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Exploring Decision Making Processes and their Influence on Uncertainty Management

A Qualitative Case Study of Novice
Entrepreneurs in Early-stage Ventures

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Abstract

In this master's thesis, data from eight different cases of novice entrepreneurs is gathered. The goal was to investigate how novice entrepreneurs shape their decision-making process to manage uncertainty in the early stages of their ventures. Utilizing qualitative interviews conducted between March and April of 2024, this study delves into the different strategies used by novice entrepreneurs in their decision-making processes and how they manage uncertainty in the early stages of their start-ups.

The analysis of the empirical data provided three aggregate themes: reasoning logic, exploring external knowledge, and impulsiveness. These various themes serve as the cornerstones for comprehending the choice and were selected through the process of a thematic analysis. By analysing and comparing the three aggregated themes with earlier research, in regards to setting the course, seeking knowledge, and gaining experience, a new framework is presented.

The framework describes how novice entrepreneurs shape their decision-making process in uncertainty in early-stage ventures: having a clear idea of the kind of company they want to be, having strong values, learning from their network and making the most of the resources at their disposal, and gaining experience by trying out various options and solutions. The research revealed that these elements have the greatest influence on how novice entrepreneurs formulate their decision-making processes. By providing these insights, this study not only supplements the theoretical understanding we have today but also offers practical insights for aspiring entrepreneurs who want to understand how novice entrepreneurs navigate and shape their decision making process under uncertainty.

Keywords: *Uncertainty, Decision-Making, Novice Entrepreneurs, Start-ups*

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1. Introduction

A background on the phenomenon of entrepreneurship will be provided in the upcoming chapter, emphasising the distinctions between novice and expert entrepreneurs. Additionally, the Introduction chapter will point out the flaws in the way that the current theory interprets the distinctions between novice and expert entrepreneurs and outline the questions that the study that follows will attempt to address.

1.1 Background

Entrepreneurship is the foundation for change and innovation, and therefore plays an important role in society's overall development (Davidsson, 2005). In a time in need of transformation, entrepreneurship is more necessary than ever, as it creates change, innovation, and value. Thus, to fully realise the potential of innovation and entrepreneurship, it is critical to comprehend the driving forces and mechanisms behind these endeavours (Davidsson, 2005; Ratten, 2023). The definitions of entrepreneurship are many; some see the phenomenon as a process and the emergence of opportunities; others view the individual behind the entrepreneurship. Regardless of the definition, the phenomenon plays a significant role in the future, where entrepreneurship can solve critical problems (Landström, 2020). The importance of entrepreneurship and innovation sets the groundwork for this thesis, with the goal of exploring entrepreneurship and how novice entrepreneurs reach their full entrepreneurial potential in their decision-making processes.

In the field of entrepreneurship, the importance of being an expert or a novice has an impact on the progression of an entrepreneurial project (Politis, 2008). Moreover, the decision-making process is also affected if the entrepreneur is an expert or a novice. Expert entrepreneurs possess the necessary skills as well as knowledge and can understand the tasks needed to be done on a larger scale. Research shows that uncertainty management is another factor that expert entrepreneurs can manage better where the recognition of potential pitfalls is easier to define. Being a novice in the world of entrepreneurship affects the outcome of the entrepreneurial project, as a lack of experience influences the results since uncertainty is

always present. (Read & Sarasvathy, 2005). The likelihood of making poor decisions or wasting time on unimportant tasks is higher for novices than for experts who have experienced similar workloads prior. However, novice entrepreneurs have other skill sets from previous experiences that may have an impact on the results of their entrepreneurial projects. The entrepreneurial arena is characterised by uncertainty and risk, with over 50 % of new ventures failing within the first five years (Shane, 2008). Since novice entrepreneurs lack the same uncertainty management and decision-making techniques as expert entrepreneurs, they are even more affected by the uncertainty and risks of entrepreneurship. The novice entrepreneur is more affected by uncertainty and lacks the tools to manage it, their decision making process looks different. The research shows a holistic understanding of how they shape their decision making process, but the contributing factors have not been explored yet and how these help them manage uncertainty.

High degrees of uncertainty are a part of the entrepreneurial experience, and entrepreneurs must take this into account when making decisions. Since the future is unpredictable, taking risks is also necessary (Sarasvathy, 2001). According to Meijer et al. (2007), it is crucial to take into account the various risks associated with different decisions. Since uncertainty has a complicated nature, handling it requires more than just planning ahead and making educated guesses about the future. It concerns the way in which the entrepreneur uses their unique cognitive process to view and understand the circumstances (Magnani & Zuchella, 2018). These elements are crucial in the decision-making process. Prior research focuses on the general understanding of uncertainty and its effect on the decision-making process. Therefore, an understanding of how novice entrepreneurs manage uncertainty through their decision making processes would be beneficial to investigate further to understand the difference between entrepreneurs.

Due to the different backgrounds and prior knowledge of expert and novice entrepreneurs, the decision-making process gets influenced and affected. Regarding the ability to process, analyse, and comprehend information, expert entrepreneurs possess a refined ability to understand the information effectively and which areas are of importance (Shepherd, Douglas, & Shanley, 2000). Novice entrepreneurs can struggle to understand how to create an overall understanding of the information, which leads to poor uncertainty management and tedious processes. The amount of time invested in decision-making processes varies amongst entrepreneurs and is contingent upon their prior knowledge and experience with similar

decisions (Dew et al., 2009). Since lack of experience influences the decision making process, the problem of “how do you know what to do when you don't know anything” occurs. The research today mainly explores the differences between novice and expert entrepreneurs, and therefore this study wants to further explore how novice entrepreneurs shape their decision making process, since they lack the experience to know what to do.

The available research shows that a novice in the field of entrepreneurship tends to use other logics than the expert, where the expert logic has been proven more successful when it comes to developing new ventures (Read & Sarasvathy, 2005). The differences between the novice and expert entrepreneur have only been researched from a general perspective, how the general decision-making processes under uncertainty are handled by entrepreneurs. Prior research has been conducted in a generic setting compared to the novice entrepreneurs in early stage ventures that have been interviewed in this study. Not all new businesses that succeed are started by knowledgeable, seasoned business people. Thus, research into the novice entrepreneurial process, uncertainty management strategies, and how a novice entrepreneur can make wise decisions even in the absence of experience is necessary. The theories lack understanding of how entrepreneurs without prior experience, knowledge, and resources do under uncertainty, which is an understanding that would be beneficial for people who want to proceed in an entrepreneurial career but lack the experience. This study wants to further the research of novice entrepreneurs that has been presented, by presenting the factors that novice entrepreneurs use in shaping their decision making and how that influences their uncertainty management. With the framework of novice entrepreneurs decision making processes, this study aims to fill the gap in prior research.

1.2 Purpose and Research Question

Prior studies have shown how the general decision-making process works, what different factors affect the process, and how varying circumstances influence the decisions (Sarasvathy, 2001; Engel et al., 2014). However, we lack an understanding of the decision-making processes of novice entrepreneurs, as well as how uncertainty affects this process, and this study wants to contribute to the theoretical gap. The definition of novice entrepreneurs in this study is entrepreneurs who have little to no prior work experience, as well as no entrepreneurial experience prior to the venture they have started today. With the

help of interviews with novice entrepreneurs, the study wants to recognize what techniques are used to shape decision-making processes under uncertainty.

This study wants to provide an in-depth understanding of novice entrepreneurs and contribute to entrepreneurial academia by filling a theoretical gap as well as making suggestions for further relevant research. The following research question has been formulated to be able to answer the purpose of the study and provide a deeper understanding of the decision-making phenomenon in entrepreneurship:

How do novice entrepreneurs shape their decision making processes to manage the uncertainty in early stage ventures?

With the help of semi-structured interviews with 8 different novice entrepreneurs, the study explores the decision-making processes and how they deal with uncertainty to obtain an answer to the previously presented research question. By exploring the decision making processes of novice entrepreneurs, the study contributes further knowledge on how entrepreneurs who lack knowledge, experience, and resources navigate uncertainty. This study has, with the help of the different respondents, been able to provide a framework. The framework built from this study presents an explanation for how different aspects affect the decision-making process, as well as how novice entrepreneurs manage uncertainty.

1.3 Thesis Outline

In conclusion to the introduction, the following chapter, Theoretical Framework, will provide an understanding of the most relevant literature for our research question and a clearer view of the background to the study. Thereafter, the methodology chapter will be presented, explaining the methods chosen to conduct this study, the reasoning behind the decisions, and the limitations. The following chapters, Empirical Findings and Analysis, are where the empirical data collected will be presented and analysed with the help of the theoretical framework to make sense of the empirical data and provide answers to the research question. The final chapter, Conclusion, will summarize the information the study has produced, offer some closing thoughts, and suggest areas for future research.

2. Theoretical framework

This chapter will cover the various theories and previous research on entrepreneurs and the effect of uncertainty on their decision-making processes. The purpose of this chapter is to outline the theories that have previously been looked into and provide a framework for interpreting the findings of this investigation. The following subjects will be covered in this chapter: uncertainty, entrepreneurial teams, experience in entrepreneurship, and decision-making logic.

2.1 Uncertainty

Since uncertainty is a natural component of entrepreneurship, it must be controlled and taken into consideration when starting new businesses and making decisions (El-Awad, Gabrielsson, & Politis, 2017). Uncertainty affects the entire field of entrepreneurship, and there are many different types of uncertainty that entrepreneurs must deal with. Uncertainty can come from both internal and external sources. Entrepreneurs have to deal with uncertainty about other actors' behavior, their surroundings, their own lack of knowledge, and their own confidence (Magnani & Zuchella, 2018). Certain people tend to overestimate uncertainty and respond to it with excessive optimism and confidence, which results in a decrease in vulnerability and a poor decision-making process (Bromiley et al., 2014). Some, on the other hand, choose to avoid taking risks or put off making decisions in order to deal with uncertainty, which can lead to lost opportunities and underdeveloped areas (Matthews & Scott, 1995; Shane & Venkataraman, 2000).

The unpredictability of entrepreneurship forces the business owner to balance risks that could open up new opportunities with past experiences (El-Awad, Gabrielsson, & Politis, 2017). Thus, the entrepreneur must manage the risks and uncertainty that come with every new opportunity (Meijer et al., 2007). An entrepreneur's ability to make decisions in the face of uncertainty increases with experience (Shepherd, Douglas, & Shanley, 2000). The entrepreneur can enhance their decision-making processes by utilizing their personal learning experiences to gain insight into the relationship between their experience and perceived uncertainty (El-Awad, 2019). As a result, the entrepreneur's experience affects the

decision-making logic employed in uncertain situations. Sarasvathy (2001) notes that inexperienced entrepreneurs typically employ causal logic as opposed to effectuation. It is proposed that an entrepreneur's experience plays a critical role in determining the actions that follow and how they view uncertainty (Politis, 2008.)

2.2 Experience in Entrepreneurship

Previous studies have shown that entrepreneurs with experience in the field of entrepreneurship have a larger toolbox of skills than novice entrepreneurs, allowing them to cope with liabilities to newness to a greater extent (Politis, 2008). Liability to newness refers to the different challenges and risks that entrepreneurs face when starting a business, including the lack of established procedures, uncertainty regarding organisational roles, high costs, and the lack of developed informal structures. Entrepreneurs with experience in entrepreneurship possess a deeper understanding of their industry and are able to make reasonable decisions and respond to unforeseen circumstances with reason. On the other hand, novice entrepreneurs do not have the same skill set, which can affect the outcome of certain decisions (Dew et al., 2009; Politis, 2008). Entrepreneurs who have experience in start-ups therefore have a larger skillset that can help them overcome challenges and obstacles in a more efficient way, and navigate the complexities of launching a new venture successfully (Politis, 2008).

One way that experienced entrepreneurs differ from novice entrepreneurs is in how they frame their problems. Experienced entrepreneurs have a tendency to approach decision-making processes and problems with a heuristic approach, which drastically differs from that of novice entrepreneurs (Dew et al., 2009). They use more effectuation in their processes and approaches (Dew et al., 2009; Politis, 2008; Sarasvathy, 2001). Entrepreneurs with less experience often think more about decisions, in fear of making the wrong one. They think about all possible outcomes in the hope of finding the best solution, in comparison to experienced entrepreneurs who implement a heuristic approach with a trial-and-error mindset (Sarasvathy, 2001).

2.2.1 Work Experience in relation to Entrepreneurial Experience

It can be equally beneficial to have prior work experience before launching a new business and entering the world of entrepreneurship as it can be to have prior entrepreneurial

experience. All the information that a person acquires is beneficial when making decisions, even if some parts of the experiences are different from one another (Bignott & le Roux, 2020). However, there are certain skill sets that are more beneficial for the positive outcomes of a business venture. Prior start-up experience provides certain types of valuable skills as well as confidence in entrepreneurial activities.

Individuals with work experience but no entrepreneurial experience have a different set of skills that can be beneficial when starting a business. They gain a better understanding of how the operative side of a business works and inspiration on how a business can succeed (Bignott & le Roux, 2020; Ramaya, Ahmad & Fei, 2012). In terms of entrepreneurial characteristics, intentions, and behaviour, the results differ depending on previous experience and knowledge (Ramaya, Ahmad, & Fei, 2012).

Previous studies show that having both work and entrepreneurial experience is beneficial when wanting to start a business, as both types of experience complement each other. Having a better understanding of how the operative side of a business works and seeing the business from an employee perspective, as well as the understanding of entrepreneurial activities from previous entrepreneurial experiences, creates the best opportunities (Bignott & le Roux, 2020). However, there are entrepreneurs without prior work or entrepreneurial experience who have started a new venture. Exploring their processes and managing uncertainty would be beneficial for others in the same situation and could make a difference in how new novice entrepreneurs proceed.

