and applying it to strategic thinking can happen on an unconscious level, as one interviewee discusses:

"I think you can do strategic thinking without being aware of it. Just like you have the knowledge that you're aware of, and then you have lots of knowledge that you're not aware of that you actually have. And it's the same thing with strategy."

Quite similarly, this notion of unconscious strategic thinking was brought up by another respondent, as well. They discussed that if a person indulges their learning (of any kind), they

can develop a broad base of knowledge that can be used to construct a strategy, whether consciously or unconsciously. This indicates that strategic thinking can potentially operate as an intentional process, as well as possibly at a more in-depth cognitive process, occurring below a level of awareness.

3.1.6 Formal Experience

When interviewees were asked whether they believe their background has contributed to their ability to think strategically, eight out of ten respondents reported that their formal experience had played a role. However, it appears hard to separate formal background (education and work experience) from their personal background. Both types of experience play a relevant role, with some responding that both have contributed, while others only cite one or the other. It seems that formal education has given the interviewees specific transferable skills, which one respondent noting as the following:

“I think I learned to think step-by-step and breakdown big problems into smaller items. And project execution. /.../ you learn the ability to digest a lot of information and that information can be anything, but that you learn, you train your ability to do that.”

Similarly, an interviewee reflected on how their formal experience, such as schooling, gives one the ability to problem solve.

“I think what you learn in every school is really to take very complex problem, break them down into their different aspects and try to solve them and find a solution.”

Likewise, another respondent discussed the capabilities their formal education background has given them, concerning their ability to strategically thinking.

“What I was learning then was to digest a lot of information in a short amount of time and find like the interesting and the important parts of the information. So that is what I do every day.”

Others described that possessing any education of any kind has allowed them to develop various abilities that have helped them in thinking strategically. On the other hand, one

respondent notes that it is a blend of personal background that can be developed further from formal education:

"I mean you just have a different way of thinking, and I think that that is partly your upbringing, or I mean every part of matter in that context. And of course, your education obviously you can improve your skills by education. That's the whole idea."

Additionally, a respondent discussed how their background had given them a way to build trust and provide a concrete foundation when trying to get others on board with a strategic decision. Therefore, they view experience as a prominent component when communicating strategy and thinking strategically:

"I think it plays a big role. That I have been in a lot of different environments. So, I understand how people in different environments think and I can translate from academia to industry, industry to research facilities and so forth"

One interviewee discusses a reflection with a colleague regarding their curriculum vitae, explaining that:

"you know, everything boiled down into I can make use of this now, all these strange things I've done in different positions"

Similar statements were additionally confirmed by other respondents, such as:

"but of course, you learn as you do business. And that aggregated knowledge is, of course, something that you use"

Parallel to personal background, these formal experiences provide a basis of knowledge, in which one can pull relevant information and apply it to the situation at hand. It appears that formal education has been more attributed to skills and abilities gained, while prior work experience has presented more applicable tacit knowledge.

3.1.7 Diversity

A consistent trend that was observed through the various interviews was strategic thinking as a collectivist group. A theme which was later coined as diversity. While some cited that due to their company structure, it was necessary for everyone to be involved in the process, others attribute it as a source of gaining insight. One of the interviewees touches upon the disconnect that sometimes comes with being a top executive. Therefore, to be successful in their strategic thinking, it is essential to acquire input from those in closer proximity to the issues.

“Ideas need to come from the ones who are closest to the problem”

One respondent discusses the importance that a person should remain open-minded to ideas and create an environment in which one can share and get feedback on ideas.

“/.../ and then you have to surround yourself with people that you can bounce ideas off.”

Correspondingly, when asked how one can improve their ability to think strategically, a respondent notes that interactions of any sort—such as with colleagues, friends, and other outside sources—allows them to gain additional information and ideas that they can then utilize when faced with a strategic choice.

“I think I become better at it if I interact with many different people. So, for me, interaction.”

Moreover, the importance of creating an environment that allows ideas to flourish demonstrates a critical element of the strategic thinking process. One respondent continues by noting that to improve one's strategic thinking abilities, they need to be nudged to push boundaries:

“Because sometimes you need to get pushed outside your comfort zone. It’s so...that really helps to be in an environment where people challenge you and ask have you tried this? Have you tried that?”

Another respondent stated that one person alone cannot possess all the necessary skills needed to be successful in implementing strategic decisions on their own:

"And I think it's probably not realistic to think that you can, you alone as a manager can fulfill that by yourself. I think that's naïve because you will miss points. You don't cover all the bases, nobody does. I've met brilliant people. They don't cover all the bases"

This collective aspect of strategic thinking is not so much the idea of making decisions jointly, but instead creating an environment that allows for the ability to inquire and gain insights from those around.

