

Trust in Generative AI - Impact on Causal/Effectual Decision-Making

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ABSTRACT,

This study aims to explore to what extent trust in Generative AI influences the decision-making logic of novice entrepreneurs during the startup phase of the new venture. A qualitative research design was adopted, following a mixed-method approach in data collection – conducting both survey and semi-structured interviews. Data from 10 novice entrepreneurs were then analyzed through the combination of abductive approach and the Gioia method. This allowed for a flexible yet systematic analysis of the data with existing theories. In the findings, effectual entrepreneurs tend to trust GenAI and they utilize the technology to help them maximize their available means, set acceptable losses, and operate under uncertainty. In contrast, causal entrepreneurs favoured manually doing tasks such as creating business plans and analyzing the market, exhibiting distrust in GenAI. In summary, this study suggests that depending on how the entrepreneurs view GenAI and what role it has in their decision-making, trust in the technology can significantly shape their entrepreneurial decision-making approaches. Entrepreneurs with high trust are more likely to adopt effectual decision-making approaches as they see GenAI with a role of an exploratory partner, as well as a tool that allows them to embrace contingency and leverage existing means. On the other hand, entrepreneurs with distrust are more likely to engage in causal reasoning as they want to reduce risks and maintain control by adhering to known and tested processes.

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Keywords

Trust; Causation; Generative AI (GenAI); Entrepreneurship; Decision-Making Logic; Effectuation Theory

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Disclaimer: AI tools like ChatGPT were used to refine structure and language. All content was reviewed and finalized by the author

1. INTRODUCTION

Over the past few years, the integration of artificial intelligence (AI) in entrepreneurial decision-making has received increasing attention (Mahmudin, 2023; Cszasz et al., 2024). The growth of AI has stirred many opinions, both good and bad, from scholars and experts. AI has many applications and is proficient in many tasks, often rivaling human capabilities or even outperforming them. Due to its proficiency across a wide range of tasks, it has been adopted across multiple industries and disciplines (Thayyib et al., 2023). In the case of this paper, the focus will be on entrepreneurial decision-making, specifically the impact of AI integration into their decision-making processes. Entrepreneurs are a driving force for progress and innovation as they identify opportunities and undertake the risk of creating and implementing their idea in the market. They utilize their expertise to create and implement new solutions that potentially contribute to job creation and productivity growth (Hallak & Lee, 2023).

Despite entrepreneurship' potential and increasing relevance, startups struggle to scale and survive on the market. One of the key factors is attributed to the liability of newness and smallness. Startups begin new and small, making them vulnerable to unique challenges. According to Noronha & Pillai (2024), industry experience has significant influence on attracting investors and partners. However, many startups have less business expertise resulting in their lack of understanding of entrepreneurial processes and stages of the venture. Startups also have limited networks, leading to a lack of access to operational resources and crucial investments. Startups are inclined to face disadvantages and challenges simply because of their experience and size. First, they lack experience and time to learn from mistakes and obstacles. These lessons help in developing routines and processes that enhance their operations. With an organizations relatively recent establishment, little to no accomplishments are known that will boost its reputation to customers and investors. Second, an organizations limited size infers lack of networks, resources, and financial instability. Startups with limited connections and relationships with their stakeholders would be unable to gain the knowledge, resources, and influence of others. This will also hinder the collection of resources, such as finance, personnel, and equipment, that can potentially aid them in competing with incumbent firms. With limited resources, there is increased uncertainty in the startups financial health. Startups may experience difficulty meeting its obligations and may be more vulnerable to economic downturns (Noronha & Pillai, 2024).

Another factor that affects startups growth and long-term success is the degree of uncertainty they are exposed to on a daily basis. Entrepreneurs operate in a volatile, uncertain, complex, and ambiguous (VUCA) environment. For them to survive, they must be agile and responsive (Enwereji et al., 2024; Troise et al., 2022) to adapt to the rapid and unpredictable changes in the business environment. They must develop strategies that can address different scenarios and prepare for any unpredictable events. The environment can become complex due to globalization and the diverse stakeholders involved. This requires entrepreneurs to collaborate to gain access to resources and opportunities (Enwereji et al., 2024; Hora & Millar, 2012). Use of technology can also enhance decision-making as it can address limitations on analyses, consistency, and gathering valuable insights. Challenges in understanding the business environment may also arise, thus, the need for entrepreneurs to remain open to pivoting when necessary (Enwereji et al., 2024). Being flexible is necessary as plans and actions may be adjusted when new information is obtained. In essence, the only thing that is constant

in the world is change therefore, new ventures should have the ability to make timely and well-informed decisions in order to survive and gain competitive advantage.