2.2.2 Early Stages in Comparison to Longitudinal Start-Ups

How the entrepreneur reacts to different situations differs depending on the time spent working with the venture. Entrepreneurs who are in the first year of their venture act differently than entrepreneurs who have worked with their venture for a longer period of time (Tatikonda, Terjesen, Patel, & Parida, 2013). There are a lot of different operational challenges and priorities depending on the stage of the start-up, where entrepreneurs in the early stages of a start-up focus mainly on customer relations, obtaining new customers, and market growth. The main decisions need to be made on how to get the company to expand and grow, obtaining as many market shares as possible. In comparison to entrepreneurs in the early stages of their business, there are other operational capabilities that are crucial to take

into account. As the venture grows and matures, the operational strategies change accordingly, and the priorities shift for the benefit of the company (Tatikonda, Terjesen, Patel, & Parida, 2013).

There are different stages start-ups go through, and in the different stages, the entrepreneur has to take different types of decisions. Depending on the stage the start-up is in, there are different types of decisions and uncertainties they phase through (Crnogaj & Matej, 2023). Due to the experience gained the longer the entrepreneur has worked on a project, certain decisions are easier to make and they have a clearer picture of the situation. The experience gained by working with a start-up gives the entrepreneur better opportunities to succeed with problems that occur (Tatikonda, Terjesen, Patel, & Parida, 2013).

2.3 Decision Making Logics

2.3.1 Effectuation

Entrepreneurs use different logics when making decisions, and the logic they use has an impact on their results. The comparison of effectuation and causation was therefore interesting to investigate in relation to how entrepreneurs make decisions under uncertainty. Effectuation is a risk-and uncertainty-filled decision-making process in the entrepreneurial process that depends on making the best use of the resources at hand (Dew et al., 2005). Expert entrepreneurs primarily employ effectuation logic, which is acquired through periods of entrepreneurial experience (Read & Sarasvathy, 2005). This implies that the process of making decisions evolves and transforms with time. Effectuation has been proven to be an appropriate logic in uncertain situations and when the future is unpredictable (Sarasvathy, 2001). Sarasvathy (2001) presents the five principles of effectuation: Bird in Hand, Affordable loss, Crazy quilt, Lemonade and Pilot in the plane, to explain how expert entrepreneurs work with uncertainty and how they manage their decision making.

1. *The bird in hand* relates to how entrepreneurs are using their available resources and what they can do with their given means. Which also leads to not having one goal-oriented logic, but having multiple potential goals.
2. *The Affordable loss* is about risking the things you can afford to lose, which makes the venture process less risky.

3. *The Crazy Quilt* is the principle that focuses on the entrepreneurial network and partnerships. In the effectuation logic, it is highly highlighted to work together with different stakeholders and collaborate to create venture success.
4. *The Lemonade* is focused on the uncertainty of entrepreneurship and how the entrepreneur will face unforeseen situations. In the entrepreneurial process, situations will occur that the entrepreneur cannot predict, and in these situations, the entrepreneur needs to turn the situation into an opportunity.
5. *The Pilot in the plane* is a way of controlling the uncertain future, where the entrepreneur focuses on the things that can be influenced or controlled rather than predicting and guessing. Taking control over the things that can be controlled.

It has been established that the most effective course of action for achieving success in entrepreneurship is effectuation logic (Read & Sarasvathy, 2005). Entrepreneurs have to make decisions under uncertainty, which means there is a balance between taking risks and doing what they know. Since novice entrepreneurs lack experience, their decision making process under uncertainty tends to lean toward the other logic presented by Sarasvathy (2001).

2.3.2 Causation

Contrary to the effectuation decision making logic, the causation logic is based on the search for the right resources to achieve a predetermined goal, and about predicting the future (Sarasvathy, 2001). Causation logic is a popular decision making technique among novice entrepreneurs, according to Read & Sarasvathy (2005), where the novice entrepreneurs tend to focus on one goal in their decision making process and predict outcomes (Dew et al., 2005). Causation is focused on giving effect and finding the right means, it is also a logic that exploits previous experiences to help predict the future. The logic thinks of the future as something you can somewhat control by predicting it, writes Sarasvathy (2001). Causation depends highly on previous experiences to find potential in the future, basing decision making on prior events, situations, and the information at hand. Using causation is therefore one way to shape the decision making process when faced with uncertainty.

2.3.3 Combination of Causation and Effectuation

The two different decision making logics, causation and effectuation, have been proven to be apparent in all entrepreneurial decision making processes. They provide an explanation for why certain decisions are made by the entrepreneur (Sarasvathy 2001). However, an entrepreneur can utilize both of these logics in their decision-making processes. Depending on the decision that needs to be made, or in which stage they are in their venture, the entrepreneur can shift between the logics and utilize both of the strengths they have (Sarasvathy 2001; Dew et al., 2009). In certain situations, expert entrepreneurs focus on working with things in their control, leveraging the information that they have, even if it means that their initial goals for the venture change. By doing this, the entrepreneur combines elements of both effectuation and causation in their decision-making processes and leverages the different elements (Dew et al., 2009). An entrepreneur usually has more distinctive traits from one of the decision-making logics, but the more the entrepreneur works within their venture, they gain traits from both of the logics, adapting to the decision that needs to be made (Read & Sarasvathy, 2005). Entrepreneurs have a unique logic of non-predictive control, which means that they are able to transform the means into new outcomes that they initially did not envision (Dew et al., 2009).

2.4 Contributing Factors to Decision-Making

Since entrepreneurs often proceed with new ventures in teams, the team factor needs to be considered in how they shape their decision making process. The team can influence how the entrepreneur makes decisions and manages uncertainty, which is therefore one consideration in the study. The team in a new venture has a big influence on how successful the venture will become since 65% of ventures fail because of the team being wrong rather than the business idea or market (Wasserman, 2008). The team can also be an influence on the decision-making process and uncertainty management, and therefore is an important factor to consider when exploring uncertainty management in early stage ventures. The success of the team and their teamwork can be narrowed down to four factors, compelling direction, strong structure, supportive context, and shared mindset (Haas, Martine, & Mortensen, 2016). By having a goal in the team, the team members get energized and inspired; the strong structure gives the members a feeling of responsibility that motivates; the supportive context motivates the team by offering the right resources; and at last, the shared mindset motivates the team by giving them a common identity and dissolving us-versus-them behaviours (Haas, Martine, &

Mortensen, 2016). The synergy of the team also has effects on the decisions that affect productivity and innovation within the venture (West, 2007)

The decision-making process in entrepreneurial teams differs from decision-making by individuals. The team can go one of two ways, either with an egalitarian or a hierarchical approach, according to Wasserman (2008). The egalitarian approach has advantages for teams of friends and can help with trust in teams consisting of strangers. This approach means that everyone in the team has the same saying and that decisions are made by the team. The disadvantages of the approach are a lack of accountability and spending too much time on building consensus, making the decision-making process inefficient. The hierarchical approach instead has the disadvantage of one person not having all the information in complex situations, and therefore the decisions may be worse, but the decisions are made quickly with clear accountability (Wasserman, 2008).

El-Awad, Gabrielsson, and Politis (2017) state that disagreements improve team performance and the decision-making process within teams. Conflicts that arise from disparate values within the team can also have a positive impact on this process if it is managed properly and if the conflicts are value-based intragroup conflicts. The success of the venture greatly depends on the team and its decision-making, which is based on the team's synergy and diversity of knowledge. Since the entrepreneurial team's collective opinions determine the venture's course, the most important decisions that affect its success are made by the group as a whole (West, 2007). The dynamics and prejudices of the team frequently affect how well the decisions turn out (Chen et al., 2022).

2.5 Theoretical Gap

There is a lot of research that has been done on entrepreneurship, entrepreneurs in different stages of their entrepreneurial venture, how different factors influence various parts of the entrepreneurial journey, etc. When it comes to the effects of expert and novice entrepreneurs, the majority of the research has been conducted to research the importance of being an expert or a novice in a general sense. The research shows that uncertainty is a big part of entrepreneurship, and with experience, uncertainty management becomes easier. However, the research lacks an explanation for what entrepreneurs without experience do to manage uncertainty. Since the research also shows that uncertainty management relates to venture

success, it is advantageous to have an understanding of how novice entrepreneurs handle it. It is clear that prior experience from work or entrepreneurial projects is better than no experience when proceeding with a new venture. But the research lacks to explain how novice entrepreneurs, without the experience, knowledge, or resources, shape their decision making processes to manage their venture.

The decision making logics and the combination of them in entrepreneurship have been well researched prior to this study, which provides a clear understanding of how entrepreneurs use different logics when pursuing their venture. The research also indicates that novice entrepreneurs use certain types of logic and emphasizes the differences between novice and experienced entrepreneurs. However, the research is restricted to the explanations of how novice entrepreneurs actually shape their decision making processes, by presenting a holistic and comparative understanding of the matter. The logic fails to expand on how the decision making process is shaped by novice entrepreneurs, and therefore, the research on the subject should be elaborated.

Given that the research indicates that the team can influence decision making and how uncertainty is managed, this factor is considered in the study. The entrepreneurial team aspect is therefore not considered to be a theory that needs to be explored further, but rather a contributing factor to answering the research question in this study.

In conclusion, this study wants to provide an understanding of the theoretical gap presented, providing insights on novice entrepreneurs and how they shape their decision-making processes in uncertainty. The study wants to fill the gap by conducting different case studies with novice entrepreneurs, where in-depth insights on the decision-making process and uncertainty management will be provided.

3. Research method

The following chapter will present how the research has been conducted, providing insights on how the empirical data was collected. A clear understanding of who was interviewed and their backgrounds will be presented, acknowledging why they were chosen to be included. The techniques used to analyse the data and the ethical considerations will also be explained in the upcoming chapter.

3.1 Research design

The study is based on qualitative research with an inductive approach, to explore uncertainty management techniques and decision making processes for novice entrepreneurs. The aim of the research was to get in-depth information on how novice entrepreneurs manage uncertainty in early stages ventures and how that influences their decision making. To get in-depth information, a multiple case study over two months was conducted.

Semi-structured interviews were used to collect the data needed for the analysis of the study. The decision to conduct semi-structured interviews was to enable the possibility of answering questions in different themes and asking differentiated questions to all interviewees (Bryman, 2011; Gioia, Corley, & Hamilton, 2013). This method also allows the study to receive real-time insights and a retrospective point of view from the individuals who are experiencing the phenomenon (Gioia, Corley, & Hamilton, 2013). With the help of qualitative research methods, there was a possibility of receiving in-depth insights into the subject and the processes that entrepreneurs go through when making decisions in uncertainty. The thesis has a subjective perspective, making it possible for reflection and nuanced data analysis. The qualitative research method was chosen because of its ability to generate deeper understandings of the participants' experiences and thoughts (Bryman, 2016). The rich data from qualitative studies also opens up the possibility of finding novel insights that can be generalised in larger contexts, making the insights valuable contributions to existing research (Eisenhart, 1989).

3.2 Participant Collection

To collect data regarding uncertainty management and decision making for novice entrepreneurs, a theoretical sampling approach was implemented, and the participants had to fulfil the following criteria: (1) The participant has not, prior to their venture project at the specific point of the interview, been part of an entrepreneurial project; (2) has little to no work experience; and (3) has been involved in situations where the decision-making processes have been crucial (Eisenhardt & Graebner, 2007). Beyond fulfilling the criteria presented, the interviewees will be asked questions in regards to the early stages of their venture to gain an understanding of the decision-making processes during that specific period of time. The participants of the interviews were all individuals under the age of 30 who had been in an early stage venture. The multiple cases that were studied were from different industries and included both individuals that worked in teams and individuals that were solo in the early stages of the venture. Both team and solo entrepreneurs were chosen to explore if being in a team or not had any affect on the uncertainty management used in the venture.

The participants did not have prior entrepreneurial or work experience that relates to their industry or experience that requires higher level studies. Part-time jobs and labor jobs were accepted since they have little to no relevance for creating a new venture and because the majority of people have had some kind of work experience beforehand. To find the participants for the interviews, we connected with people through LinkedIn, as well as reaching out to individuals in our network that we knew fulfilled the criteria set for the study.

For the study, data from 8 participants was collected, and the duration of all the interviews varied from one to one and a half hours. The reasoning for the difference in length between the interviews was due to the different amount of information the participants were able to provide us. All interviews were a minimum of an hour, and depending on the amount of information the interviewee was able to provide us, the longer the interview became. All interviewees have been kept anonymous to ensure the security of the data provided by the respondents and to receive the valuable data needed to conduct this study. All of the participants were okay with the presentation of their ventures in the acknowledgement but have, however, still been kept anonymous for the duration of the study. Overall, the study gave a large sample of different perspectives and experiences around uncertainty and decision making processes. The number of participants was set during the time of conducting the

research and collecting the data, and it ended when the answers stopped giving new answers and new perspectives on the questions. Table 1 provides the basic characteristics of all the interviewees to gain a general understanding of the participants. By providing the characteristics, quantity of interviewees, as well as the population of where they have been chosen, there is an easier understanding of why and how we received the empirical data analysed in the study (Saunders & Townsend, 2016).

Participant	Age	Gender	Nationality	Previous Job	Previous Venture	Team/Solo
1	25	Male	Swedish	None	None	Team & Solo
2	25	Female	Swedish	None	None	Team
3	25	Male	Swedish	None	None	Team
4	23	Female	Swedish	None	None	Solo
5	25	Male	Dutch	None	None	Solo
6	29	Male	Danish	None	None	Team
7	27	Male	Swedish	None	None	Team
8	28	Male	Swedish	None	None	Solo

Table 1, Overview of participants

3.3. Data Collection

Participants' information was gathered via semi-structured interviews. The method was chosen due to its ability to allow for flexibility in questioning, being able to receive more in-depth answers for certain areas depending on the interviewees competence, while maintaining a consistent format for all interviews (David & Sutton, 2016). The questions were asked in a variable order, depending on the interviewees answers and the approach they took to the different questions (Bryman, 2011). The semi-structured interviews were based on an interview template (see Appendix), and additional questions were asked if needed in relation to the participants' responses to earlier questions. The interview questions were divided into four different themes:

1. Background
2. Uncertain situations
3. Uncertainty Management
4. A) The influence of the team; B) Solo entrepreneur

The four themes were chosen to firstly, get to know the participant in a general context, secondly, gain an understanding of the uncertain situations; and thirdly, contextualise and understand how they had handled the different situations as a novice entrepreneur. Finally, the last theme was included to understand what influence being a team or solo entrepreneur has on uncertainty management and decision-making processes. The last theme was split into two different sets of questions to fully get the best information, depending on the participant's situation. Not all of the questions in the last theme were asked of all of the participants. The decision of which questions to ask in theme four was based on the previous answers from the interviewee, whether they were in a team or had started their venture as a solo entrepreneur. The questions were made to explore uncertainty management by getting stories from novice entrepreneurs on the uncertain situations they faced and how they handled them.