3.2 Summary

After reviewing the findings, it is clear that experience (both personal and formal) is the most pertinent concept in strategic thinking, according to respondents. Additionally, interviewees viewed thinking ahead as the most essential skill out of the disposition sub-codes. The prevalence of trial and error demonstrates the shared belief that possessing the aptitude to experiment and test different scenarios enables one to collect real-life experience from previous decisions. Coupled with a sense of curiosity to explore new ideas and solutions, additionally provides a plethora of supplementary insight. While there was a direct question regarding if respondents' backgrounds play a role in their ability to think strategically, all interviewees attributed some aspects of their background to their strategic thinking abilities. It appears difficult to fully separate the interplay of both personal and formal background, suggesting that strategic thinking could be a combination of predispositions and acquired knowledge through past experiences. Gaining collective opinions and placing one's self in an environment that challenges a person's thinking are both viewed as ways to improve one's strategic thinking skills.

4 Literature review

After the collection and summary of the findings, a literature review was performed to create a base of research for comparison. The literature review consists firstly of the general findings regarding the definition of strategic thinking. The topic of strategic thinking takes on many different forms and is connected to a multitude of other concepts. The material in this study is, therefore limited to a review of material regarding the six sub-codes found in the findings section, illustrated in Figure 1 and Table 1. This was also considered the most relevant way to present the literature review, keeping a connection to the research questions and purpose and allowing for an appropriate comparison between the study's findings and existing research.

4.1 Strategic thinking

Research within the topic of strategic thinking provides a myriad of definitions and application areas. Although research on both the subject and its nature is inexhaustible, there still seems to be no consensus on a particular definition. This has also been highlighted by researchers as a common problem when trying to practice or teach strategic thinking in real life (Moon, 2013; Liedtka, 1998; Heracleous, 1998). The performed literature review revealed that a majority of research within the topic was produced during the 1990s but have seen an influx again in the past five years. While 90's research focuses on the importance of strategic thinking and attempting to define it, later researchers seem to prefer to create their own niche definition that best suits their research. The constant appearing of alternative definitions such as strategic decision making, strategic planning, and strategic management further perplex anyone trying to answer what strategic thinking really is. Although some are clear in separating these definitions (Mintzberg, 1994; Liedtka, 1998), others see them as intertwined terms, nested together in use and interpretation (Nickols, 2016; Mason, 1986).

When collecting research within strategic thinking, the name Henry Mintzberg appears frequently. Mintzberg (1994) make a point out of clearly separating the concept of strategic planning from strategic thinking, arguing that the ability of strategic thinking is impeded by planning to a large extent (Mintzberg, 1994). This point of view has been cited numerous times since, with many researchers accepting Mintzberg's initial claim of strategic thinking being a continuous skill to implement decisions, rather than a sporadic effort to create a strategy. With a focus on management in practice, Mintzberg aims to depict managerial concepts as they are

exercised in real life, finding that strategic thinking—led by curiosity and vision—is crucial for prosperous management (Mintzberg, 1994; Mintzberg, 2013).

Ellen Goldman (2007) performed a similar study aiming to depict management and strategic thinking in real-life. Goldman interviewed individuals, pointed out by others, as strategic thinkers. She found that experience such as upbringing and professional advancements, amongst others, contribute to the development of strategic thinking in an individual (Goldman, 2007). Although numerous studies describe strategic thinking in behavioral or personal terms, for example, to "act thoughtfully" (Weick, 1983, p. 225), with the exception of Goldman (2007), very few acknowledge the interaction of management science and behavioral science—at least when it comes to the topic of strategic thinking. Common among most research, is that a study assumes either one side or the other and aims to understand that particular side further. This, however, misses the opportunity to understand the complexity of the situation. Goldman (2007) assumes a "nurture" point of view, asserting a position in the debate on where strategic thinking might come from.

However, Gail Steptoe-Warren (2011) did perform a literature review in 2011 with the aim to understand strategic thinking from these two perspectives combined but found that research containing both were a scarce resource. Defining strategic decision-making was also found troublesome since many different researchers took the liberty to create their own explanation. Dragoni, Oh, Vankatwyk & Tesluk (2011) performed another study examining a deeper difference in the effect that personality traits and experience have on the ability to think strategically. The study found that the accumulation of work experience positively contributes to strategic thinking competency, although the executive's cognitive ability seemed to demonstrate the most substantial relationship to the ability to think strategically (Dragoni et al. 2011). This indicates an interesting bond between personal disposition and strategic thinking, otherwise relatively unexplored within the available research. The study also found that extraverted executives achieved a more significant accumulation of experience (Dragoni et al. 2001), suggesting a complex relationship between the debated concepts nature and nurture.

It should be noted, however, that many definitions do overlap. Attributes frequently mentioned are the ability to adapt to unknown situations, anticipating and evaluating future possibilities (Mintzberg, 1994; Bouhali, Mekdad, Lebsir, & Ferkha, 2015; Dickinson, Farris & Verbeke, 2001), as well as synthesizing experiences or information down to a tangible decision to be

made (Mintzberg, 1994). Chaos control and the personal characteristic of being comfortable with the unknown (Sanders, 1998) is also a recurring definition. Below, these themes are explained further to provide an overview of the most common attributes when defining strategic thinking from a literature point of view.