The increasing uncertainty and unpredictability of the business environment suggests enhanced entrepreneurial decision-making, where entrepreneurs react faster to changes and make effective choices. Traditionally, entrepreneurs employ planning-based approaches (e.g. business plans) to shape and commercialize their business ideas (Nakajima & Sekiguchi, 2025). Karlsson and Honig (2009) stated that some companies utilize this approach to gain capital and support from external actors. However, formal documentation and detailed analysis of the market is required, which can be time-consuming and a struggle to follow through. This approach describes causation theory and has also been observed to be limited and not sufficient for entrepreneurs to remain competitive, especially in environments with high levels of uncertainty (Sarasvathy, 2001; Henninger et al., 2019). Therefore, entrepreneurs are forced to explore other approaches such as effectuation which allows them to embrace contingencies; welcoming unexpected events and turning them into new opportunities. Sarasvathy (2001) illustrated effectuation processes as the opposite of causation, focusing on the means or tools available and using them to create opportunities. The two approaches are essential for new ventures to survive and thrive. However, recent technological advancements and the emergence of AI, introduced new possibilities for entrepreneurs to navigate the constantly changing business environment.

AI has witnessed rapid advancements the last few years. It has also become an attractive target for investors (Toosi et al., 2021). The investment from companies and governments on AI has led to further advancements in its computational power and algorithm design. AI is changing many aspects of human life and has even reached the level of outperforming humans in a number of tasks. Some of the many applications of AI are robotics, natural language processing (NLP), e-commerce, and etc (Biswal, 2025). Its convenience and its ability to motivate productive levels encourages industries to continue utilizing it. Its wide range of functions and applications includes its ability to enhance the quality and efficiency of an entrepreneur's decisions. Within the broader topic of AI, Generative AI, offers various practical applications for startups such as content creation, product development, and market research (Emergeandrise.org, n.d.). It can also be used to predict trends, understand customer behavior, and identify risks. The release of OpenAI's ChatGPT chatbot in November 2022 gained rapid traction as it went viral and picked up millions of users in just 5 days (Duarte, 2025). It is incorporated with NLP and machine learning, and is designed to understand and generate human-like conversations.

Chalmers et al. (2021) argued that AI can be used in several entrepreneurial activities like decision-making and scaling. AI is able to support human judgment as it can provide data that is comprehensible and without any biases (Colson, 2019). AI may also be able to aid organizations in growing rapidly without having to encounter challenges that new ventures would initially have to tackle (Chalmers et al., 2021). New ventures are slowly being transformed by AI technology, making it crucial for entrepreneurs to learn to incorporate this tool into their organizational activities. Not only does it optimize businesses but also increases the chances of long-term success. Mahmudin (2023) also explored the potential benefits of using ChatGPT for strategic decision-making in startup businesses. The study concluded with many benefits and some are that it can provide deep insights and help entrepreneurs make informed decisions. This calls for the need for entrepreneurs to learn the proper way

to leverage the potential of AI tools like ChatGPT. In fact, Biswal (2025) listed different ways to learn AI which includes understanding the basics, online courses, projects, hands-on experience with AI tools, and AI communities.

The combination of the topics AI and entrepreneurial decision-making has been receiving growing interest amongst scholars, given that many studies have been done on this topic. Since 2020, several papers which focused on this topic have been published, such as implications for venture creation in the fourth industrial revolution (Chalmers et al., 2021), how AI-based models can support digital entrepreneurs with their daily operations (Raneri et al., 2023), and how AI impacts entrepreneurs application of effectual decision-making (Haaland et al., 2024).

An important factor that has significant influence on entrepreneurial decision-making is trust (Cho et al., 2015). Trust is considered one of the foundation for decision making in many context and is with different definitions in different disciplines (Cho et al., 2015). This study utilizes the meaning of trust from the disciplines of psychology and automation. In the psychological perspective, trust is viewed as a result of social experiences where another individuals words, promises, and statements are seen as reliable (Rotter, 1980). From the discipline of automation, trust pertain to reliance on agents, such as Generative AI, to help achieve an individuals goals under high uncertainty and vulnerability (Lee & See, 2004). Although it is recognized that trust plays a key role in an individuals decision-making, more research is needed on the factors that influence entrepreneurs trust (or distrust) in Generative AI and its effect on the style of approach they use to make decisions.

Given the identified research gap, this study aims to answer the question:

To what extent does trust in Generative AI impact the causal/effectual decision-making of novice entrepreneurs during the startup phase of the new venture?

In addressing this gap, this study will use a qualitative research approach. A case study will be conducted where novice entrepreneurs with less than 5 years of industry experience are interviewed. The venture life cycle model by Clarysse and Moray (2004) will be employed to determine at which phase of startup development the entrepreneurs belong at. Namely, the phases are idea phase, pre-start-up phase, start-up phase, and post-start-up phase. Then, the effectuation/causation model by Sarasvathy (2001) will be utilized to help in studying the entrepreneurs style and approach to decision-making. This will also be supplemented with the model by Reymen et al. (2015), to confirm the shift between the two approaches over time.