The interviews were conducted in March and April of 2024, where we were able to gain a broader understanding of how different individuals with no prior work or entrepreneurial experience manage uncertainty and decision making processes. A total of ten hours of data was collected during the course of the interviews, which were all conducted either in-person or virtually based on the participant's preferences and location. The point at which response saturation happened determined how much data to collect. During the interview process, certain themes were able to be determined already and were noted to be able to effectively identify the different themes for the analysis of the empirical data at a later stage.

All interviews were either conducted in English or Swedish. The reason behind this decision was to receive more thorough answers from the respondents. The respondents who are initially from Sweden have a larger vocabulary in Swedish and are therefore able to provide more in-depth answers in their mother tongue. If the interview was conducted in Swedish, we transcribed the whole interview in Swedish as well. No translation was made, except when quotes were needed in the empirical data chapter to enhance the findings for the study. Only quotes that we believed were pertinent to the research and that maintained the original meaning were translated. If we believed that, under any circumstance, the quote could be

interpreted in a different way, we explained the data instead of using quotations. The use of ChatGPT was apparent in the translations of the quotes to ensure the content of the quotes stayed the same throughout the translation.

3.4 Data Analysis

Thematic analysis was used to analyze the interview data in order to establish a foundational approach for the analysis (Braun & Clark 2006). Several themes were found by carefully examining the empirical data that was gathered. The identification of themes involved identifying commonalities among the various interviews, wherein distinct themes and patterns recurred. The analysis was made using the Gioia methodology, following three steps:

1. 1st Order concepts

Concepts from the raw data are mapped into the first step, which does not require a thorough analysis. The first order concepts were derived from the interviewees' responses about uncertainty management, including the types of uncertainty they have encountered and the ways in which they have handled it. These could be explanations of how uncertainty management has been impacted by, for example, the entrepreneur's way of making decisions based on their values.

2. 2nd Order Themes

In order to extract the essence of the data, the second step goes beyond the raw data and develops themes from the first order concepts. The first order data serves as the foundation for the second order themes, which conceptualize "values" from the 1st order concepts.

3. Aggregate Dimensions

In the third step, the complexity of the Second Order themes is decreased, and they are integrated into larger conceptual dimensions. establishing a more thorough comprehension of the connections and relationships between themes. The overall dimensions present a more comprehensive view of the decision-making procedures used by novice entrepreneurs in their early-stage businesses. The aggregate dimension "reasoning logic" is constructed from the 2nd Order concepts of "effectuation/causation," "values & direction," and "guidelines." The same coding is used for the other aggregate dimensions.

The Gioia methodology was employed for the data analysis due to its systematic, reliable, and comprehensive approach, as well as its demonstrated ability to produce insights from inductive research and propel scientific progress (Gioia, Corley, & Hamilton, 2013).

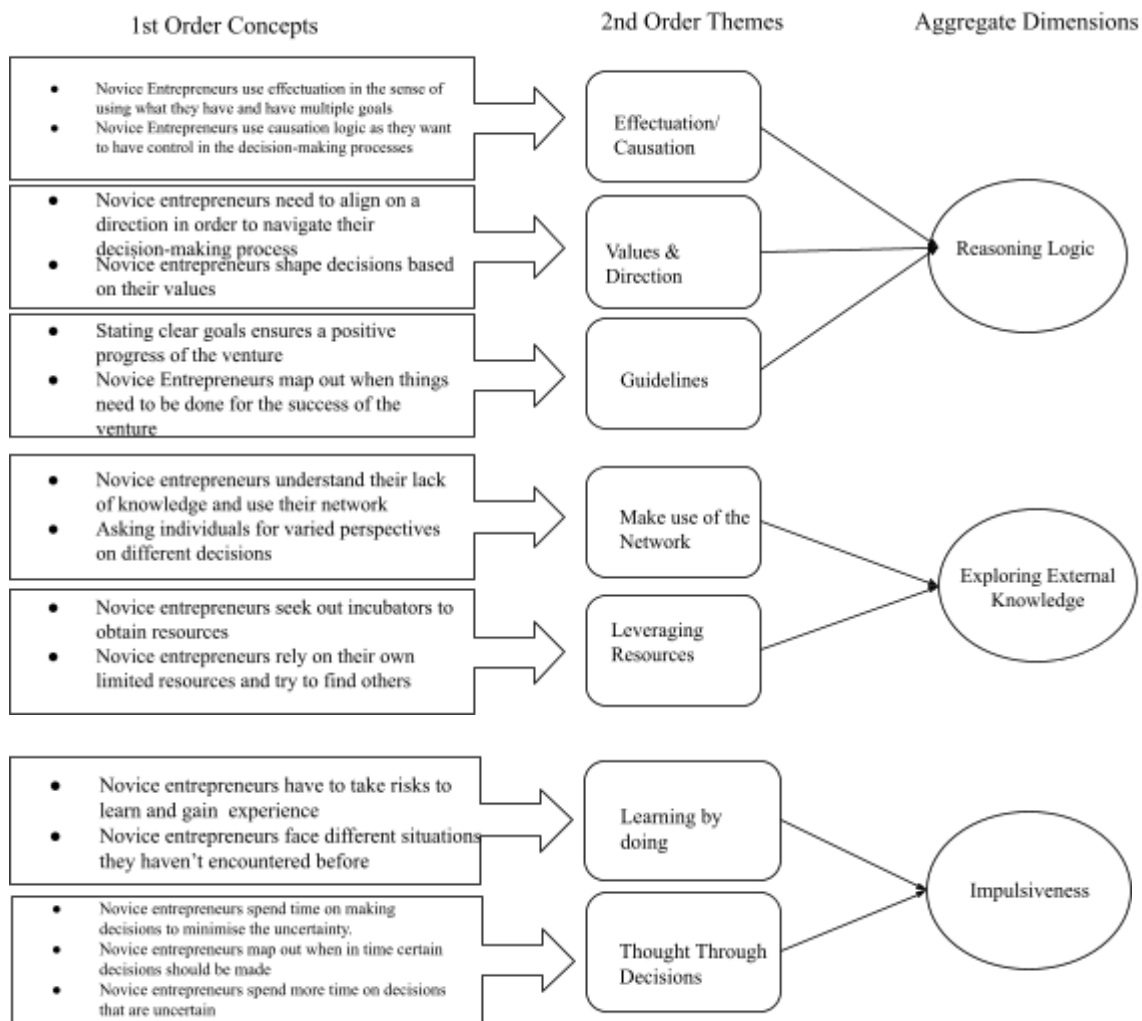


Figure 1. Data Analysis

The data and findings received were then analysed and discussed in relation to the previous research presented in the theoretical background to provide a conclusion to the research question for the study. By combining and comparing the literature with the new findings, the theoretical understanding becomes greater and provides the opportunity to fill the theoretical gap in previous literature (Eisenhart, 1989). The comparison with prior research also makes it possible to provide suggestions for future research areas.

3.5 Methodological Reflections

3.5.1 Validity and reliability

When discussing the quality of the collected data, validity and reliability can be examined (Alvehus 2023). Reliability refers to whether the results would be the same if the study were conducted again. This is hard to achieve in qualitative research as the answers to questions will vary depending on the respondents (Coleman, 2021). To reach the highest level of reliability in this research, we interviewed as many participants as needed until similarities in the outcome of the interviews appeared.

Validity refers to whether the subjects actually investigated match the ones intended to be studied. There should also be consistency between the theoretical ideas and the collected empirical material (Bryman 2011). To verify validity in this study, certain criteria were established when choosing the interviewees to ensure the right individuals were chosen who had the competence needed to conduct the research and answer the research question. Validity is a measuring tool that can be used in qualitative research that uses semi-structured interviews to show the calibre of the data gathered (Bryman 2011; Yin 2011). But measuring validity and reliability in qualitative research presents issues since it is at odds with the principles of qualitative research (Alvehus 2023; Coleman 2021). Because the social environment in qualitative research is constantly changing, achieving external reliability can be challenging.

However, similar individuals within the same area of expertise can be studied to obtain external reliability (Bryman 2011). Internal reliability is something that is easier to ensure in qualitative research because there are two individuals interpreting all the collected material (Bryman 2011). This ensures that the information is interpreted in a similar manner and ensures the analysis.

3.5.2 Authenticity

The study presents a fair picture and presents opinions and perceptions accurately based on authenticity. According to Bryman (2011), catalytic authenticity has also been thought to facilitate change for individuals and their circumstances. This implies that in order to modify certain behaviours, the people who are interviewed for the work will obtain a clearer

understanding of a scenario that they might not have previously considered. Moreover, participants now have a deeper comprehension of their surroundings and are better equipped to take action toward enhanced operations thanks to tactical authenticity (Bryman 2011).

3.5.3 Limitations

This study has a few limitations in regards to the methodology. An extended duration of the study could have resulted in a larger number of participants, which could have led to additional insights into the topic. There were only eight cases that participated in the study due to time constraints. Nevertheless, despite the short time period and small number of participants, the data still produced a consensus on the responses.

The study was also limited by the participants' nationalities, as a majority of the participants were from Sweden. Even if the participant was from another country, their ventures were from Sweden. Therefore, the results could have been affected and could be considered to be the most relevant in Sweden. This limitation also occurred due to the limited time frame for conducting the study.

3.5.4 Practical Considerations

To reduce the possibility of inaccurate data translation, the interviews were preferably conducted in English. However, if the interviewee endorsed the possibility of conducting the interview in Swedish, we adapted and carefully translated the empirical data. To ensure transparency in the study, the data from the interviews conducted in Swedish will be clearly stated in the analysis of the study.

Moreover, the time constraint to fulfil the study has been taken into consideration. To gain a more in-depth understanding of the phenomenon and provide deeper knowledge into the research question, a study conducted over a longer period of time, following the different participants and observing how they deal with uncertainty and decision-making, would provide a substantially more in-depth understanding. These limitations need to be considered, as they affect the outcome of the study.

3.6 Ethical Considerations

Research ethics have been applied to protect the integrity of the participants. The requirements for information, consent, confidentiality, and utilization are among the ethics that are taken into consideration (Bryman 2011; Alvehus 2023). By informing the parties involved about the investigation's goal, the voluntariness of participation, and the opportunity to withdraw at any moment, the information requirement has been guaranteed. Moreover, consent requirements that allow participants to choose whether or not to participate have been granted. This has been carried out in light of the fact that consent contracts were sent to the concerned parties prior to the interviews. In order to protect their integrity, the interviewees have also given their verbal consent to participate. The need for confidentiality, which requires that all participant data be handled securely to protect participants' private and business identities, is another ethical consideration that has been taken into account. All of the interviews that have been conducted have been recorded in relation to the Swedish legislation on the General Data Protection Regulation (GDPR). The recordings have only been listened to by the authors of the study and transcribed. The recordings and all empirical data will be deleted when the study has been finalised. Based on the utilisation requirement, we have therefore not saved or used individuals' data in the work to ensure their participation. Furthermore, the anonymity of the participants has been carefully considered during the whole process of this study, ensuring that the participants are able to speak freely about the subject of the study and about their experiences without feeling threatened or scared to provide sensitive information (Bryman 2011; Alvehus 2023).

Research questions in qualitative research may be seen as vague and thus open to many interpretations, creating ethical challenges. For certain interviewees, answering certain questions might also be uncomfortable (Bryman 2011; Alvehus 2019). In order to guarantee this in the work, the research question has been worded as precisely as possible to prevent it from being interpreted in multiple ways, and interview questions are not allowed to be answered with sensitive information that could make the interviewee feel uncomfortable. Additionally, to guarantee ethical work, interviewees have been informed prior to the interview that they are under no obligation to answer any questions and that they are free to end the interview at any moment.

Even if the participants have been chosen through our combined network and LinkedIn, we wanted to ensure that there were no potential biased answers. To cope with this, we asked the same questions to all participants, not neglecting questions that we already knew the answer to. Moreover, we wanted all participants to feel as if they were involved in an interview rather than a conversation with us, where they answered in a way they believed that we wanted them to answer. As both authors of this study do not have the same network, we also ensured that both parties analysed and coded the empirical data collected, to ensure that the same interpretation of the data was made. All of the statements made in the empirical findings have also been confirmed by multiple participants to ensure their validity. If there has only been one participant who has stated something, this has been highlighted to inform the reader of the biased opinion (Bryman, 2011; Alvehus, 2019; Stiles, 1993).

4. Empirical Findings

In the Empirical Findings section, all of the collected data will be presented. The data has been sorted and will be presented according to the different themes found when analysing the data. The different themes found were Reasoning Logic, Exploring External Knowledge, and Impulsiveness. These themes were the most apparent in all of the interviews conducted.

4.1 Reasoning Logic

The first aggregated dimension is reasoning logic, which encompasses the principles that the novice entrepreneur utilises to guide their decision-making. This aggregated theme has demonstrated itself to be a significant determinant in the choices made by novice entrepreneurs in the face of uncertainty. Since they are inexperienced and uninformed, novice entrepreneurs base their decisions instead on different reasoning logics, and make use of effectuation and causation in different ways, but they are also influenced by their values in their decision making processes. How the novice entrepreneur reasoned in their different situation makes a big impact on what their decisions become since they don't have the experience or knowledge to guide them towards a decision.

4.1.1 Effectuation/Causation

Novice entrepreneurs tend to lean towards causation in their decision making processes, as they base their decisions on prior information and information from others rather than their own experiences and knowledge. But they also use effectuation in the case of using their available resources to build their venture, looking at their means and what possible outcomes they can achieve with them.