4.1.1 Thinking ahead

As observed in the findings of this study, the concept of thinking ahead or envisioning decisions beyond the short-term, was the most common denominator of several researchers' definition of strategic thinking. Barnett & Berland (1999) calls it foresight; the ability to foresee consequences of a decision to be made. A similar description is that strategic thinking is the ability to restructure a company's resources with the aim of building revenue, not only for the short-term (Dickinson, Farris, & Verbecke, 2001). Bratianu (2015) highlights the importance of strategic management as a framework permeating a whole business to reach its fullest potential, with strategic thinking at the core. This allows for a business to create strategies sustainable in the long term, with new decision-making methods (Bratianu, 2015). Strategic planning, although separated from the concept of strategic thinking by Gluck, Kaufman, and Steven (1982), is still considered essential for successful and innovative management and that a company must have a considerable amount of strategic thinking throughout the company to be able to reach peak performance (Gluck, Kaufman & Stevens, 1982).

Vision and vision creation could be argued as a topic closely related to thinking ahead. Zabriskie and Huellmantel (1991), found that executives think strategically when they visualize goals, assess alternatives, and identify crucial steps for realizing it. Strategic thinking can allow managers to look forward into the future with confidence to identify a relevant and achievable vision (Zabriskie & Huellmantel, 1991). Mintzberg also mentions vision as a key aspect of strategic thinking, even arguing that successful strategies should not even be plans at all, but visions (Mintzberg, 1994).

4.1.2 Trial and error

Research on trial and error, directly linking to strategic thinking in the sense that has been found throughout this study is available, however, not in isolated studies. Practice as a way to widen one's perspective allowing for more flexible thinking, in turn, aids in thinking strategically. This is often mentioned in passing in a majority of literature on the subject without being given

a sole focus. It is possible that researchers see trial and error as a concept with the same definition as 'experience' and because if this is mentioned even less.

In other research areas such as behavioral science, studies have found the importance of learning by doing as crucial to developing strategic thinking (Camerer, 2003). The same can be found within the field of educational studies (Covington, 2014). Covington (2014) found a clear link between learning to think strategically and not being afraid to fail, since seeing failure as something damaging to one's self-worth hinders the ability to view it as a learning opportunity. Thus, instead of seeking these opportunities, the individual instead develops various tactics to avoid them (Covington, 2014).

4.1.3 Curiosity

Interestingly, there seems to be little to no research in strategic thinking linking it to curiosity. Goldman (2007) mentions it in brief as the driver of collecting the experience that, in turn, lays the base for successful strategic thinking. However, to the study conductors' knowledge, individual studies on this connection have not been performed within the research field of business and management.

An interesting aspect that could be closely related to curiosity is creativity, which has been found in research on strategic thinking. It could be argued that both of the concepts require an innovative and imaginative mindset and are therefore similar in nature, although not the same (Kashdan & Fincham, 2002). Bonn (2005; 2001) argues that creativity is one of three major components of strategic thinking, since "strategic thinkers must search for new approaches and envision better ways of doing things, in other words, be creative." (Bonn, 2005 p.338). Complemented with systems thinking and vision, creativity aids the individual to come up with innovative solutions that are critical for developing unique strategies (Bonn, 2005). Likewise, Mintzberg (1994) argues that creativity is an essential characteristic of strategic thinking, helping an individual's ability to synthesize information and perspectives (Mintzberg, 1994).

4.1.4 Gut feeling

Gut feeling, often referred to as intuition in social psychology (Gilovich, Keltner, Chen & Nisbett, 2015), seems to be a relatively unexplored aspect of strategic thinking. Research on intuition in the context of decision making or cognitive psychology is not equally unexplored (Gigerenzer & Gaissmaier, 2007; Gilovich et al., 2015), yet the concept still holds some

mystery to where it might come from or what it truly is. In the realm of management research, there has been some who have examined the connection between intuition and decision-making. Such research has synthesized definitions stemming from various subjects to "a non-sequential information processing mode, which comprises both cognitive and affective elements and results in direct knowing without any use of conscious reasoning" (Sinclair & Ashkanasy, 2005, p. 357). Two additional studies were found that analyze the interplay of intuition and managerial decision makers. Both studies conclude that intuition plays a role in making managerial decisions, mainly since they are often characterized by uncertainty (Henden 2004; Kutschera & Ryan, 2009). Other research found in this area, discuss the implications of intuition in management and how it might affect the decision-making process (Schwenk, 1988), although its characteristics and origin still seem relatively unexplored in management research.

4.1.5 Personal background and formal experience

Recurring in multiple studies is the importance of experience to develop strategic thinking as an ability (Mintzberg, 1994; Henden, 2004; Moon, 2013; Dragoni et al., 2011; Barnett & Berland, 1999). Goldman (2007) emphasizes this in particular, listing ten kinds of experiences perceived to contribute the most to an individual's strategic thinking—including family upbringing, among others. Goldman (2007), Millett (1988), and Stumpf (1989) all highlight the importance of experience. Building up a base of understandings, perspectives, and notions (Covington, 2014) help the strategic thinkers to make a more informed decision, even when that information is not available in the present. Experience helps to stretch the capacities to think strategically, by expanding the knowledge base on which to base new decisions, even in unknown situations (Stumpf, 1989).