This research aims to help entrepreneurs and startup accelerators by providing insightful information about how AI can support and enhance their decision-making. This study also provides information for investors about the impact of AI. Their knowledge of this will set as a guide for them to make informed investment decisions. This research can also be used to inform policymakers about the positive and negative effects of AI. Ultimately, preventing establishments or entrepreneurs incurring any harm from the yet enigmatic AI.

2. THEORETICAL FRAMEWORK

To understand and analyze entrepreneurial decision-making, this study will employ a theoretical model by Reymen et al. (2015). The model will help to explain startups decision-making approaches and the role of AI.

2.1 Venture Development Phases

In the early 2000s, Clarysse & Moray described the ‘four distinct phases of development of the venture and its team’. The four phases identified were: 1) idea phase, 2) pre-start-up, 3) start-up, and 4) post start-up. In the study, the idea phase is described as where an idea is led by a leader. The leader organizes, plans, and writes proposals to gather support for the idea. Key activities could also include brainstorming ideas, identifying gaps in the market, and exploring possibilities that could align with own skillsets and interests. Pre-start-up phase begins when the idea turns into an actual business. It is a phase for opportunity validation – to determine whether the idea is worth pursuing. This phase also entails conducting surveys or building prototypes. Then leader pushes for the idea and creates a team to determine the business plan. During the start-up phase, the business becomes official and legal. Later on, the company reaches the post-start-up phase when they focus on refining their business focus and strategy (Clarysse & Moray, 2004). The venture phases was later incorporated in a study by Reymen et al. (2015). It was used to analyze how businesses evolved over time and kept track of key decision events by categorizing them into different phases.

As startups operate in a dynamic and uncertain environment, it is essential that the entrepreneurs, often acting as the leader, master fast, informed, and adaptable decision-making (Enwereji et al., 2024). Entrepreneurs that are able to decide quickly have a competitive advantage because first, they are able to seize market opportunities before their competitors. Second, they have enough time to change their approach if necessary. Lastly, they can continue to evolve and remain relevant in a fast-moving market. A startup's success also stems from making informed decisions. The ability to decide quickly is an asset; however decisions must be based on thorough research and analytics (Aker et al., 2019). The practice of making informed decisions will significantly reduce risks and prevent costly mistakes. It is also essential for startups to be flexible and quick to adjust especially in environments with high uncertainty and ambiguity (Enwereji et al., 2024). Proficiency in fast, informed, and adaptable decision-making not only increases the startups chances of survival but also the potential to thrive in competitive markets.

2.2 Entrepreneurial Decision-Making: Causation vs. Effectuation

The study by Sarasvathy (2001) provided a clear distinction between causal and effectual reasoning. Causal entrepreneurs are goal-driven, analytical, and use predictive decision-making. In contrast, effectual entrepreneurs are adaptive, experimental, and use resource-driven decision making. Reymen et al. (2015) also further elaborated the fundamental differences of causation and effectuation based on four decision making principles. First, the basis for taking action or the approach to decision-making. Causation starts with a goal in mind and carries it out by determining the best way to achieve it. On the other hand, effectuation makes use of the resources available and explores possible outcomes (bird in hand principle) (Effectuation.org, n.d.). Second, attitude toward unexpected events or how entrepreneurs react to their market environment. Causation responds negatively to unexpected events as they tend and prefer to create and follow a plan. In contrast, effectuation decision-making leverages contingencies (lemonade principle) (Effectuation.org, n.d.) or being open to unexpected events as it is about adaptability and seeking feedback is crucial. Third, attitude toward outsiders during the creation process. Causal entrepreneurs protect knowledge and collaborate with partners that complement their skills. Conversely, effectual entrepreneurs involve others as it is a means to access resources and feedback (crazy quilt principle) (Effectuation.org, n.d.). Fourth, view on risk and resources or how they approach investments. Causal

entrepreneurs create business plans and seek to maximize returns. While, effectual entrepreneurs focus on the present and make small steps at a time (affordable loss principle) (Effectuation.org, n.d.). Lastly, the view on causation and effectuation as opposing, independent, or compatible logics. According to Reymen et al. (2015), ideal decisions are a result of the collaboration of both approaches. Combination of both logics can be through showing the causal logic of predicting what is predictable and the effectual logic of flexibility and staying in control of the uncertain (pilot in the plane principle) (Effectuation.org, n.d.).