The results showed that the novice entrepreneurs did not strive towards one specific goal, they were not goal oriented other than the fact that they wanted to build a company with the right values. To achieve this, they both used the limited resources they had at hand and also sought resources within their network.

"Everyone I have ever met, I ask. I am very curious. I question everything and everyone. And usually, if someone says something, I double-check it with three others. And it's not because I don't trust the person, but because I really want to get a nuanced picture." Interviewee 1

When novice entrepreneurs ask for help and guidance for specific decisions they want to take in their venture, a common trait in all of our case studies is that they ask individuals in their network for guidance. This logic is shown to be causal, where novice entrepreneurs want to gather as much information as possible before making a decision. They collect resources in the sense of information to be able to craft their decision-making process and provide the best possible outcome for their decision. However, novice entrepreneurs do not only use causal logic in their decision-making processes under uncertainty. A lot of the novice entrepreneurs have an effectual logic, where they use the means at their disposal and craft their decisions based on the resources available.

"Even if we might not have the best equipment for a specific job, or rather, I mean advanced equipment, we do what the customer wants to avoid doing. And because they want to avoid it, they are usually satisfied. We learn along the way, and the next time we get a similar assignment, we send the same employees we sent on the previous job, because then they have better knowledge of how to handle it." Interviewee 7

The novice entrepreneur explains in the quotation above that they do not always have all of the means to execute the best job. However, they use what they have and the little knowledge they have to execute the job. A common trait that the novice entrepreneurs have is that they do not always have all of the knowledge or resources, but use what they have and make the best of a situation. Moreover, they usually work toward different goals. During their decision-making processes, they are able to switch to the direction they need in order to succeed. When uncertain situations arise, they are more likely to use the resources that they have and work towards one goal that might not have been the end goal to start with.

4.1.2 Values & Direction

Decision-making in the face of uncertainty has been demonstrated to be significantly influenced by entrepreneurs' and entrepreneurial teams' values and direction. They value how customers and stakeholders view their company, and therefore they make their decisions reflecting on what kind of company they want to be and their values. Which helps them manage to make hard decisions, because they feel good about their decision then. The values give the entrepreneur a direction for the venture and a direction for what the end result of their decisions should be.

*"So yeah, growing slowly is tough. I mean, it's tough. So, it's a conscious decision but also something that has been hard for us to come to terms with. And to think and be authentic to ourselves. " **Interviewee 2***

Growing slowly, as interviewee 2 described, is an illustration of a difficult choice made by the novice entrepreneur who wanted to stand by their values and uphold the venture's direction. The decisions were made since they saw the values and direction of the venture as a high priority, which was common in all cases. There are times when novice entrepreneurs showed up to take a more difficult road because they believed it aligned more with their values and that those decisions were right in the direction they had for their venture. Which they did not know because of experience or knowledge but by their reasoning logics.

They want their decisions to be a reflection of the kind of business they wish to run and be known for. The results also demonstrate the need for values and direction to facilitate a simple and convenient decision-making process within an entrepreneurial team; without it, the group may experience issues like discord and demotivation. The entrepreneurs are better able to make decisions that feel good for them personally and that are in line with their goals for the new business, thanks to the shared vision.

"Because we had written an agreement that essentially revolved around receiving the shares and then working. But there wasn't a specification of how much one should work. There wasn't a clause stating that if they didn't work a certain number of hours per week, they wouldn't be allowed to keep their shares. [...] And having people holding onto shares who

aren't doing anything, that's pretty much the worst situation you can have in a company." Interviewee 1

By not having a clear direction, the entrepreneurial team of interviewee 1 faced difficulties with work ethics and disagreements on work effort within the team, which then affected their decision making processes and uncertainty management. Making the decision making process both harder and slower, which leads to missed opportunities for the venture. By agreeing on a direction for the venture, the entrepreneurs decision making processes are made easier and faster, and at the same time, their motivation gets higher.

4.1.3 Guidelines

To make the decision making process easier, novice entrepreneurs implement different guidelines, especially if they are part of a team. The guidelines make it easier to know how to handle certain situations and provide the team with a common sense of action, which also minimises the risk of uncertainties within the team. When there has been a lack of guidelines, entrepreneurs in early-stage ventures have faced problems, and different team members have acted in different ways that could have impacted the venture in a bad way. By having a guideline, everyone in the team knows how they should proceed.

"I believe it is important to have very clear guidelines and directions. You need a well-documented common vision and goals that are crystal clear. Otherwise, when there are several people involved, you cannot work in the same direction. [...] Being able to objectively point out that something will help us get closer to the vision makes it much easier to motivate why a decision is good or bad." Interviewee 1

As stated in the quotation above, interviewee 1 believed that guidelines are important in a venture, especially in the early-stages of a start-up venture. By having a set mission and vision for the venture, it is easier for the different stakeholders to act and guide them. This is something that all participants hinted at being an important part of their decision-making process to make it easier for the different parties in the venture to understand what decision needed to be made. However, interviewee 1 praised the importance of guidelines. The

respondent believed that the guidelines they had built for the venture enabled them to succeed in a more efficient way.

Additionally, the reasoning logic includes the guidelines. Every decision is made easier by guidelines because they provide a protocol for actions and, consequently, indicate the kind of decisions that should be made. This facilitates the process of making difficult choices when an entrepreneur must weigh what will be beneficial in the short and long terms. Making decisions without guidance can be challenging for a novice entrepreneur due to their lack of resources, experience, and knowledge, especially when working with a group of novice entrepreneurs. The novice entrepreneurs shape their decision making process on their reasoning logic, which is based on the causation, effectuation, values, direction, and guidelines within the early-stage venture.

4.2 Exploring External Knowledge

The second aggregated dimension is exploring external knowledge, which has proven to be crucial for novice entrepreneurs since they lack experience. Novice entrepreneurs can take advantage of learning from others without having to try everything from scratch because they are aware that others have experienced similar situations and have tried similar things. Even if, a lot of the time, novice entrepreneurs make decisions and gain experience in the process, there is a lot of uncertainty to deal with. In order to minimise the uncertainty of their decision, they seek external knowledge from different individuals to receive a variety of different inputs to shape their final decision-making process. They also use the available competence that they can gain in governmental programs, incubators, listening to podcasts, and reading books. By combining a network, mentors, and other resources, the novice entrepreneur can shape their decision even if they themselves lack experience.

4.2.1 Make Use of the Network

The use of mentors and networking can have a big impact on how novice entrepreneurs manage uncertainty and make decisions. Entrepreneurs leverage the expertise and experience of others to obtain information and make informed decisions in unfamiliar situations. Entrepreneurs with more experience are very helpful and will often lend a hand if asked for advice, which the inexperienced business owners learn by contacting them, asking for assistance, and receiving a response to their inquiries from the knowledgeable ones.

"I would say that we are extremely good at asking people. We are very good at networking, I must say. You are good at this. You have also been in our shoes. Can we please grab a coffee so we can talk about this? Because what you also notice in entrepreneurship is that everyone has been in the place you are in." Interviewee 2

As mentioned in the quotation above, by being approachable and modest, novice entrepreneurs base their choices on pertinent information rather than taking a chance, which lessens the risk and terror associated with managing uncertainty. The mentors and people within the entrepreneurial network give guidance and answers to both big and small questions. By asking around and taking in perspectives from many different sources, the novice entrepreneur avoids mistakes and shortens the time spent on doing the wrong things or on research.

"Yeah, and like, talk a lot with people in your network. Also, not being afraid to, like, hey, now I'm starting to fail. I mean, it's not really failing but reaching out to your network and talking to them. Because they might have good tips and they're already out there. Because when you're in it, you have such tunnel vision, you know, and you think you've done everything. Maybe you haven't really done everything. Or maybe you've done something but just in the wrong direction. And not taking it too hard then." Interviewee 4

The novice entrepreneur in interview 4 is not alone in facing similar circumstances. By asking around and talking to as many experienced people as possible, the novice entrepreneur shapes their decision making process based on the competences in their network under uncertainties. The people in the network are a huge resource and comfort that novice entrepreneurs rely on.

In the majority of cases, novice entrepreneurs have relied on the thoughts or insights of either one or multiple mentors, experts, or entrepreneurs in their network. By gathering these insights, the novice entrepreneur feels safer with the decisions that they make since they trust the knowledge of the different individuals to guide them towards the right decisions under

uncertainty. In cases where the entrepreneur did not have a mentor, the uncertainty of the decisions felt higher and more risky; therefore, entrepreneurs who missed a mentor proceeded to find one. Since it is such a crucial factor in minimising uncertainty and making the right decisions.

4.2.2 Leveraging Resources

Novice entrepreneurs take advantage of and make use of the resources available in addition to their network and mentors, which may include books, podcasts, government initiatives, and team resources. It can also be talking to friends and families, not as business advisors but as resources in labour work, etc. This has proven to be a crucial component in helping new business owners manage uncertainty.

Some novice entrepreneurs believe that their inexperience is to their advantage because they are accustomed to living on the barest minimum due to their time spent as students or because they have not yet experienced living a life of luxury, which has facilitated their decision to dedicate themselves to the entrepreneurial path. With limited resources, they read books, listen to podcasts, and look for incubators to help them make decisions. They worked very hard to find direction and answers in the information at hand, and as a result, they acquired a great deal of expertise that helped them formulate their decision-making process. They make use of what resources they have at hand, which may include approaching their peers for assistance to deal with the uncertainty they are experiencing.

"So, I basically called everyone I knew from university and asked if I could come and pack. And it was actually very, very nice. There were a lot of people who came by and helped me pack and were extremely supportive. Touched by their willingness to help." Interviewee 1

In the situation presented in the quote above, the participant was faced with a new, unknown situation that was very stressful and tough, putting the participant in a very uncertain situation. The actions taken in the situation show that the novice entrepreneur used the available resources to handle the uncertainty, choosing to reach out to friends and family in times of need and getting the help that was needed. This was presented as a course of action in multiple cases in the study. In tough times, they decide to reach out and get help in

whatever way is possible, which allows them to move forward. Novice entrepreneurs have fewer resources than big companies or experienced entrepreneurs, so they leverage the resources they have. Which can be deal breakers for the venture.

4.3 Impulsiveness

Since novice entrepreneurs lack experience and knowledge of the ventures they are engaging in, the next phase and subsequent aggregated dimension is their impulsiveness and how quickly they make their decisions in uncertainty. Making a decision and moving forward does not mean waiting for the perfect answers for novice entrepreneurs. All of the participants in this research made it evident that they depend on taking action and have a somewhat impulsive nature in their decision-making processes. This is the one piece of advice they would give to anyone considering an entrepreneurial career because, by taking action, they try new things and gain experience from doing them, which helps them move past the stage of being a novice and into the role of an experienced entrepreneur. They learn from their experiences, which influences how they make decisions, and sometimes they just have to act in order to move their venture forward, even if they are unsure if the choices they make are the right ones. By experimenting with various options and observing the results, they mould their decision-making process. However, they also feel the need to take a step back sometimes and figure out which path they want to take and what decisions need to be made. Therefore, novice entrepreneurs are not always impulsive in their decision-making processes and need to figure out a balance between being too impulsive and being more controlled.

4.3.1 Learning by Doing

Novice entrepreneurs learn a lot by doing during their entrepreneurial journey because they do not have a broad portfolio of experience and expertise in the field of their venture. They need to gain experience by trying different things, and then they can observe and assess the results. As they proceed with their entrepreneurial journey, the outcomes contribute to their learning process and provide distinct experiences that they can use when making decisions.

"But some things you can't actually learn just by reading. You need experience. So you just have to try and make mistakes. Or ask someone who has done it. So you don't have to make mistakes." Interviewee 1

The quotation above exemplifies the kind of decision-making mindset that novice entrepreneurs have. They are aware of their lack of expertise in the area and realise they must act to find out what needs to be done. Interviewee 2 said, *"I believe that no mistake is in vain as long as one learns from it."* This quote captures the mindset of novice entrepreneurs, who believe that mistakes and failures are learning opportunities that should be embraced. Since they lack prior experience, inexperienced entrepreneurs think that the only way to learn is to try and acquire knowledge. There are no novice entrepreneurs who have excluded failure from their entrepreneurial journey, but the entrepreneurs also believe that there are ways of seeing the positive in their mistakes.

"And then I think like being an entrepreneur gives you the opportunity to also just tell yourself like, okay, let's just do it [...] ignore everyone. And then you fail anyways. And then you're like, now you learned your lesson, now you're gonna change." **Interview 5**

Novice entrepreneurs who adopt a positive outlook towards failure and mistakes can learn more about various scenarios and how to address them should they recur in the future. Making mistakes helps novice entrepreneurs accumulate more experience that they can use in other circumstances.

Novice entrepreneurs often find themselves in circumstances where they must overcome unfamiliar obstacles because they lack extensive prior experience. They are forced to try new things where they are able to learn, grow, and build new experiences. They must, however, also take significant risks in the various circumstances where they must try new things because they are unsure of the results. This was demonstrated in the first interview, when the participant handled cultivated food.

"I had sort of cultivated some boxes for a few local restaurants and tested, and then I suddenly got an order for two pallets full of product. So I thought it's just about duplicating what I did on a small scale and increasing it. But it turned out that it didn't work at all, and everything I cultivated molded." **Interview 1**

According to the quote above, the respondent wanted to try something different, which ultimately led to failure. However, in the end, he gained a great deal of experience and would have a stronger foundation to stand on in future decision-making processes. Even with significant risks, novice business owners are willing to try new things in order to learn more about the industry they are in and determine what works and what doesn't. The novice entrepreneurs are willing to take risks and try new things, as they are aware that it is needed when becoming entrepreneurs.

4.3.2 Thought Through Decisions

Talking with other individuals who have experience in entrepreneurship is important for novice entrepreneurs to gain more in-depth knowledge in areas outside of their expertise. Entrepreneurs with no prior experience see the importance of receiving as much information as possible before making a decision to minimise the risk. Talking to multiple people and evaluating their thoughts and opinions is crucial to being able to spread the risk and ensure the right decision is being made.

"So yes, it's very important to seek help and agree with different people, and often that's what's so great because if you agree with different people, everyone has different perspectives and viewpoints on something, and then you can pick what is wisest and what you think that person is saying."