4.1.6 Diversity

Another aspect that seems to be less researched in strategic thinking is the diversity of people and perspectives, or the view of strategic thinking as a collective effort. The outcome of strategic thinking and decision-making can be optimized by allowing a group of individuals to freely share their perspective (Liedtka, 1998), allowing for a broader and more diverse ground to base said decisions on. Abraham (2005) identified strategic thinking as "the process of finding alternative ways of competing and providing customer value," (Abraham, 2005, p. 5) and found it key to identify and involve the right people for formulating the perfect strategic moves.

4.2 Behavioral science

While management and business research highlight the importance of formal experience and practice, there is also research in other fields suggesting otherwise. In behavioral research, studies have been performed to evaluate the role of personal disposition in subjects mentioned above (e.g., curiosity, creativity, and gut feeling) in decision making and problem-solving (Svenson, 1979; Zsombok & Klein, 2014). This presents an interesting divide connecting back to the "nature versus nurture" discussion mentioned previously, that will be revisited in the discussion section to follow. Although strategic thinking is not a psychological term, many of the sub-codes that have shown to be closely related have been researched in behavioral science for decades. One example of this is gut feeling or intuition. Research on intuitive decision-making (Johnson, 1955; Dane, Rockman & Pratt, 2012; Hogarth, 2010) and heuristics (Sherman, 1984; Gigerenzer & Gaissmaier, 2011), among others, are all well-researched areas. Research shows the significant role that our psyche affects our behavior, both individually and socially, as well as management abilities such as making decisions and leading others (Schwenk, 1988; Stubbart, 2007).

4.3 Summary

In summary, the definition of strategic thinking is fluid and highly contextual, changing from study to study. There seems to be some overlaps, such as the importance of experience, the ability to think ahead, and the positive impact of creativity. Curiosity, trial and error, and diversity were subjects less researched, yet mentioned in passing as significant in some studies. See Table 2 for an overview of the literature review findings, sorted by the themes mentioned above.

<i>Theme</i>	<i>Sources</i>	<i>Key points</i>
Strategic thinking	Moon, 2013; Liedtka, 1998; Heracleous, 199; Nickols, 2016; Mason, 1986; Mintzberg, 1994; Mintzberg, 2009; Goldman, 2007; Weick, 1983; Steptoe-Warren, 2011; Dragoni et al., 2011; Bouhali et al., Dickinson, 2001; Sanders, 1998	No widely accepted definition, although a few recurring notions like prediction, planning (although debated by some) and acting in the unknown or a chaotic environment.
Thinking ahead	Barnett & Berland, 1999; Dickinson et al., 2001; Bratinau, 2015; Gluck et al., 1982; Zabriskie & Huellmantel, 1991; Mintzberg, 1994	Envisioning consequences beyond the short-term is argued crucial for strategic thinking, to provide a bigger scope for decision making.
Trial and error	Camerer, 2003; Covington, 2014	Seeing failure as an opportunity to learn can aid in thinking strategically by widening one's perspective
Curiosity	Goldman, 2007; Bonn, 2001; Mintzberg, 1994	Curiosity seems unresearched, however creativity can be seen as a related concept. Creativity allows for better strategic thinking, since it requires imagination and prediction.
Gut feeling	Gigerenzer & Gaissmaier, 2007; Gilovich et al., 2015; Sinclair & Ashkanasy, 2005; Henden, 2004; Kutschera & Ryan, 2009; Schwenk, 1988	Gut feeling, or intuition, plays a role in managerial decision making by providing an intuitive base of knowledge to rely on.
Personal background and formal experience	Mintzberg, 1994; Henden, 2004; Moon, 2013; Dragoni et al., 2011; Barnett & Berland, 1999; Goldman, 2007; Millett, 1988; Stumpf, 1989; Covington, 2014	Collecting and reflecting upon gathered experience help the thinker to make more informed decisions even when the present knowledge is lacking.
Diversity	Liedtka, 1998; Abraham, 2005	Not deeply researched but implies that communication and group reflection aids in decision making.
Behavioral science	Svenson, 1979; Zsombok & Klein, 2014; Johnson, 1955; Dane et al., 2012; Hogarth, 2012; Sherman, 1984; Gigerenzer & Gaissmaier, 2011; Schwenk, 1988; Stubbart, 2007	Suggest that cognitive disposition plays a role in decision making skills. Also confirm the importance of intuition as a decision-making tool.

Table 2. Summary of literature review findings.

5 Analysis

With the base of both empirical findings and a review of relevant research, a comparative analysis was performed to analyze the similarities and differences between the study's findings and today's perception of what strategic thinking is (presented through the literature review). This analysis is presented below, followed by a discussion on this study's practical implications. Lastly, a conclusion of the study is presented along with reflection on possible further studies.

Following the aim of this study to diversify the current research with a perspective from the practitioner, the discussion present the findings in three sections: 1) themes that seem to align with previous research, indicating that these might play a more prominent role in strategic thinking, 2) themes that contrast or lack in previous research, showing areas that would benefit from further research and increased focus, and 3) independent reflections regarding the interplay of the findings of the study and previous research.

5.1 Aligning themes

The findings from this study have been found to parallel previous literature regarding the topic of strategic thinking. Theses similar topics are thinking ahead, trial and error, gut feeling, and collecting experiences (personal and formal).