Effectuation and causation approaches address different aspects of the decision-making and can be employed by established companies and new ventures. Sarasvathy (2001) illustrated the approaches as two alternatives, and later studies presented findings of entrepreneurs simultaneously applying both in the different phases of their ventures. Reymen et al. (2015) indicated that entrepreneurs use a hybrid logic in their decision-making. Elements from both logics can be combined and used simultaneously. In particular, a pattern emerged from their study and confirmed that effectuation is more prominent in the early phases of new ventures such as the ideation phase. The application of effectuation decreases in the later phases as the goal driven and planning-based nature of causation becomes more crucial. The authors argued that effectual logic can also reoccur later in the creation phases, highlighting the blend of both approaches. Each approach has elements that can be useful under different circumstances. Thus, the indication of hybrid approach by Reymen et al. (2015). Entrepreneurs' combination of both approaches was also studied by Koguta et al. (2023). Their findings showed that causal entrepreneurs thrive in predictable environments. They are known for being analytical and planning-oriented decision maker, but under a complex and uncertain environment will shift to a more effectual stance as the circumstances may demand more flexibility. The researchers also presented another situation where effectual entrepreneurs integrate causal reasoning in settings where planning and forecasting are required.

2.3 Generative AI in Entrepreneurial Decision-Making

This section will expound on the integration of GenAI tools into novice entrepreneurs decision-making processes, specifically during the ideation and pre-start-up phases. Effectuation and causation principles will also be applied to present the connection.

2.3.1 Causation and Generative AI

As described by Sarasvathy (2001), causal entrepreneurs start with a clear goal in mind and a set of means and resources that will help to achieve the goal in the most efficient way possible. They, ultimately, thrive in situations which they can predict, plan, and come to a structured decision. These types of entrepreneurs may prefer to use Generative AI, which includes ChatGPT, Gemini, and Claude to assist in entrepreneurial activities such as market research and defining goals. It also allows entrepreneurs to make informed decisions as to prevent making risky and costly mistakes early in the venture phase. For example, during the pre-startup phase, AI systems like ChatGPT and Gemini can assist entrepreneurs in making business plans with defined goals, costs, and possible risks.

Proposition 1: Novice entrepreneurs with causal approach in decision-making use GenAI to help them with their business planning.

2.3.2 Effectuation and Generative AI

In contrast, effectual entrepreneurs are labelled as means driven – looking at the resources available at hand and creating possibilities based on those (Sarasvathy, 2001). GenAI may also be of service to entrepreneurs utilizing this approach as AI can provide suggestions about which industries, market demands, or products/services to look into based on the inputted background, skillsets, and interests. It is capable of suggesting opportunities that are possible to be explored and which matches the given information. During ideation phase, AI systems like ChatGPT and Gemini can aid effectual entrepreneurs by offering informative insight about industry trends as well as competitor and consumer overviews.

Proposition 2: Novice entrepreneurs with effectual approach to decision-making use GenAI to leverage the means available to them.

Studies have also discussed and highlighted the need for entrepreneurs to understand consequences of adopting AI in pursuit of their venture (Roundy, 2022). Incorporation of AI arises to ethical concerns such as digital amplification and algorithmic bias. When AI is used to enhance the reach of digital content, it can shape the public's opinion and raise concerns about fairness and transparency. Algorithmic bias can also result to discrimination in hiring processes where qualified candidates may be overlooked (Gibson, 2024). However, there is more to AI; further exploration could unlock greater value.

2.4 Trust in Entrepreneurial Decision-Making

According to Goel & Karri (2006), trust plays a key role in the formation and growth of businesses. Entrepreneurship involves building and forming relationships between coworkers, partners, or fellow entrepreneurs. These interactions also require a certain level of trust amongst the parties involved. In the literature by Goel & Karri (2006), it is suggested that entrepreneurs driven by effectual processes are prone to over-trust; believing in something or someone easily without conducting a deep evaluation of its trustworthiness. They make decisions based on what they can afford to lose, which may result in them being more open to engaging and entering deals with other entrepreneurs. They are also able to easily accept its failure, as it is a potential loss within their limits and what they can manage. Entrepreneurs embrace uncertainty and continue to make more decisions based on trust. There are cases where over-trust causes failures, but the reward and success that follows also create new opportunities for the entrepreneur. For the same reasons, this research proposes the following:

Proposition 3: Novice entrepreneurs with effectual decision-making approach trust GenAI by using it to explore actions that are within their affordable loss limits.

Proposition 4: Novice entrepreneurs with effectual decision-making approach trust GenAI by using it to embrace contingencies.

3. METHODOLOGY

3.1 Research Setting

This paper explores the integration of AI into entrepreneurial decision-making processes. Specifically, it aims to determine how GenAI can support novice entrepreneurs in their decision-making all throughout the different phases of their venture. An exploratory, qualitative approach will be employed as this area of focus has received little attention. This approach also allows for creative thinking (Hunter, McCallum, & Howes, 2019).