Interview 8

As presented by interviewee 8, it is positive to receive information from multiple sources to be able to make a well founded decision. For the most part, novice entrepreneurs talk to people they trust, but even if the entrepreneurs have a lot of trust in specific people, they see the importance of receiving information from multiple sources from a larger network, so a well thought out decision will be made where as much risk as possible will be reduced.

"So we were actually quite good at just reaching out to people on LinkedIn who have the expertise and such and getting 30-minute conversations to ask a lot of questions. So there, we have actually talked to quite a few people." Interview 3

The interviews also proved that in the early stages of a new venture, there are a lot of different decisions that need to be made and different uncertainties that need to be handled. However, they also explained the importance of not rushing decisions for the sake of moving forward, as that is when the most mistakes happen. They emphasize that when making decisions, it is not only important to talk to external experts and individuals, but that the whole team in the start-up needs to be aligned in the decision-making processes. All the different co-founders of the venture talk through the information that they have received and together process the information, ensuring that all parties are aware of the different risks and possibilities of the decision that will be made.

The numerous risks associated with launching a new business are known to novice entrepreneurs. There are many different decisions that need to be made all the time. For inexperienced and novice entrepreneurs, the most crucial thing to concentrate on is attempting to determine which decision is correct and when it is the appropriate time to make it.

“So we would find pros and cons for everything. [...] And then, of course, if we are not 100%, we needed to make a decision. And I think that's a big part of being an entrepreneur. You need to take some risks. And that's what we did.” Interview 6

As presented in the quote above, novice entrepreneurs do not always have an answer to all of the uncertain situations they encounter but have to make a decision anyway and try to make the best decision possible. The most common way to decide on the best course of action is to consult with a variety of stakeholders and individuals. The way that novice entrepreneurs make sure they get as much information as possible before making a decision is by opening the discussion from varied points of view. They feel that before deciding on a course of action, they should get advice and input from a variety of sources.

Novice entrepreneurs understand that launching a business entails risks, and one tactic they employ to reduce those risks is scheduling the critical decisions in advance. In situations where there are numerous unknowns and decisions to be made, novice entrepreneurs attempt to determine which choices are the most important. They lay out the deadlines for decisions

that must be made if they have an impact on the company's future more than on future growth or the introduction of a new product.

*“But we just saw as we grow, it was a little more slow in the development because we found out that our initial plan to make this year two on invoices was too narrow. So we changed our whole business plan. But that also meant that we we didn't start to develop as fast as possible. But we then as a what's it called? As a result of that, we actually ended up making like a very good business on our consultancy. So we changed our whole funding strategy.” **Interview 6***

As a first-time entrepreneur, you have a lot of situations to deal with when your business is first starting out, but you may later realize that some of these situations are not as urgent as you first thought. As a result, novice entrepreneurs base their decisions on the greatest amount of uncertainty, which forces them to prioritize and avoid unnecessary decisions. They organize the various choices and outline the various risks in order to reduce the amount of startup failure.

5. Analysis

The analysis chapter will include all the findings that have been made in the study, presenting the core results to provide an answer to the theoretical gap and a better understanding of how novice entrepreneurs make decisions in uncertain situations. The chapter is divided into different sections, presenting the different areas that can answer the research question.

5.1 Setting the Course

As novice entrepreneurs indulge in their entrepreneurial journey and are part of an early-stage venture, the course of the team or individual is crucial, especially since the entrepreneurs lack experience. The decision-making process is shaped by the course and direction of the venture. Haas & Mortensen (2016) explain that a common identity and understanding will help the team be successful. They also talk about the compelling direction, which is one of the more important factors found in the data. A goal, objective, or target is necessary for the entrepreneur to strive for, which could be characterised as the venture's vision. This factor is needed not only for teams starting a venture together but also for individual entrepreneurs.

In the early stages of a venture, the novice entrepreneur's vision and course influence and shape the decision-making process and facilitate it, considering that at that point they are aware of the purpose of their choices. To be even more explicit, though, the novice entrepreneur can establish rules that are binding on all members and carry repercussions for breaking them. This tool aids the novice entrepreneur in decision-making and helps them stay clear of internal conflicts. Novice entrepreneurs are more motivated and involved in the venture when they are in agreement about its direction (Haas & Mortensen, 2016). Team alignment is essential because, in contrast to when members' mindsets were out of sync and they lacked a shared direction, problems were more serious, decisions were more difficult to reach consensus on, and the team nearly went bankrupt. which causes the entrepreneur's decision-making process to be more difficult and slower (Wasserman, 2008). An entrepreneur can make decisions in the face of uncertainty by charting a course for their venture and depending on that rather than past performance. The course expedites the decision-making process, enabling entrepreneurs to take advantage of additional opportunities.

Rather than discussing specific goals, market share, sales rate, etc., the participants in the empirical data discussed their course more in terms of their ideal company. To establish and gain recognition as an ethically-conscious organization was the shared objective among them all. Their desire to be seen as a good company by their network, customers, and peers helped them make better decisions. They were always looking to make choices that would fit their ideal interpretation of the venture. With no prior experience to help them, they use their reasoning logic to figure out the best course of action, making due with what they have and what they know to survive in an uncertain situation (Dew et al., 2009).

The reasoning logic and setting the course are the first steps for novice entrepreneurs to shape their decision making process. By using a combination of effectuation and causation, the novice entrepreneur can make decisions easily, quickly, and with direction. Guidelines can be used by the novice entrepreneur to further simplify the decision-making process. When knowledge and experience are limited, guidelines can be useful tools, especially when working in a team. When the entrepreneur gains more experience, the guidelines are not needed to the same extent, since they will then gain a more heuristic approach with a trial-and-error mindset rather than looking for the right solution (Sarasvathy, 2001; Tatikonda, Terjesen, Patel, & Parida, 2013).

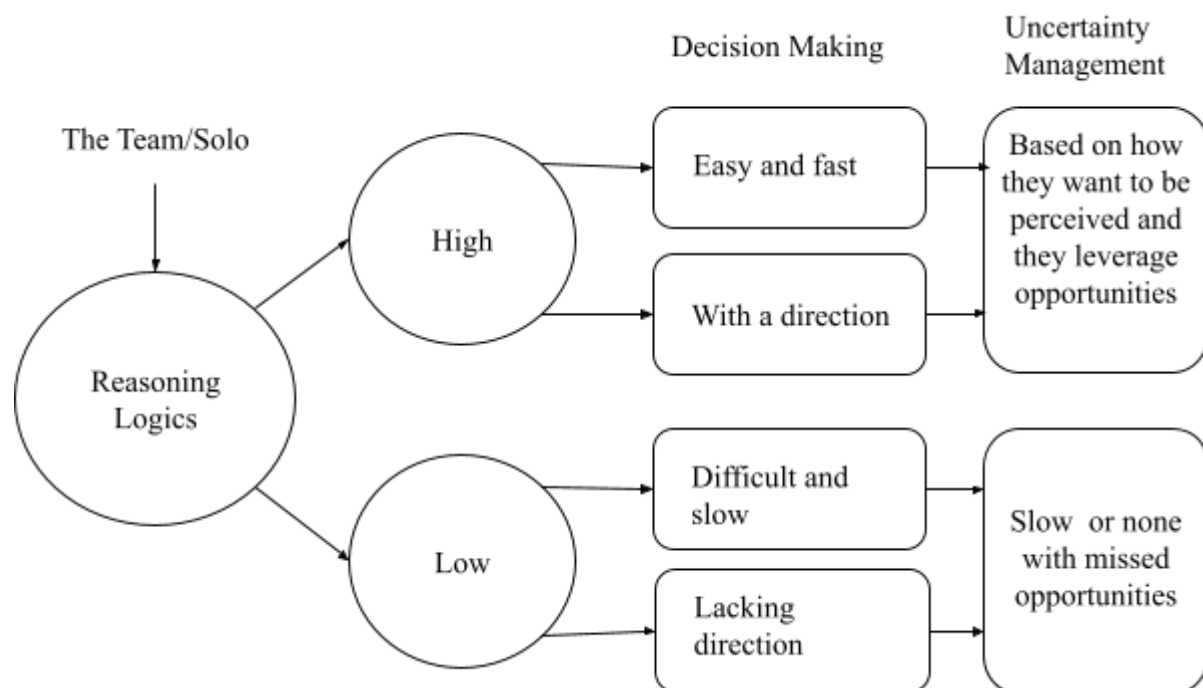


Figure 2. Framework of How Reasoning Logics influences Uncertainty Management

Figure 2. illustrates how the reasoning logics affects the decision-making process and uncertainty management. With the right reasoning logic, the novice entrepreneur shapes a decision making process that is easy and fast and, at the same time, opens up the possibility of leveraging opportunities under uncertainty. By having a clear direction for the venture, decisions are made because they affect the perception of the venture, which has been proven to be important for novice entrepreneurs. The reasoning logic is at the same time affected by if the entrepreneur is part of a team or not, how the group aligns in their reasoning logic makes a huge difference. Uncertainty management is affected by the way the decision-making process is perceived, and if there is a strong direction and values within the venture, there is a better ability to leverage the different opportunities. In ventures where there is little to no direction, values, or guidelines, uncertainty management is slow, and opportunities are missed due to the lack of direction and difficulties.

5.2 Seeking Knowledge

Novice entrepreneurs do not have experience in the field of entrepreneurship and therefore need to gain experience. They also need to learn from others who have prior experience and leverage their knowledge. Novice entrepreneurs highlight the importance of using all available resources to their advantage. This logic is emphasised as effectuation, where the entrepreneurial process contains risks and uncertainty. The entrepreneurs then utilise the available resources when making decisions (Dew et al., 2005; Sarasvathy, 2001). The most common principle novice entrepreneurs have when making decisions is the Crazy Quilt principle. The entrepreneur utilises their network and other experienced entrepreneurs and works together with them to make decisions (Sarasvathy, 2001). In uncertainty, novice entrepreneurs lack an understanding of what different outcomes could come with the decisions they make. Therefore, a common approach that novice entrepreneurs share is using their network with people, the different mentors they have, and their minimally experienced knowledge as a resource of guidance in what decision they should make.

Another common principle of effectuation that novice entrepreneurs have is The Bird in Hand. This principle relates to entrepreneurs using the available resources at hand to make decisions (Sarasvathy, 2001). The entrepreneur does not have one goal that they work for, but

rather multiple goals, depending on the available resources. Due to the novice entrepreneurs not having the knowledge or experience in certain situations, they do not have a bank of outcomes that they can evaluate. They use the approach of learning by doing, where they use the resources that they have and try a solution out. If the outcome is negative, they learn from the situation and have a clearer picture of what they need to do the next time a similar situation appears.

According to Read & Sarasvathy (2005), causation logic is a more popular decision making technique among novice entrepreneurs. In some aspects, this is true, as novice entrepreneurs usually try to focus on having an effect and finding the right means. However, there are a lot of aspects that indicate an effectual logic in novice entrepreneurs, where they leverage the resources they have at hand, trying to do something even if it ends up not being the best solution for the company. They use what they have and try to provide the best possible outcome that they can. Individuals that have a causal logic think of the future as something you can predict and, in some ways, control (Sarasvathy, 2001). According to the interviewees and empirical research conducted in this study, there is more evidence that novice entrepreneurs are aware of their weaknesses of not knowing how the future will unfold, and therefore make decisions using the resources they have and learn along the way.

A lot of entrepreneurs use a mixture of effectuation and causation, where they switch logic depending on the situation (Sarasvathy, 2001; Dew et al., 2009; Read & Sarasvathy, 2005). Novice entrepreneurs are no exception to this statement. Even if novice entrepreneurs, according to this study, use a more effectual logic when starting their venture, there are situations where they implement a causal logic as well. A common trait for novice entrepreneurs is taking help from other entrepreneurs with experience, mentors, people in their network, or specialists. This could be seen as an effectual logic, where they use the Crazy Quilt principle, leverage their network, and build partnerships. However, it can also be seen as a causal decision making process, where they try to gather as much information in a specific area as possible before making a decision. When novice entrepreneurs talk to their network, they want to talk to multiple people to hear different perspectives before deciding which perspective to go with. They are aware that the decision they make will affect the future of their venture and that different decisions come with different consequences. Which leads to the novice entrepreneur relying heavily on information from others and with that information trying to predict the best outcomes, a causal reasoning logic but at the

same time in other situations they use the information as a tool to control what can be controlled, the pilot in the plane principle from Sarasvathy's (2001) effectuation logic. What can be stated is that novice entrepreneurs rely on the information, knowledge, and resources that they can gather within their networks to shape their decision making processes.