5.1.1 Thinking ahead

Many respondents discussed the importance of having an overarching goal or vision, as without one, an organization would not know the direction they are aiming to go. When asked to recall a successful strategic decision they have made in the past, four interviewees recognized a time when they changed or realigned the company's goal or vision as a catalyst for success. This aligns with the literature review findings of thinking ahead, of projecting decisions into the future to reap long-term benefits of a short-term decision or realignment of the strategy. There seems to be a value that lies in the idea of thinking in the long-term, some researchers claiming that executives utilize strategic thinking when envisioning goals, evaluating alternatives, and identifying key steps to fulfill it (Zabriskie & Huellmantel, 1991). Additionally, as mentioned in the literature review, Mintzberg (1994) notes that strategies are not plans but rather visions. Previous literature coincides with the input received from interviewees revealing a connection to prior studies. Being that almost all respondents mentioned some form of futuristic thinking,

highlights that this is perceived as a crucial component of strategic thinking. The necessity for a clear goal, vision, or 'leading star' seems to appear as an overarching theme for strategic thinking.

5.1.2 Trial and error

Another mutually supported topic among this study and prior research is trial and error. Interviewees noted the importance of failing fast and learning from experiences as a vital aspect to improve strategic thinking. While it appears to be scant in management research, other research asserts that learning by doing is a crucial step in developing strategic thinking (Camerer, 2003), as well as not being afraid to fail (Covington, 2014). However, due to the perception that failure is detrimental to one's self-worth, individuals, in turn, create tactics to avoid this failure (Covington, 2014). This can suggest that one can potentially develop tactics to circumvent this. It may be possible to develop a mindset that allows them to seek out these learning opportunities instead. Having the ability to envision alternatives and test whether they work or not, provides insight to base future decisions. The theme of trial and error appeared in several of the respondent's interviews, implying that this disposition can be essential in gaining a repository of knowledge to use for strategic thinking decisions.

5.1.3 Gut feeling

A few respondents cited that they use their "gut feeling" or intrinsic feeling of being correct, to base their strategic decisions on. While "gut feeling," also labeled intuition, appears to be a fairly unexplored topic, the research there discusses intuition as pulling from experience and expertise but operating below a level of consciousness (Sinclair & Ashkanasy, 2005). It is believed to allow a person to holistically scan their memory and recognize patterns from their past experiences (Sinclair & Ashkanasy, 2005). Interestingly, as mentioned in another area of the findings, two additional interviewees stated they believed strategic thinking may happen subconsciously. This leads the researchers to believe that there may be a more significant link to cognitive functions than previously thought. Prior research does recognize that intuition plays a role in the decision-making process (Henden 2004; Kutschera & Ryan, 2009), however, both research and this study's respondents had a difficult time identifying where this intuition comes from and how it operates when making decisions.

5.1.4 Collecting experience

The theme of collecting experience (both personal and formal) presented to be an essential aspect of strategic thinking among respondents. While literature that relates emphasize that gathering experience can aid in the capacity to think strategically (Stumpf, 1989), it does not appear to place as great of importance on it as this study has found. Interviewees conferred that strategic thinking incorporates intrinsic characteristics, as well as an accumulation of skills and knowledge acquired through previous work experience and education. In addition, others described their strategic thinking as a product of how they were brought up or credited their personality as the reason they perpetually try to learn and explore more outlets. Covington (2014) expresses the prominence of experience when making an informed decision with little information because it aids in building a base of understandings and perspectives. Being in varying environments, learning from past jobs, and studying various subjects have provided respondents with transferable skills that they utilize when making strategic decisions. The prominence of this sub-code indicates that both personal and formal experience is an essential foundation for strategic thinking.

5.2 Contrasting themes

Within the findings, a few themes were found that suggest novel aspects of strategic thinking previously not mentioned (or mentioned in brief) within the previous research of strategic thinking. Although to different extents, the topics of curiosity, diversity, personal disposition, and the role of strategic thinking in management seem to differ from the literature found for the literature review.

5.2.1 Curiosity

Curiosity was one of the seven sub-codes identified in this study, however, this topic was not found in previous research. As one of the more commonly mentioned codes, six out of ten mentioned the concept in correlation with successful strategic thinking. Curiosity seemed to be a vital part of the subjects' perception of strategic thinking.

However, a connection could be made—as argued in the literature review—to creativity. Both curiosity and creativity utilize imagination and innovation to see the world differently (Bonn, 2001; Goldman, 2007; Mintzberg, 1994). It is, however, interesting that the word 'creativity' was not mentioned in any interview, in contrast to six respondents citing 'curiosity' as a critical

factor of strategic thinking. This presents a factor that may need further investigation to define its role within strategic management. Drawing from the respondents' answers, curiosity represents the innate interest to put oneself in new situations, see from new perspectives, and not settle for a solution that is merely 'good enough.' Curiosity seems to foster a kind of ambition, a want to keep thinking forward even in times where one is comfortable or safe. The subjects also saw this curiosity as part of their personality, suggesting that this aspect of strategic thinking is of a more dispositional nature, in contrast to most research accepting strategic thinking as an external skill.