3.2 Sampling Approach

A purposive sampling procedure is used in the selection of research participants. Each of the 7 researchers, that belongs in

the circle of this overarching research topic, invited 5 entrepreneurs to participate in this research study. All data was compiled together under one project in Atlas.ti. Out of all the data gathered, 10 respondents were deemed fit for this research paper. These entrepreneurs share similar characteristics such as that they started their venture without any entrepreneurial experience and are founders or founding members of a business venture. These entrepreneurs are 18 years old and older, for the purpose of gaining valid consent prior to the data collection. These entrepreneurs are also digitally competent as they engage with digital tools, including AI. They are aware of Generative AI tools like ChatGPT, Gemini, and Claude. They have also used it at some point, ideally during the pre-start-up phase of their startup development. The sampling population also consisted of diverse novice entrepreneurs residing and operating in different parts of the world.

3.3 Data Collection

For this research, a mixed-method approach with two steps was used. The first step was to conduct a survey. The survey consisted of 28 modified items, built upon the measurement scale developed by Brettel et al (2012). It was divided into 4 parts, where each was measuring a different dimension or principle of the effectuation theory. The first part measured the entrepreneurs' preference for means. The second part evaluated their preference for affordable loss. The third section assessed the preference for partnerships. And the last part identified their acknowledgement of the unexpected. The survey was designed in a way that the entrepreneurs as the respondents themselves choose between two opposing approaches (effectual and causal). These opposing approaches were presented side by side and in between was a 5 point Likert scale. Through the Likert scale, the respondents can indicate at which side of the continuum they feel was more dominant for them. Differing from Brettel et al (2012), which employed a 6 point Likert scale, this study employed a 5 point Likert scale to provide a neutral midpoint. The midpoint indicates a neutral or hybrid logic, which reflects the entrepreneurs' preference for either effectual or causal logic.

The second step of the data collection was in-depth interviews of the entrepreneurs. Questions for the semi-structured interview was prepared beforehand, consisting multiple areas of focus, including all questions from other researchers under the research circle. The interview questions aimed to explore the entrepreneurs' decision-making as well as their experiences and opinions of AI. The questions were also arranged into several sections with different focuses, specifically, inspiration for the formation of the startup, validation of the survey results, startup phase identification, strategy and resources, opinion about AI, enablers and obstacles to using AI, team or company culture, and advice to other aspiring entrepreneurs. Participants were first sent an invitation to take part in this research study and as soon as consent was received, they were then made aware of the research objectives and the processes involved.

3.4 Data Coding & Analysis

For the first round of the data collection, the survey results were analysed by calculating averages or means. For all of the questions belonging to one dimension, the average score for each respondent was calculated. As the survey presented effectual logic on the left side and causal logic on the right, an average closer to 1 would mean dominance of the effectual approach. An average closer to 5, thus indicates leaning towards the causal approach. Also, if the mean score is closer to 2.5 then the entrepreneur is relatively neutral between the two approaches or that he/she shows preference for both effectual and causal approaches. The results were then validated during the interview, to check for consistency.

For the second round, the one-on-one interview was recorded, transcribed, then reviewed. The reasoning mainly followed in analysing was the abductive approach which emphasizes sense-making of surprising observations from the gathered data (Van Hulst & Visser, 2024). In particular, the Gioia method (Gioia et al., 2012) was employed as it has a structured approach to exploring the relationships between the different concepts – GenAI, trust, and causal/effectual logic – involved in this study. It also allows for discovery of new ideas or patterns from the data collected. To complement the abductive reasoning and the Gioia methodology, methodological triangulation was employed. This confirms the validity of the findings from both survey and interviews. The method followed in this research opens an opportunity to add into the existing theories and contribute something new to the field as it allows for a flexible yet systematic analysis of the data with existing theories. As the paper employs a qualitative approach, patterns and ideas arise as responses are coded and analyzed. The method follows 3 stages: first order analysis, second order analysis, and aggregate dimension (Gioia et al., 2012; Suleiman & Othman, 2021).

First order analysis relies heavily on the participants words, initial concepts are recognized then categorized, directly from the terms used by the participants. This is about diving into the massive amount of data gathered during the interviewing process. It is known to be a messy stage as it can lead to the identification of over 50 categories from just a few interviews. The goal of this first round of analysis is also to closely capture the words of the informant and not over-interpret it (Gioia et al., 2012). After the collection of the first order categories, the second order analysis focuses on trying to organize and reduce its number by finding similarities. It involves grouping the categories or looking for patterns and connections to determine underlying themes. (Gioia et al., 2012). Lastly, aggregate dimensions is about making another broader theme that will further condense the second order themes. To complete this method, a visual representation should be created for a more comprehensive view of all the analysis. The data structure shows the analysis from first order until aggregate dimensions (Gioia et al., 2012).