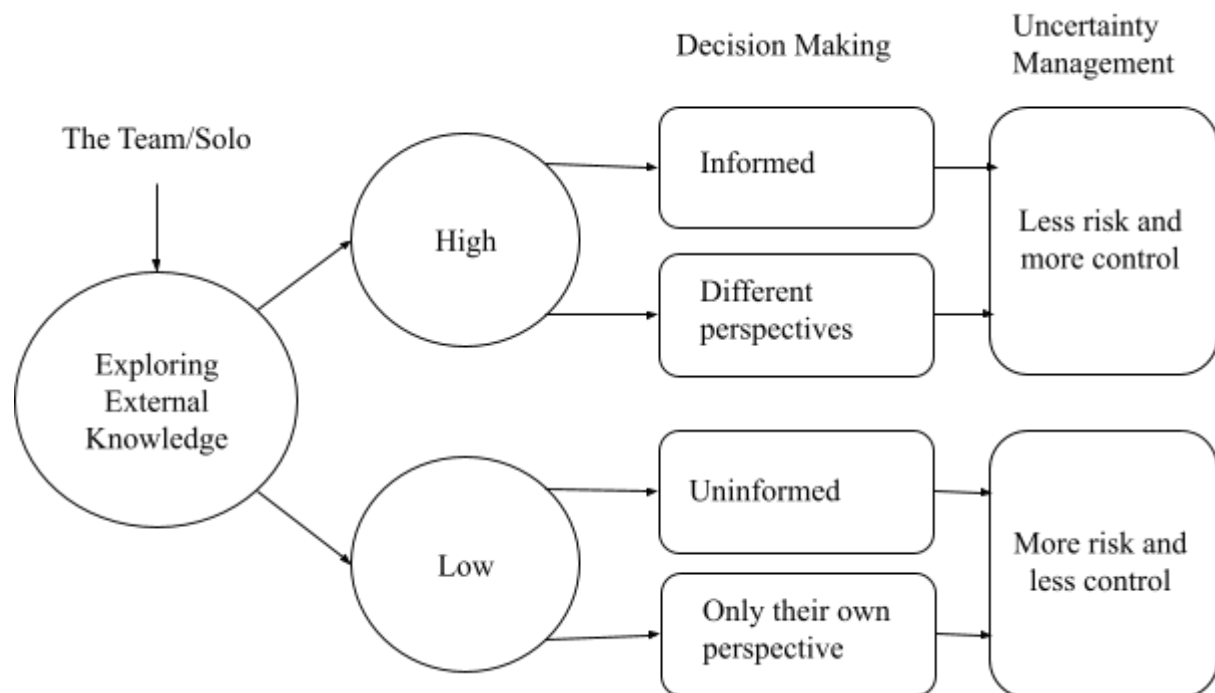


Figure 3. Framework of How Exploring external Knowledge influences Uncertainty Management

Figure 3 provides a clear picture of how exploring external knowledge as a novice entrepreneur influences uncertainty management. Firstly, being in a team or being a solo entrepreneur has an impact on how this element is being handled. The amount of exploring external knowledge the entrepreneur does has an impact on the decision making process. By having high levels of exploration of external knowledge, the entrepreneur gains knowledge from others that a novice entrepreneur lacks and therefore also gains different perspectives that they can consider when making decisions. These decisions are therefore safer to make, putting the novice entrepreneur more in control, compared to when the entrepreneur does not explore external knowledge. The figure therefore wants to illustrate the effects on decision-making processes and uncertainty management that exploring external knowledge has.

5.3 Gaining Experience

In the early stages of a start up there are a lot of different decisions that need to be made, as well as a lot of uncertainty. In comparison to experienced entrepreneurs who have been working with their ventures for a longer period of time, novice entrepreneurs act upon uncertainty in a different way (Tatikonda, Terjesen, Patel, & Parida, 2013). Novice entrepreneurs have a dependency to face different challenges and situations where they do not have the answer or experience to provide a correct solution, but the main trait they all have is that they embrace the uncertain situations and try to make decisions that will benefit them the most. In situations where they fail, they learn from their mistakes and bring their experiences with them for their future decision-making processes.

With novice entrepreneurs and their lack of experience, there are a lot more risks to take into account. The most important thing is therefore to be aware of the risks and try to manage them in the best way possible, which also includes some levels of impulsiveness. The main aspect that novice entrepreneurs try to achieve is gaining experience. Entrepreneurs with more experience have more tools to work with and can make decisions according to their prior knowledge from being in the field for a longer period of time (Politis, 2008). Entrepreneurs who have prior work experience before becoming entrepreneurs are also able to leverage their learnings and knowledge in different areas, as all information and knowledge a person acquires is beneficial in decision making processes (Bignott & le Rouz, 2020). Novice entrepreneurs are aware of their disadvantage of not possessing as much knowledge and therefore believe that taking action and doing stuff is the best way to gain knowledge. Due to the individuals not knowing what decision is best, there is a lot of uncertainty about which road to take. However, if they are afraid of trying, they will never gain the experience needed to make more thoroughly thought out decisions in the future. Novice entrepreneurs who do not take action and try will not be able to move forward with their venture at the same pace as other ventures, which leads to novice entrepreneurs wanting to take action and learn along the way. They believe that every decision made is a lesson in their journey and will give them more experience and knowledge for future decisions.

By obtaining more knowledge and experience, novice entrepreneurs have the opportunity to make decisions easier in the future. They are able to build a larger toolbox where they can make decisions more efficiently (Dew et al., 2009; Politis, 2008). However, to obtain more

experience, novice entrepreneurs need to be impulsive and go through situations they have not encountered before.

It is crucial for a novice entrepreneur to control the various risks associated with launching a new business. There is a need to understand what different options there are when it comes to decision making processes. Seeking guidance on different situations from people in their network is the most common tactic employed by novice entrepreneurs. They can also proceed with what they think is the best course of action given the resources at their disposal, learning along the way what could be done differently if the circumstances were to arise again. Most novice entrepreneurs adjust to the effectuation logic of The Pilot in the Plane. The idea is that by concentrating on what they can influence and control, entrepreneurs can manage the unpredictable future (Sarasvathy, 2001). By combining the knowledge they gain by exploring external knowledge, the novice entrepreneur can be more impulsive in their decision making process, which is needed if the venture is going to proceed further. When not being impulsive and instead waiting for the right answers, the entrepreneur misses chances to learn and gain the needed experience. Low impulsiveness can be a cause of not exploring external uncertainty when there is a lack of experience and, therefore, being too scared to handle the uncertainty. Therefore, it is important to make use of external knowledge and be impulsive to gain experience to make decisions to manage uncertainty.

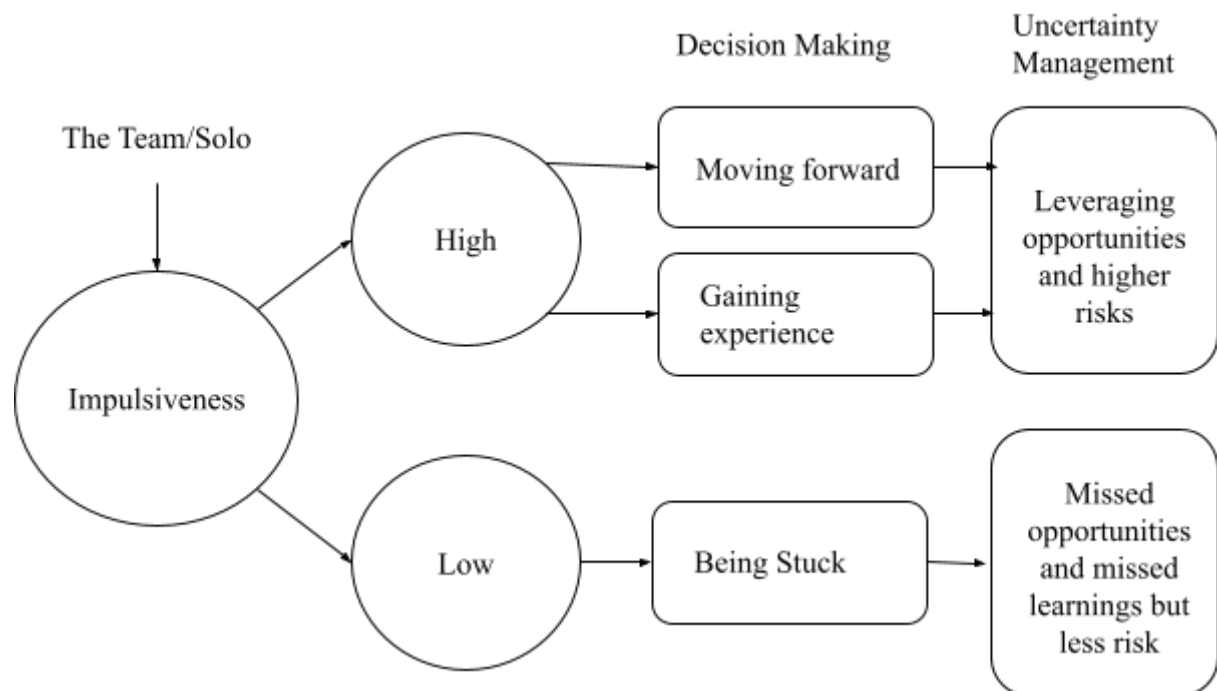


Figure 4. Framework of How Impulsiveness influences Uncertainty Management

As the figure above shows, the decision-making processes and uncertainty management of novice entrepreneurs are affected by the impulsiveness of the entrepreneur. When a novice entrepreneur takes action at a high level, it is easier to proceed with the decision-making process since they gain experience and knowledge, which can be used to guide other decisions. They are then able to leverage the different opportunities that occur but, however, add additional risks. In comparison, entrepreneurs who do not take action when different opportunities occur get stuck but lower the level of risk for the venture, as both the venture gets stuck and also their own learning development, causing the novice entrepreneur to not make decisions at all. By being stuck, the uncertainties are not managed, and the venture misses opportunities. By gaining experience, the venture moves forward, and the novice entrepreneur will have more knowledge to consider when making decisions.

5.4 Framework

Setting a course, seeking knowledge, and gaining experience all connect to the decision making process of novice entrepreneurs, explaining how novice entrepreneurs shape this process in their early stage ventures. Following the framework presented in this section can lead to a deeper understanding of how novice entrepreneurs shape their decision-making process and how it influences their uncertainty management. This can be beneficial for individuals who are interested in entrepreneurship but lack experience, as well as for bridging the theoretical gap on the topic.

In addition to providing guidance for others, the framework explains the components of the decision-making process that were discovered in this study. The eight cases that were studied served as the basis for the framework, which includes the following:

1. Three different elements shape decision making
2. The team element influences the other three elements
3. How the three different elements influence each other
4. How it all connects to uncertainty and uncertainty management

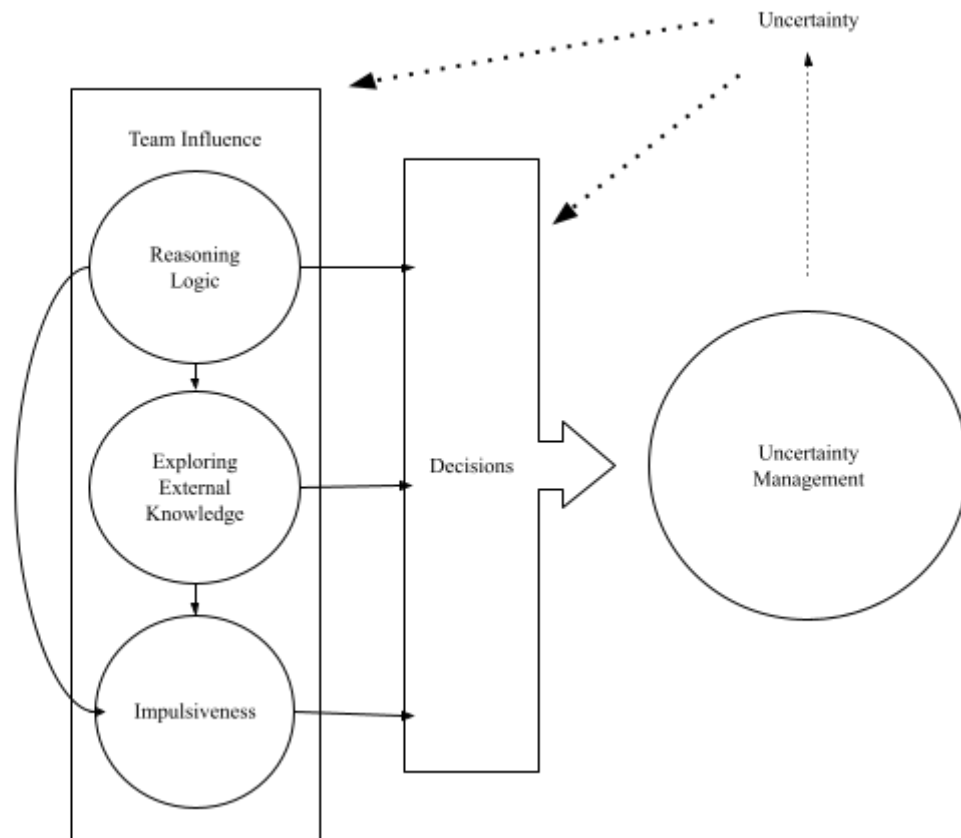


Figure 5. Novice entrepreneurs decision making process under uncertainty

The uncertainty of entrepreneurship is always present and is therefore an influencing factor for the other elements; reasoning logic, exploring external knowledge, impulsiveness, and team influence. Entrepreneurs handle uncertainty through their uncertainty management, which addresses both indirect and direct causes of events (Magnani & Zuchella, 2018).

The entrepreneur's use of effectuation and/or causation, values, direction, and guidelines makes up the first component of the shaping of decision making, which is the reasoning logic element. This component influences the decision-making process by providing a purpose and direction for the decisions, simplifying the process of making decisions. The reasoning logic used by the novice entrepreneur highly affects decisions in early stage ventures since they can't base decisions on experience. In this element, the novice entrepreneur relies on the limited information they get and on what they want to achieve with their venture when it comes to decision making under uncertainty. Since they don't know how to handle uncertainty through experience, they instead make their decisions based on their reasoning

regarding the situation. With a direction for these decisions, they can still leverage opportunities for their early stage venture and not end up making no decisions or delaying them (Matthews & Scott, 1995; Shane & Venkataraman, 2000). This component is related to both exploring external knowledge and impulsiveness. Because the reasoning logic affects the entrepreneur, how the entrepreneur views uncertainty affects how external knowledge is explored and how impulsive the entrepreneur is.

Using your network and available resources is crucial, as discussed in the second component, exploring external knowledge. Since the entrepreneur is inexperienced, they can learn by seeking assistance and benefiting from the expertise of others. The knowledge they can gain from this shapes their decision making process since they get information they can base their decisions on. The results clearly state that novice entrepreneurs are depending on the knowledge of others when they have to make decisions under uncertainty. When not knowing what to do, the guidance of others helps and saves the entrepreneur time. The novice entrepreneur seeks knowledge from people within their network, mentors, industry experts, and by using resources offered by institutions. The entrepreneur primarily learns this information by looking for it, asking for assistance, and projecting humility in their appearance. With all the knowledge and resources collected, the novice entrepreneur can make decisions that align with their values and that seem to be the best for the venture at that given time. By gaining more knowledge, the entrepreneur becomes more confident in his or her impulsiveness, the third element.