5.2.2 Diversity

Although there is research on the topic of diverse perspectives in strategic thinking, it still presents a discrepancy to the study's findings. The research briefly presents diversity in perspective, expertise, and communication tactics as a component, yet the subjects of this study perceived it to be of vital importance. The six respondents who mentioned this topic all argued for it being a significant factor to the success of their strategic decision making.

This suggests that the ability to collect and synthesize not only facts but also values may be a key to successful strategic thinking. The subjects themselves highlighted this, noting that it is crucial to understand what kind of opinions and values one's co-workers hold to be able to correctly evaluate possible outcomes of strategic decisions. The collective aspect of strategic thinking is scarcely researched but could provide more insight into strategic thinking as a social skill rather than an individual skill.

5.2.3 Personal disposition

The sub-code of 'personal experience' in this study refers to the experience from personal life and its role in the manager's ability to think strategically in a professional setting. This also includes experience with developing personality traits, talents, and discovering personal dispositions innate to the individual. All ten respondents mentioned experience from their personal life as a core aspect of thinking strategically, most referring to inborn temperaments they have had throughout all of their life. This includes the previously mentioned curiosity and other elements like gut feeling.

Researchers such as Goldman (2007) seem to agree to about half of the definition mentioned above, however the opinion that personality or innate disposition of the individual offer

something vital for thinking strategically does not seem prevalent in previous research. Gathered from an overview of previous literature, the commonly held opinion is that strategic thinking is an individual, but not intrinsic, skill. Some acknowledge personality as a factor, but the findings of this study suggest that the personal foundation of born traits or dispositions may play a more significant role than previously expected. However, it is worth noting the importance of experience, which was addressed in the section of aligning themes, is something that both the study's subjects and research regarded as a vital part of strategic thinking. Personal experience and personality might be two subjects hard to draw a line in between, and it is, therefore, possible that the subjects themselves have trouble discerning innate traits from learned behavior. Further research on the personality traits behind strategic thinkers, following the path of Dragoni (et al., 2011) could give valuable insight into the balance of external and internal factors.

6 Discussion

6.1 The complexity of strategic thinking

An overarching reflection made throughout this study was how complex the phenomenon of strategic thinking seemed to be. This was expected to some extent since the study's purpose was based on the apparent difficulty to find a clear definition. Finding multiple themes, all closely intertwined, truly show the complexity and multidimensional nature of strategic thinking. Personal disposition, experience, and diversity all seem to weave together to create the base for strategic thinking. When reflecting on the study as a whole, the true common denominator appears to be a multitude of perspectives allowing for a vast pool of knowledge and experience to draw from.

There seems not to be one single kind of experience or personal trait to call the source of strategic thinking, but more an ability to add to and reflecting on one's pool of experience. This opens up an interesting discussion regarding the nature of strategic thinking. The findings suggest that while experiences are at the center of strategic thinking, the ability to grow and exploit this experience-based knowledge requires certain personal dispositions. These particular dispositions allow an individual to adopt mindsets that aid in thinking strategically. Trial and error, as outlined above, facilitates a learning opportunity through failure, which can then provide tacit knowledge that is then stored in the memory bank for future situations. Concurrently, with curiosity, one can explore different fields other than their own, opening them up to new insights.

When searching for a solution in times of ambiguity, the necessity for input and interactions become essential. As one respondent describes, it is naïve to think one manager alone can cover all the bases; no single person can do that. Other colleagues may be more specialized in a specific area or have encountered particular events, in which their knowledge can provide use. Thus, if one has not attained certain experiences or have not encountered specific fields, it is a necessity to ask others for their input. Therefore, gathering opinions and input is a way to synthesizes others' encounters with something similar. However, it seems that even if a person builds up their experience-based knowledge through various outlets, they still need to be able to recognize patterns and pull applicable information to the situation at hand.

6.2 Internal and external aspects of strategic thinking

The findings of this study, in conjunction with prior research, indicates that there is no single concept relating to strategic thinking. Instead of being one comprehensive strategic thinking "trait," it appears to be an integration of several different qualities functioning together. From the beginning of the study, the conductors were able to observe and classify two general themes relatively quickly. Moreover, these two themes were sustained throughout the remainder of the study. There appeared to be a distinct difference between disposition and experience during the interviews, which can be interpreted as a potential interplay between specific internal and external forces. Since it proves challenging to narrow strategic thinking down to just a few or one specific concept, it can be alleged that all themes found to play a part when thinking strategically. See Figure 2 for an overview of the themes found connected to strategic thinking through the internal/external paradigm. For example, Goldman (2007) suggests that there are ten different kinds of experience gathered through varying levels of interactions, which play a role in a person's ability to strategically think. In this study, there were seven themes found, however, more extensive research could possibly reveal many more. This can also indicate that the seven themes found in this study could potentially be as multilayered as Goldman (2007) found experience alone to be.