4. RESULTS

This chapter presents the main themes identified through the Gioia coding process of the interview results. The data produced 28 first-order concepts, 9 second-order themes, and 3 aggregate dimensions. The analysis focuses on how novice entrepreneurs trust in AI influences their decision-making approaches in their startup. The data structure shows that the three aggregate dimensions derived from the interview results are trust levels in Generative AI, causal decision-making, and effectual decision-making.

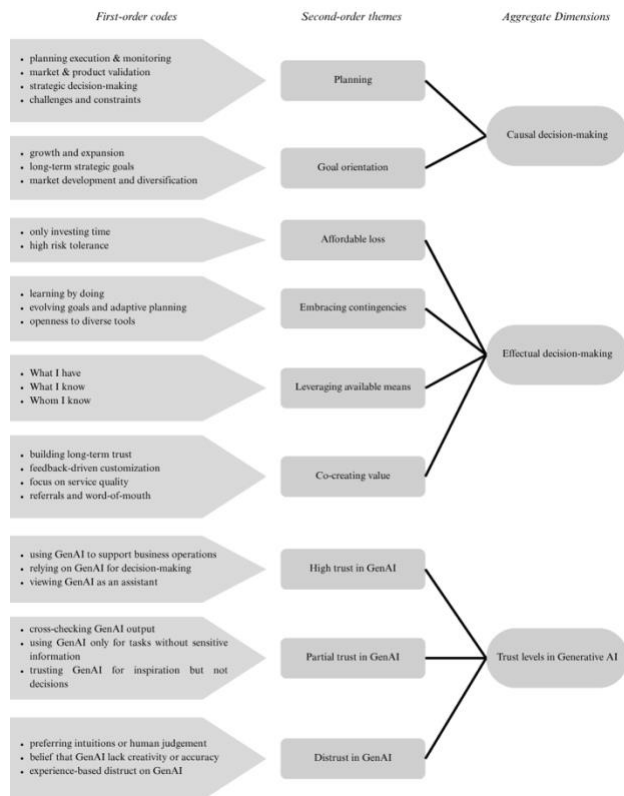


Figure 1. Data Structure

4.1 Trust Levels in Generative AI

One of the key dimensions determined while processing the data through the Gioia method is the entrepreneurs varying trust levels in GenAI. The variation in trust levels is derived from how entrepreneurs view the reliability, accuracy, and the effectiveness of integrating AI tools into their decision-making. Three levels were discovered namely high trust, partial trust, and distrust in GenAI.

4.1.1 High trust in GenAI

This theme involves the different ways GenAI is integrated in the entrepreneurial process - showing high level of trust. Entrepreneurs reported using GenAI for various tasks in their business. From the interview results, three categories of AI application were discovered; as a reliable assistant, to support business operations, and to support decision making.

First, some of the entrepreneurs interviewed expressed high trust in GenAI. They described it as a reliable and efficient assistant. These entrepreneurs explored with AI tools to automate certain tasks like coding and have also relied on it to help inform their decision-making. One entrepreneur shared: “*For programming – I am using it, a tool called Cursors, which helps in writing your code, helps with automating coding.*” Another entrepreneur mentioned: “*During uncertain times when I’m not sure what is going wrong or right. [...] I would use AI to do a web scraping [...] and it would assess what can be the problem and how it can be improved.*” Such statements present belief in the AI systems’ capability to analyse information and provide strong support for their decisions.

Second, majority of the entrepreneurs used AI to create and optimize both written and visual contents. This includes contents like social media posts, graphics, and presentations. One entrepreneur shared: “*Other tasks like text generation, sometimes image generation, I can leave for AI.*” This shows how GenAI eased the task of drafting marketing materials for businesses.

Another entrepreneur with a technical background shared that they use GenAI for coding and to detect where the error is in the code. The entrepreneur stated: “*For programming I am using a tool called Cursors which helps in writing your code, helps with automating coding.*” This statement shows how tedious the coding process is, where minor mistakes can cause error that is difficult to detect. This is where AI can shine as it is accurate and consistent without making any human errors.

Lastly, AI was also used to support decisions. In particular, novice entrepreneurs utilized it for forecasting, validation, and research when they began their new venture. One of the entrepreneur shared: “*For optimising forecasting, I am using the AI called ChatGPT to recheck and formulate new ideas to give me more ideas so I can develop [...] It can support decision making for me by looking at the advantages and limitations.*” This statement shows how GenAI such as ChatGPT can be helpful in learning about the industry and market that aspiring entrepreneurs want to get into. It can serve as a tool to discover information and trends to make informed decision making.