By having high levels of impulsiveness, the entrepreneur gains more experience, which can be used to make better decisions. Since the novice entrepreneur lacks experience, it is crucial to learn by doing to create a better decision making process. They also have to navigate uncertainty by taking the risks of doing things that they haven't done before to actually move forward with their venture. Impulsiveness is the way forward and is also what is necessary when going from novice to experienced entrepreneur. The data showed agreement from all novice entrepreneurs that they needed to try things out and not be afraid to fail to leverage opportunities. This mindset helps them shape their decision making process under uncertainty, as they know they do not have all the right answers, but they make decisions anyway to be able to proceed. They have a mindset of doing things to gain experience that would help them shape their decision making process. They also shape the decision making process by just doing things, even though it causes uncertainty, because they have to.

By combining the knowledge from the second element with experience from the third, the novice entrepreneur gets a better context of the situation they are in and can base their decisions on relevant information that they did not possess before. By gaining more experience and knowledge from others, entrepreneurs also learn how to manage their uncertainty.

The last element is team influence, which affects all the other elements in the decision making process. How the team is built makes a difference, as does how the members align with each other (Wasserman, 2008; Haas, Martine, & Mortensen, 2016). The team has huge effects on the decision making process, on what decisions are made, how they are made, and the success of the venture. Therefore, the fourth element is very important to take into consideration when forming a new novice entrepreneurial team. The team will influence the reasoning logic, how they leverage resources, and what actions they take. When the entrepreneur is a solo entrepreneur, this element instead consists of the influence of close relationships and the entrepreneur's personal traits. By being solo, the element of exploring external knowledge becomes even more crucial.

All these four different elements affect the decision making process among novice entrepreneurs in early stage ventures, which helps them manage the uncertainty they are in. By combining reasoning logic, the exploration of external knowledge, and gaining experience, the novice entrepreneur shapes their decision making process. Since novice entrepreneurs have a mindset of finding solutions rather than a heuristic mindset, these elements help them make decisions they feel comfortable with and give them a direction for how to handle the uncertainty that they are in. The reasoning logic makes a difference in how the entrepreneur explores external knowledge, and by leaning towards either causation or effectuation, the external knowledge is explored in different ways and therefore causes different decision making processes. The exploration of external knowledge then relates to how impulsive the entrepreneur feels comfortable being; the more knowledge gained, the more the entrepreneur can be impulsive and then gain the experience that affects the decision making process further. Therefore, the three elements link together, and when used correctly, the novice entrepreneur can use them to make decisions and manage uncertainty.

6. Conclusion

The final chapter, Conclusion, presents what contributions have been made through the study and what findings have been made. Moreover, this chapter wants to highlight the limitations of the research and what future research could be done to further gain in-depth knowledge in the area of novice entrepreneurs and their decision making processes.

6.1 Contributions

This study has contributed to answering the research question, *How do novice entrepreneurs shape their decision making processes to manage the uncertainty in early stage ventures?* which has been a gap in previous research and the theoretical framework. By conducting the research, the study was able to provide a framework for answering the research question. The framework explains and creates deeper insight into how novice entrepreneurs shape their decision making process to manage uncertainty in early stage ventures. This contribution helps to fill the theoretical gap in novice entrepreneurship and can be a beneficial tool for individuals who are interested in pursuing a new venture.

The framework presents four elements that affect the shaping of the decision making process among novice entrepreneurs under uncertainty:

1. Reasoning Logic
2. Exploring external Knowledge
3. Impulsiveness
4. Team influence

By following the framework, novice entrepreneurs have a guideline for decision making under uncertainty. The framework provides an understanding of what novice entrepreneurs need to focus on in their decision-making processes in order to proceed with their venture. The different elements in the framework have been proven in this study to be the most pressing areas for novice entrepreneurs to focus on, as they are the areas that provide them with a toolbox to effectively see progression in their start-ups. The presented framework can

also be a building block for future research and for academics to delve further into decision making processes under uncertainty among entrepreneurs. The three first elements are also explained deeper in the analysis on how they influence decision-making processes and uncertainty management to present the connections further. These explanations contain figures showing the different outcomes if the element is highly used or not, which helps to understand the last presented framework and what the outcomes are for not shaping the decision making process, as the cases studied in this research agreed upon being the best course of action.

6.2 Limitations

There are a few limitations to this study. Firstly, this study might only be applicable in Sweden since a majority of the participants were from Sweden, and therefore, the study has limitations regarding the results being applicable in the whole world. All of the participant data was in alignment, and both the Swedish and international participants provided responses that were similar. However, all of the participants started their ventures in Sweden to begin with, which could also affect the outcome and results of the study. The decision making processes presented in this study could therefore not be applied universally without further studies on novice entrepreneurs who have started a venture outside of Sweden.

The study approached entrepreneurs in early stage ventures in different types of industries and therefore can have limitations when it comes to specific industries. The results suggest a common approach regardless of the industry, but this limitation can still be valid in specific industries with complex and special contexts. In certain industries, there are stricter laws and regulations that need to be taken into account, which have not been thoroughly researched in this study. However, the study is able to provide insights on how novice entrepreneurs handle uncertainty in their decision making processes in a general context.

6.3 Future research

Regarding the limitations of the study, suggestions for future research are to look into a specific industry to get deeper insight into that particular circumstance or to gather data from a more international data collection. Since the study was not situation-specific, it would also be interesting to investigate more particular uncertain situations and how they are handled, recommending further research be done on uncertainty in the supply chain, investors, capital,

corona, or the impact of war, as these were the scenarios that appeared in the study's data. Examining one of these could provide insight into that particular situation, enabling others to benefit from it and investigate ways to take advantage of it should it arise again. By focusing on one particular uncertainty, the results and contributions would benefit both entrepreneurs and academics in understanding how novice entrepreneurs shape their decision making process to manage uncertainty.

The last suggestion for future research is to explore the next step of the framework. For example, consider how uncertainty management relates to venture success or failure (Figure 6). The study conducted now only focused on how novice entrepreneurs shape their decision-making processes to manage the uncertainty in their ventures. However, the study has not looked at the success criteria of these different decision-making processes and uncertainty management techniques. This research, gaining an understanding of how the different techniques effect the outcome of the venture, would provide a more nuanced and in-depth perspective on the novice entrepreneur’s journey and venture success.

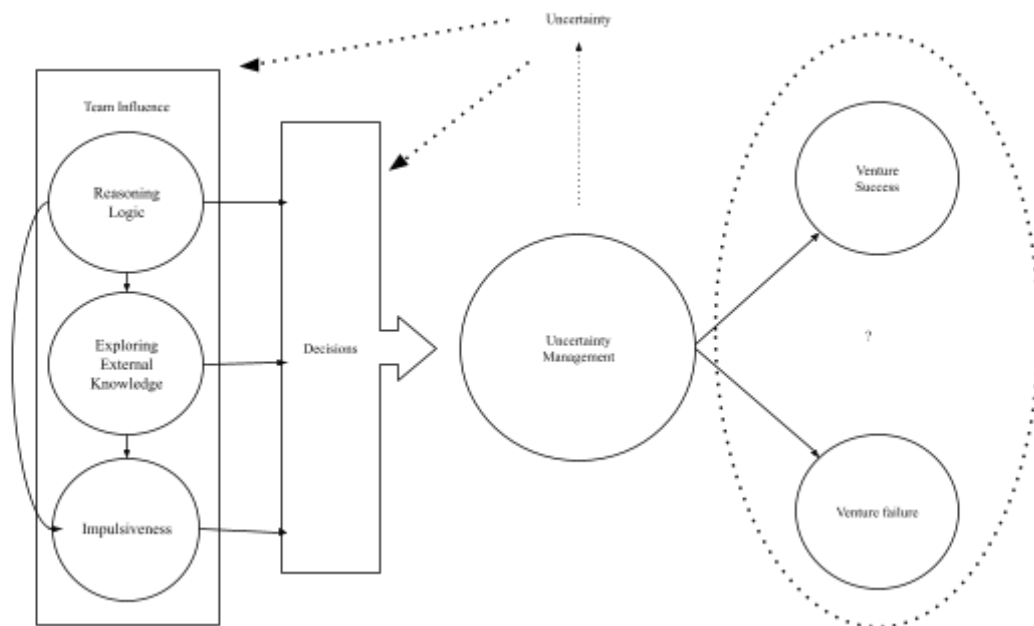


Figure 6. Suggested future research on novice entrepreneurs uncertainty management outcomes

Reference list

Alvehus, J. (2023). *Skriva uppsats med kvalitativ metod*. Liber AB: Stockholm

Bignotti, A. and le Roux, I. (2020), "Which types of experience matter? The role of prior start-up experiences and work experience in fostering youth entrepreneurial intentions", *International Journal of Entrepreneurial Behavior & Research*, Vol. 26 No. 6, pp. 1181-1198.

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77–101. doi:10.1191/1478088706qp063oa.

Bromiley, P., McShane, M., Nair, A. & Rustambekov, E. (2014) Enterprise Risk Management: Review, Critique, and Research Directions, *Long Range Planning*, 48(4), 265-276. <https://doi.org/10.1016/j.lrp.2014.07.005>

Bryman, A. (2016). *Social research methods*. Oxford University Press

Coleman, P. (2021) 'Validity and Reliability within Qualitative Research in the Caring Sciences', *International Journal of Caring Sciences*, 14(3), pp. 2041–2045. Available at: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=ccm&AN=154936122&site=eds-live&scope=site> (Accessed: 21 March 2024).

Chen, J., Elfenbein, D., Posen, H. & Wang, M., (2022) The problems and promise of entrepreneurial partnerships: decision-making, overconfidence, and learning in founding teams. *Academy of Management Review*. 47(3) 489-520 <https://doi.org/10.5465/amr.2019.0119>

Crnogaj, Ka, & Matej, R., (2023). "From Start to Scale: Navigating Innovation, Entrepreneurial Ecosystem, and Strategic Evolution" *Administrative Sciences* 13, no. 12: 254.

Davidsson, P. (2005), Chapter 1 in "Researching entrepreneurship". US: Springer.

David & Sutton (2016), *Samhällsvetenskaplig metod*. *Studentlitteratur AB*

Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal of Business Venturing*, 24(4), 287-309 <https://doi.org/10.1016/j.jbusvent.2008.02.002>

Eisenhart, K. (1989), Building theories from case-study research. *The Academy of Management Review* 14(4), 532-550. <https://doi.org/10.2307/258557>

Eisenhardt, K. M., & Graebner, M. E. 2007. Theory Building from Cases: Opportunities and Challenges. *Academy of Management Journal*, 50: 25-32

El-Awad, Z., (2019), 'Unpacking entrepreneurial learning: How prior related experience and uncertainty affect learning behaviors', Paper presented at 39th Annual Babson College Entrepreneurship Research Conference (BCERC), Boston, United States, 2019/06/05 - 2019/06/08.

El-Awad, Z., Gabriellson, J. and Politis, D. (2017), "Entrepreneurial learning and innovation: The critical role of team-level learning for the evolution of innovation capabilities in technology-based ventures", *International Journal of Entrepreneurial Behavior & Research*, Vol. 23 No. 3, pp. 381-405. <https://doi.org/10.1108/IJEER-06-2016-0177>

Engel Y., Dimitrova N., Khapovaa S. & Elfringa T. (2014) Uncertain but able: Entrepreneurial self-efficacy and novices' use of expert decision-logic under uncertainty. *Journal of Business Venturing Insights*, 1, 12-17 <https://doi.org/10.1016/j.jbvi.2014.09.002>

Gioia, D. A., Corley, K. G., & Hamilton, A. L. 2013. Seeking Qualitative Rigor in Inductive Research Notes on the Gioia Methodology. *Organizational Research Methods*, 16(1): 15-31.

Haas, M., & Mortensen, M., (2016) "The secrets of great teamwork." *Harvard business review* 94(6) 70-76

Jiang, Y. & Tornikoski, E. (2018) Perceived uncertainty and behavioral logic: Temporality and unanticipated consequences in the new venture creation process. *Journal of Business Venturing*, 34(1), 23-40. <https://doi.org/10.1016/j.jbusvent.2018.06.002>

Jiao, K., Ling, Y., & Kellermanns, F. W. (2023) Does prior experience matter? A meta-analysis of the relationship between prior experience of entrepreneurs and firm performance, *Journal of Small Business Management*, 61:6, 2938-2985, DOI: 10.1080/00472778.2021.1951280

Landström, H. (2020), The Evolution of Entrepreneurship as a Scholarly Field, *Foundations and Trends in Entrepreneurship*: 16(2), 73-99.

Magnani G. & Zuchella A. (2018) Uncertainty in Entrepreneurship and Management Studies: A Systematic Literature Review. *International Journal of Business and Management*. 13(3), doi:10.5539/ijbm.v13n3p98

Matthews, C. & Scott, S. (1995) Uncertainty and Planning in small and entrepreneurial firms. An empirical assessment. *Journal of Small Business Management*. 33(4) 34-52.

Meijer, I. S., Hekkert, M. P., & Koppenjan, J. F. (2007). The influence of perceived uncertainty on entrepreneurial action in emerging renewable energy technology; biomass gasification projects in the Netherlands. *Energy policy*, 35(11), 5836-5854.

Parida, V., Lahti, T. & Wincent, J. (2016) Exploration and exploitation and firm performance variability: a study of ambidexterity in entrepreneurial firms. *Int Entrep Manag J* 12, 1147–1164 . <https://doi.org/10.1007/s11365-016-0387-6>

Politis, D. (2008), "Does prior start-up experience matter for entrepreneurs' learning? A comparison between novice and habitual entrepreneurs," *Journal of Small Business and Enterprise Development*, Vol. 15 No. 3, pp. 472-489.

Ramayah, T., Ahmad, N. H., & Fei, T. H. C., (2012). Entrepreneur Education: Does Prior Experience Matter? . *Journal of Entrepreneurship Education*. London, Vol. 15: 65-81.

Ratten, V. (2023). Entrepreneurship: Definitions, opportunities, challenges, and future directions. *Global Business and Organizational Excellence*, 42(5), 79–90.