While the findings indicate that external possibilities for experience collection are essential, an individual might still need to possess certain internal abilities to utilize these experiences properly. Notably, Mintzberg (1994) highlights that strategic thinking is about synthesis, which involves intuition, creativity, and an integrated perspective (Mintzberg, 1994). Following this same logic, an individual can experience a multitude of occurrences but it may only prove to be useful if they possess internal traits that allow them to use the most relevant and applicable information in the situation at hand. Therefore, this study's findings suggest that Mintzberg (1994) is the closest, however, that appears to be only a small portion of the bigger picture.

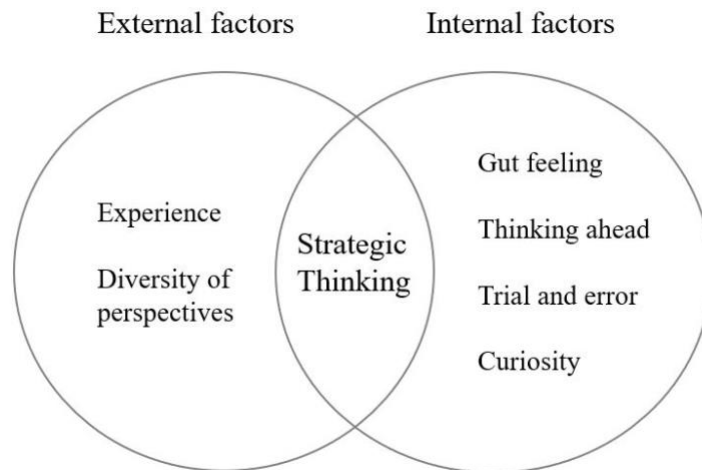


Figure 2. Perceived interplay of themes found

The main research question set out at the start of this study—how top managers perceive the concept of strategic thinking—proved difficult to provide with a simple answer. Several definitions, opinions, and focus points were revealed, differing from respondent to respondent. This multitude of aspects might, at first glance, seem to provide no answer of value. However, looking deeper into these aspects to search for an answer to the sub-question of what it could tell us about the nature of strategic thinking, these different themes together seem to paint a bigger picture, each aspect providing something of value. Although this qualitative study does not provide data with statistical validity, the indications of strategic thinking as a multi-faceted and organic ability with no single source seems plausible, given the multitude of answers from both respondents and scientific research.

Could this multiplicity of factors be just what a strategic thinker need? The flexible and fickle nature of strategic thinking as a whole—for example, making decisions to prepare for unexpected situations—may even demand it to be performed properly. An overarching impression from all respondents was the importance of not a single aspect, but a collection of experience, abilities, dispositions, and mindsets. Further initiatives to not search for a single definition, but instead to map out the different factors (both internal and external) to understand how they together form a web of knowledge, may carry the field of research on strategic thinking forward in the future.

6.3 Interdisciplinary collaboration

As the study conductor's field of knowledge expands beyond business research, the aim was to combine it with behavioral science, in which the conductors have a bachelor's degree-level expertise. Interestingly, the connection between the two subjects proved evident throughout the study, with many researchers relating strategic thinking to psychological, cognitive, or social topics. The interplay of internal and external factors also suggests a possible area for collaboration between managerial and behavioral science. Although this has shown prevalent in previous research to some degree, there still seems to be a lack of collaboration or true utilization of the behavioral sciences. Utilizing the vast behavioral research within the areas tied to strategic thinking could offer a deeper insight into the true nature of strategic thinking.

The collective theme in this study, diversity, is a prime example of this. Social psychology offers many theories and studies on the concept of group behavior and collective thinking. Making use of this through interdisciplinary collaboration would give a stronger foundation when tackling strategic thinking. Dragoni (et al., 2011) and a few others have performed studies along these lines but more significant initiatives to collaborate between the social and economic sciences could hopefully push strategy research further.

The study conductors do acknowledge the fact that this connection, and the perceived gain from interdisciplinary collaboration, might be due to their previous knowledge on the subjects. Researchers with backgrounds from other areas, such as biology or IT, might find other valuable links to their own fields of expertise.

6.4 Conclusion

Relating to the purpose, this study aimed to present insight into the concept of strategic thinking from the practitioner's perspective. This presented both confirmatory findings to previous research, such as the importance of projecting decisions forward in time. The findings also presented some contrasting themes, such as the new notion of curiosity and other personal dispositions playing a significant role in strategic thinking. The argument can still be made that everyone has the opportunity to better understand and possibly even develop their strategic thinking, with the right tools. With the opportunity to grow the mindsets necessary for successful strategic thinking, such as trusting one's gut feeling or learning not to fear failure,

the personal disposition does not have to be the end-all measure of the ability to think strategically.

Even though the concept of strategic thinking still presents somewhat of a challenge to define, this study suggests that it might be this diversity of definitions that might carry the actual charm. Experience, new definitions, additional information, and novel perspectives all add to the growing supply of knowledge for managers to base their next decision on. On the other hand, the ability to discern what knowledge to apply also seems like a key aspect of strategic thinking, implying a crucial connection between the two. Therefore, the discoveries in this study indicate that strategic thinking could be the opportunity to gather diverse experience combined with the personal disposition to know when and how to utilize it.