4.1.2 Partial Trust in GenAI

In contrast, several of the entrepreneurs showed partial trust in using GenAI, where they used it mainly for inspirations and for tasks that did not involve sensitive information. For instance, one entrepreneur noted: “*We just avoid using AI when we work with client data.*” This reflects how entrepreneurs see AI systems as helpful tools but not fully dependable on high risk tasks.

4.1.3 Distrust in GenAI

Lastly, one entrepreneur demonstrated distrust in GenAI. This was due to the fact that they have much knowledge about the industry they are involved in. This entrepreneur perceived AI as lacking in creativity and insights. The entrepreneur stated: “*I am very much an AI-skeptic [...] I don’t like that AI, because it always agrees with you. I think it can’t tell you much that you don’t know yourself.*” This entrepreneur preferred relying on his own knowledge and experience, showing that their approach to decision making highly puts forward their intuition and human judgment first.

Overall, the various levels in trust influenced how the entrepreneurs integrated GenAI into their workflows. Importantly, the level of trust often aligned with their broader decision-making logic, whether they are more causal or effectual. Those expressing higher and partial trust in GenAI leaned towards adaptive and experimental approaches (effectual) while those with distrust in GenAI engaged in predictive strategies and processes within their control (causal).

4.2 Causal Decision-Making

Another dimension derived from the interview is causal decision-making. As previously discussed, causal reasoning is about being driven by a certain goal, being analytical, and using predictive decision-making (Sarasvathy, 2001). Under this dimension, two themes were identified in the interview results; planning and goal orientation.

4.2.1 Planning

The concept of planning is an important aspect of causation and has been reflected in the participants responses. Several of the entrepreneurs emphasized following a certain process at the beginning of their new venture. For example one entrepreneur in the agricultural industry shared: “*The first thing was brainstorming what can be the business model [...] So a bit of BMC in which we map everything into it. And then we used other tools such as a product market feed tools and others. As well as (conducting) desk and field research [...] we started growing,*

creating an MVP.” This approach focuses on understanding the problem and developing solutions to reach the desired outcomes. Such statements show how causal entrepreneurs reduce uncertainty by evaluating the current situation and addressing potential problems rather than marching in without any preparations. This concept goes hand-in-hand with predicting the outcomes which is also a core concept of causal reasoning.

A separate category within planning encompassing the reasons why entrepreneurs have to develop plans are the challenges and constraints faced by entrepreneurs. One of the challenges was inconsistency of the flow of customers. Businesses must earn a certain amount to keep the business afloat. They have all sorts of expenses to pay out such as bills and salaries of their employees. To overcome this, they must convert a certain amount of customers on the daily basis or must reach a certain quota. But it is not all the time that the business is doing well as the market is always full of uncertainties. One of the entrepreneurs shared: *“There would be seasonality of customers, because sometimes there are less customers than expected.”* Another challenge was the limitation in terms of the number of personnel and skillsets. As they are a newly founded business, they had difficulty in catering to more customers or clients and to offer a wider variety of service. This is in a way also hindering the growth of their business. One entrepreneur expressed: *“Not enough capacity [...] I cannot get the best. We need more skilled, motivated, and the right people.”* Not only does it influence their revenue but also on how fast they can scale. While these challenges do not have a direct connection with the concept of trust, it provides context to how and when AI was adopted. It allows for better understanding of the constraints within which the entrepreneurs had to work with.

4.2.1 Goal Orientation

Another key concept of causal reasoning is goal orientation where the entrepreneur has predefined goals. They then set a plan that will help them to achieve this goal in the most efficient and accurate way possible. One of the entrepreneurs stated: *“I started with a long term goal. When I started this business, my goal was to make it into a franchise.”* Another entrepreneur also shared: *“In that sense, I’m more for long-term goal, we define where we want to be. We have a clear mission [...] We do not make general goals, they’re pretty specific. We use the SMART methodology.”* Such statements show that the participants already had a goal in mind and worked towards that goal. There were also other responses that reflected development of goals after noticing a market gap. One participant shared: *“When I came here, I found out that all the vegetables here are lacking taste [...] that’s why we decided to innovate and we went for this new approach of growing microgreens.”*

4.3 Effectual Decision-Making

The third aggregate that emerged in this study is effectual decision-making. In contrast to causal entrepreneurs, effectual entrepreneurs adapt as they go, open to experimenting, and use resource-driven decision making (Sarasvathy, 2001). The themes observed from the interview results are affordable loss, embracing contingencies, leveraging available means, and co-creating value.