Read, S., & Sarasvathy, S. D. (2005). Knowing What to Do and Doing What You

Know: Effectuation as a Form of Entrepreneurial Expertise. *The Journal of Private Equity*, 9(1), 45–62. <http://www.jstor.org/stable/43503446>

Sarasvathy, S. D. (2001). Causation and Effectuation: Toward a Theoretical Shift from Economic Inevitability to Entrepreneurial Contingency. *The Academy of Management Review*, 26(2), 243–263. <https://doi.org/10.2307/259121>

Saunders, M.N. and Townsend, K., 2016. Reporting and justifying the number of interview participants in organization and workplace research. *British Journal of Management*, 27(4), pp.836-852.

Shane, S. (2008) *The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live By*. Yale University Press

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.

Shepherd, D. A., Douglas, E. J., & Shanley, M. (2000). New venture survival: Ignorance, external shocks, and risk reduction strategies. *Journal of Business Venturing*, 15(5), 393-410.

Stiles, W., (1993). Quality Control in Qualitative Research. *Clinical Psychology Review*, Vol. 13, pp. 593-618

Tatikonda, M. V., Terjesen, S. A., Patel, P. C., & Parida, V. (2013). The Role of Operational Capabilities in Enhancing New Venture Survival: A Longitudinal Study. *Production and Operations Management*, 22(6), 1401-1415.

Wasserman N. (2008) *The founder's dilemmas : anticipating and avoiding the pitfalls that can sink a startup*. Princeton University Press

West P. J., (2007) Collective Cognition: When Entrepreneurial Teams, Not Individuals, Make Decisions. *Entrepreneurship Theory and Practice*, 31(1)
<https://doi.org/10.1111/j.1540-6520.2007.00164.x>

Appendix

Interview Template

Theme 1, Background

1. Tell us about yourself - age, from, studies, etc.
2. What made you interested in entrepreneurship
3. Tell us about your venture - what you do, when was it founded
4. When founding, were you in a team or alone? - what did your team look like?
5. Do you have employees? - how many
6. Can you share your revenue?

Theme 2, Uncertain Situations

1. Could you tell us how you look at uncertainty?
2. In the early stage of your venture, what uncertain situations were you faced with?
3. What situations did you encounter frequently?
4. Can you give us an example of a situation where you had to deal with a high degree of uncertainty?
5. What has been the most challenging when starting a new venture and dealing with uncertainty?
6. The uncertain situations you have encountered, how did they start/where did they come from?

Theme 3, Uncertainty Management

1. Could you explain how you handled (a situation mentioned earlier)?
2. Could you go through the thought process you had in this situation?
3. Why did you handle a situation like that?
4. When faced with the same situation today, how would you handle it?
5. How do you keep yourself motivated to pursue the venture when faced with all these uncertain situations?
6. Could you explain why you think it is worth it?
7. Do you have a mentor or other “senior” entrepreneurs that you get any help from? - explain that relation and how it helps in uncertain situations

8. Tell us about a situation where you handled uncertainty in a bad way?

Theme 3A, The influence of the team

1. How has the composition of your team influenced your way of handling uncertainty?
2. What different perspectives or competencies do different team members bring when managing uncertainty?
3. Can you describe how your team has evolved over time in terms of uncertainty management, and what role do you think this has played in your development?
4. What are the biggest challenges you have encountered in integrating different perspectives and opinions from your team members into your uncertainty management, and how have you overcome these challenges?

Theme 3B, Solo entrepreneurs

1. What do you do to gather different perspectives or insights when faced with uncertainty?
2. How do you ensure accountability and objectivity in your decisions, when there are no other team members to provide feedback or challenge your ideas?
3. What do you do to stay adaptable and resilient in the face of uncertainty and changing circumstances?

Interview template in Swedish

Tema 1, Bakgrund

1. Berätta om dig själv – ålder, från, studier osv.
2. Vad gjorde dig intresserad av entreprenörskap
3. Berätta om ditt företag - vad ni gör, när grundades det
4. När du grundade, var du i ett team eller ensam? - Hur såg ditt lag ut?
5. Har du anställda? - hur många
6. Kan du dela med dig av vad du har för intäkter?

Tema 2, Osäkra situationer

1. Kan du berätta hur du ser på osäkerhet?
2. Vilka osäkra situationer ställdes du inför i det tidiga skedet av ditt företag?
3. Vilka situationer stötte du ofta på?
4. Kan du ge oss ett exempel på en situation där du var tvungen att hantera en hög grad av osäkerhet?
5. Vad har varit det mest utmanande när man startat en ny satsning och hanterat osäkerhet?
6. De osäkra situationer du har stött på, hur började de/var kom de ifrån?

Tema 3, Osäkerhetshantering

1. Kan du förklara hur du hanterade (en situation som nämndes tidigare)?
2. Skulle du kunna gå igenom tankeprocessen du hade i den här situationen?
3. Varför hanterade du en sådan situation?
4. När du stod inför samma situation idag, hur skulle du hantera det?
5. Hur håller du dig själv motiverad att fortsätta satsningen när du står inför alla dessa osäkra situationer?
6. Kan du förklara varför du tycker att det är värt det?
7. Har du en mentor eller andra ”senior” företagare som du får hjälp av? - förklara den relationen och hur den hjälper i osäkra situationer

Tema 3A, Teamets inflytande

1. Hur har sammansättningen av ditt team påverkat ditt sätt att hantera osäkerhet?

2. Vilka olika perspektiv eller kompetenser tillför olika teammedlemmar när de hanterar osäkerhet?
3. Kan du beskriva hur ditt team har utvecklats över tid när det gäller osäkerhetshantering, och vilken roll tycker du att detta har spelat i din utveckling?
4. Vilka är de största utmaningarna du har stött på med att integrera olika perspektiv och åsikter från dina teammedlemmar i din osäkerhetshantering, och hur har du övervunnit dessa utmaningar?

Tema 3B, Soloentreprenörer

1. Vad gör du för att samla olika perspektiv eller insikter när du ställs inför osäkerhet?
2. Hur säkerställer du ansvarighet och objektivitet i dina beslut när det inte finns några andra teammedlemmar som kan ge feedback eller utmana dina idéer?
3. Vad gör du för att förbli anpassningsbar och motståndskraftig inför osäkerhet och förändrade omständigheter?

Literature overview

Article	Author(s)	Highlights
Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency	Sarasvathy, S. (2001)	Effectuation: using available resources causation: predicting outcomes and selecting the best course of action The principles of effectuation How uncertainty can be managed in decision-making iterative learning techniques, experimenting with different options, and seeking feedback from others.
Characteristics, traits, and attitudes in entrepreneurial decision-making: current research and future directions.	Acharya, K., Berry, G.R (2023)	How different characteristics, traits and attitudes affects decision making in new ventures Self-efficacy Future research
Effectual versus predictive logic in entrepreneurial decision-making: Differences between experts and novices.	Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2009).	Study with experts and students Experts → effectual logic Students → predictive logic Student follow textbook procedures in decision making
Knowing What to Do and Doing What You Know: Effectuation as a Form of Entrepreneurial Expertise	Read S., Sarasvathy (2005)	Affordable loss Learning from feedback Inexperienced tend to use causation Focuses on the one goal in their decision making Gain more knowledge as they go by, and change their decision making process
The human complexities of entrepreneurial decision making: A grounded case considered	Douglas, D. (2005)	substantive theoretical insight into the micro-world of entrepreneurial activity understanding of the human complexities that are involved in decision-making The impact different decisions have on smaller businesses
Uncertain but able: Entrepreneurial self-efficacy and novices' use of expert decision-logic under uncertainty	Engel Y., Dimitrova N., Khapovaa S. &Elfringa T. (2014)	High entrepreneurial self-efficacy leans towards effectual logic People who framed situations as opportunities were more likely to prefer effectual logic in their decision-making. Novice entrepreneurs rely on forecasts and predictions with more confidence in your abilities comes more motivation
Perceived uncertainty and behavioral logic: Temporality and unanticipated consequences in the new venture creation process	Jiang, Y. & Tornikoski, E. (2018)	Examine how the relationship between effectuation and causation evolves in new venture creation processes. The nature of the relationship between perceived uncertainty and behavioral logics evolves from causal conditional to integrative. Nuanced view of when effectuation is applied

Which types of experience matter? The role of prior start-up experiences and work experience in fostering youth entrepreneurial intentions	Bignotti, A. and le Roux, I. (2020)	Entrepreneurial background, work experience, and experience of starting a venture before all have a positive effect on entrepreneurial intentions Peer influence and contextual factors appear to dampen youth entrepreneurial intentions because of fear of failure and fear of competition.
Enterprise Risk Management: Review, Critique, and Research Directions	Bromiley, P., McShane, M., Nair, A. & Rustambekov, E. (2014)	Enterprise Risk Management (ERM) integrates risk management with corporate governance and strategy. Current ERM research is limited and mostly found in accounting and finance journals, not in management journals. Management scholars can significantly contribute to and advance ERM research by addressing its limitations and gaps.
The problems and promise of entrepreneurial partnerships: decision-making, overconfidence, and learning in founding teams.	Chen, J., Elfenbein, D., Posen, H. & Wang, M., (2022)	Entrepreneurial teams must structure decision-making to manage confidence biases. Three decision-making structures are analyzed: partnership voting, a boss with employees, and a buyout option. Partnership voting works well when entrepreneurs are unbiased or optimistic, while a buyout option is better if biases differ or responses to new information are too rapid.
From Start to Scale: Navigating Innovation, Entrepreneurial Ecosystem, and Strategic Evolution	Crnogaj, Ka, & Matej, R., (2023)	Startups are key employment contributors, particularly in mature ecosystems like the U.S., with Europe, especially Slovenia, being less explored. Need for tailored business strategies, innovation, and multifaceted support systems to navigate growth challenges successfully.
'Unpacking entrepreneurial learning: How prior related experience and uncertainty affect learning behaviors	El-Awad, Z 2019	The study examines why new ventures adopt different learning behaviors to manage uncertainty in commercialization. Prior experience relatedness influences how ventures judge and manage uncertainties, shaping their learning behaviors accordingly.
Entrepreneurial learning and innovation: The critical role of team-level learning for the evolution of innovation capabilities in technology-based ventures	El-Awad, Z., Gabriellson, J. and Politis, D. (2017)	Identifies different sets of team learning processes critical for the routinization and evolution of innovation capabilities in technology-based ventures. the conceptual model advances the scholarly understanding of entrepreneurial learning as a dynamic process operating across multiple levels in technology-based ventures.

The secrets of great teamwork	Haas, Martine, & Mortensen (2016)	Different concepts that explain the best dynamic for teamwork The main criteria for evaluating team effectiveness are collaborative ability, output, and members' individual development.
Perceived uncertainty and behavioral logic: Temporality and unanticipated consequences in the new venture creation process	Jiang, Y. & Tornikoski, E. (2018)	The nature of the relationship between perceived uncertainty and behavioral logics evolves from causal conditional to integrative. The boundary condition for effectuation theory extends from the perception of uncertainty through to situations in which unanticipated consequences occur.
Uncertainty in Entrepreneurship and Management Studies: A Systematic Literature Review.	Magnani G. & Zuchella A. (2018)	Explores the characteristics of uncertainty, its distinction from risk, and sources affecting firms' activities in entrepreneurship and management. Difference between uncertainty and risk, highlighting uncertainty's complex nature, and linking it to opportunity formation in strategic management and entrepreneurship.
Uncertainty and Planning in small and entrepreneurial firms. An empirical assessment	Matthews, C. & Scott, S. (1995)	As perception of environmental uncertainty rises, both strategic and operational planning decrease. Despite entrepreneurial firms engaging in more sophisticated planning overall, they still experience a decrease in planning as uncertainty perception increases.
The influence of perceived uncertainty on entrepreneurial action in emerging renewable energy technology; biomass gasification projects in the Netherlands	Meijer, I. S., Hekkert, M. P., & Koppenjan, J. F. (2007)	The article examines how perceived uncertainties and motivation affect entrepreneurs' decisions to engage in innovation projects for emerging renewable energy technologies. Perceived uncertainties and motivation evolve over time, influenced by critical factors in the project's internal and external environment.
Exploration and exploitation and firm performance variability: a study of ambidexterity in entrepreneurial firms	Parida, V., Lahti, T. & Wincent, J (2016)	Young entrepreneurial firms often struggle with performance variability, impacting their survival. Focusing on either exploration or exploitation can reduce performance variability, promoting ambidexterity.
Does prior start-up experience matter for entrepreneurs' learning? A comparison between novice and habitual entrepreneurs,	Politis, D. (2008)	Habitual and novice entrepreneurs differ significantly with regard to several interesting aspects of the hypothesized dimensions.
Entrepreneur Education: Does Prior Experience Matter?	Ramayah, T., Ahmad, N. H., &	There are significant difference between groups that have prior experience compared to those who do not have prior

	Fei, T. H. C., (2012)	entrepreneur experience in terms of entrepreneurial characteristics, behaviour and intention.
The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live By	Shane, S. (2008)	Exploring different myths on entrepreneurship and offers explanations of who really are entrepreneurs, the risks of entrepreneurship and success factors in entrepreneurship. Further explains the difficulties of entrepreneurship and how it is not as glamorous as the myths tell everyone.
New venture survival: Ignorance, external shocks, and risk reduction strategies	Shepherd, D. A., Douglas, E. J., & Shanley, M. (2000)	The mortality risk new ventures face, often attributed to the "liability of newness." Mortality risk is seen to decrease as novelty diminishes through information dissemination and passive learning processes.
The Role of Operational Capabilities in Enhancing New Venture Survival: A Longitudinal Study	Tatikonda, M. V., Terjesen, S. A., Patel, P. C., & Parida, V. (2013)	The study explores the relationship between operational capabilities and new venture survival, proposing a contingency framework based on operations management and entrepreneurship literature. It suggests that different operational capabilities are crucial at various life phases of a new venture's evolution.
Collective Cognition: When Entrepreneurial Teams, Not Individuals, Make Decisions	West P. J., (2007)	Highlights the significance of examining cognition at the team level in new venture success, drawing on managerial cognition and entrepreneurship literature. Collective cognition is crucial for new venture strategy and other critical decision domains.