6.4.1 Practical Implications

It is important to remember that the qualitative nature of this study limits how these findings can be accepted as generalizable or as a definitive answer to the true nature of strategic thinking. However, this study can act as an indicator of how managers themselves seem to perceive the concept, an approach that is growing in popularity within the field of business research. The aim of the study was to offer insight into the concept of strategic thinking from the practitioner's point of view, to further build the base of knowledge on which future researchers can draw from.

The aim was also to diversify what areas of research may be relevant when examining strategic thinking. With a focus on behavioral science, the findings of this study have indicated that there exists a great opportunity for business and behavioral science to cooperate in future research approaches as well.

Another practical implication area for this study could be the education sector. The findings suggested that not only the external factors such as experience play a part in strategic thinking but personality and mindsets (like not fearing failure) also seem to be of great importance as well. This could be of interest for developing the business and management education sector aiming to educate tomorrow's managers. Traditional education, often based on theory or practical application could, therefore, be complemented with initiatives to heighten creativity or develop curiosity to offer several different ways to better one's strategic thinking. Approaching education from this multifaceted way could hopefully aid in developing strategic

thinking from various perspectives, providing a more holistic approach to managerial education.

6.4.2 Future Research

Since there seems to be an abundance of these various themes within behavioral sciences and not within business research, this suggests that there should be more research examining the intersection of these two fields. Furthermore, a limited amount of previous research takes a more real-life based approach and consequently becomes challenging to put the findings into practice. Additional studies examining a more real-life approach can provide a more holistic picture on the implementation of theory to practice.

Additionally, the findings of this study indicate a relationship between formal experience and personal disposition, in regard to strategic thinking. Due to its qualitative nature, no conclusions can be made. However, additional research in this sparse area can provide more clarity on the interaction. Dragoni et al. (2011) present a similar study investigating this connection through a quantitative method. Such quantitative studies can prove to be valuable in assessing how instrumental this study's seven sub-codes are statistically.

A handful of interviewees mentioned the notion of "gut feeling" or intuition, in conjunction with others believing that strategic thinking can occur as subconscious thought. Previous research on the topic of intuition leads to the idea that a person can subconsciously scan one's memory bank for patterns and information relating to the decision at hand (Sinclair & Ashkanasy, 2005), connecting these two notions together. This indicates that there can be a possible cognitive component to the ability to think strategically. Therefore, further cognitive psychological research should be performed in the relationship between intuition and strategic thinking.

During the interviews, a question was asked regarding whether the respondents believed strategic thinking played a role in their management. While this was not the focus of this research, the study conductors were interested to find out what impact the respondents believe strategic thinking has on their management. Therefore, the response only relied on their personal perception of what they thought strategic thinking was. As a result, almost all interviewees believed that strategic thinking plays a role in their management, however, the degree to which it does varies. One respondent alleged that the higher up a person is, the greater

the importance it has. Thus, further research into the variance and necessity of strategic thinking for middle managers versus CEOs and top executives should be done.

Additionally, a few respondents noted that it is significant but not so much in their day-to-day work and is something that needs to be deliberately thought about. The variety of answers presented fascinating responses, however, this was not the focus of this study and no inference can be made. Furthermore, the responses received suggest that future research on the importance of strategic thinking in different occupational areas (such as innovation, finance, IT, etc.) should be performed. Without a single concrete definition, the impact of strategic thinking may be hard to identify clearly. Therefore, continuous research should be conducted to further aid in understanding the complex nature of strategic thinking.

Lastly, respondents were asked their opinion on whether the ability to strategic thinking can be improved. Again, this was not the core focus of this study, however, the responses indicate that this is an area that should be explored further. Since these interviews we based on the respondent's perception of strategic thinking, the answers given reflect their personal definition of it. As such, a handful of respondents believed that this is something that can be done, however, to do so still remains unclear. The interviewees' responses indicated that it could possibly be something that is developed through experience (personal, work, and education). Additionally, the respondents listed a variety of concepts that appear in the seven themes identified above, such as understanding of where one is heading, being nudged out of one's comfort zone, as well as having interactions and input of different opinions. Others noted that they were unsure of whether it can be improved and one even cited that they believe a person should only improve skills they are innately good at. Thus, only a person who is naturally better at strategic thinker should work to develop that skill. The difference of opinions conveyed suggest that further research into the ability to improve strategic thinking should be done.

Appendix

1. Interview Outline

Part zero

0. Introduction of us
1. Tell us a little bit about your company!
 - a. How many years have you spent in your current position?
2. What is your educational background?

Part one - general understanding of management

3. Tell us about your role in the company
4. What does your management/leadership style look like?
5. What qualities do you think is necessary to be a good manager/leader?
 - a. Do you know anyone who is a great manager? What are they like?

Part two - The role of strategic thinking in management

6. What comes to mind when you hear strategic thinking?
 - a. What does it mean to you?
 - b. Is there a difference between making a strategy and thinking strategically?***
7. How does that play a role in your management?
8. Tell us about a time when you made a successful strategic decision
 - a. How did you come to that decision?*
9. How do you think your background plays into your ability to think strategically?*

Part three - The ontology and source of strategic thinking

10. Where do you think your strategic thinking comes from?
11. What do you think is necessary for someone to improve it? Is that possible?

* questions added after the first iteration

** questions added after the second iteration

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