4.3.1 Affordable loss

The principle of affordable loss in effectuation theory suggests that entrepreneurs make decisions based on what they can afford to lose at any moment. It emphasizes focusing on what one is willing to risk or lose. It is also about limiting downside risk and making decisions based on acceptable loss, not potential return. One of the entrepreneurs expressed: *“I’ve discussed it with my dad and he was like, you don’t have much to loss in terms of risk. I need to invest, but the most things I invest is time, not money.*

So the only thing I can lose if time.” The same entrepreneur later added: *“Sometimes it takes me a while to figure out what a customer asked for but at the end it’s worth it because then I know for the next time how to do it. Besides its my portfolio that counts, its not only money.”* This shows how the entrepreneur remains present in the moment by focusing on gaining experience rather than prioritizing financial gain. They take small steps at a time and allow themselves to learn quickly from their mistakes and on the feedback they receive for their work/service. As long as the cost of failure is low or within their limits, they are willing to do it.

4.3.2 Embracing contingencies

In effectuation theory, embracing contingencies emphasizes being open and adaptive to unexpected situations. It is also about treating them as opportunities instead of setbacks. The entrepreneurs that presented this type of mindset also more open to following new opportunities that are not part of their plans. One entrepreneur said: *“I’ve been gaming for a long time, but I wasn’t happy about how the services (of game hosting) have been running for a long time [...] Because of this, some people kept asking me to build my own company. At some point in time, I just gave in and created the firm.”* Another entrepreneur mentioned: *“My partner and I have previous experience in Agriculture [...] But then its different from vertical farming, which is a trend nowadays. So, under this uncertainty, we go for experimentation.”* Embracing contingencies is about having a flexible strategy and seeing opportunity under uncertainty. As entrepreneurs learn to identify trends or address unexpected feedback from their stakeholders, they become more resilient and agile in the industry.

4.3.3 Leveraging available means

The third principle is leveraging available means which is the practice of making decisions based on the what you already have. This principle emphasizes starting with existing resources such as skills, tools, people, time, and money. It is also about creating opportunities and being creative within constraints. One entrepreneurs stated: *“How it started is that I worked before with a Germany marketing company and that’s where I got the skills, the knowledge to start my own after a couple years.”* The statement shows the use of personal knowledge and experience to start the venture. Another entrepreneur shared: *“We are part of the Honor’s cohort. The teachers there provided us with the tools necessary – the guidance to make the market analysis and validation effective.”* They utilized the connections they have in their educational environment instead of reaching out or hiring experts externally.

4.3.4 Co-creating value

Co-creating value is an important process where entrepreneurs develop or refine their offerings in collaboration with their customers, partners, or other stakeholders. This is in a way their response to the feedback they receive and the different circumstances they face in their day-to-day operation. This also showcases their high adaptability mindset. One entrepreneur expressed: *“One of the feedbacks was they wanted to engage in karaoke during the trip, so now me and my brother are now looking into buying an LCD attachment that we can put in the van and get mics so out customers can do karaoke while they are travelling.”* Another entrepreneur shared: *“I do have a lot of partners that are doing the same thing that I’m doing [...] I ask them what they’re doing new and I tried to apply it to what we’re already doing.”* This shows how they are tapping into their network to gather knowledge and insights they don’t have. This also does not require heavy investments.

Table 1. Proposition Outcomes

Propositions	Outcome	Explanation / Evidence Summary
Novice entrepreneurs with causal approach in decision making use GenAI to help them with their business planning	Not supported	Participants with causal approach did not consistently use GenAI for tasks with structured planning. Instead, they preferred manual tools like Excel spreadsheets or traditional feedback networks.
Novice entrepreneurs with effectual approach to decision-making use of GenAI to leverage the means available to them	Supported	Effectual participants used GenAI as a tool to enhance their existing resources, such as knowledge and experience. It is also for technology. Examples included using GenAI for marketing content and idea generation.
Novice entrepreneurs with effectual decision-making approach trust GenAI by using it to explore actions that are within their affordable loss limits	Supported	Entrepreneurs used GenAI for low-risk experimentation and learning, such as testing marketing parameters and valuing the learning process from failures.
Novice entrepreneurs with effectual decision-making approach trust GenAI by using it to embrace contingencies	Supported	Entrepreneurs described using GenAI in response to real time challenges such as unexpected client requests and creative dead-ends.

5. CONCLUSION & DISCUSSION

This chapter presents both conclusion and discussion to provide a concise and cohesive reflection on the findings gathered. This allows for creating direct linkage of the results to the the research question, propositions, and the theoretical framework. This section will first present the conclusion containing key findings followed by its interpretation, for better flow and understanding of what were discovered and what it means.

5.1 Conclusion

This research examines how novice entrepreneurs' trust in Generative AI influences their decision-making approaches, particularly in the startup of their new venture. Through the analysis guided by the combination of abductive approach and the Gioia methodology, the research set out to answer the following research question:

To what extent does trust in Generative AI impact the causal/effectual decision-making of novice entrepreneurs during the startup phase of the new venture?

The findings revealed that the entrepreneurs trust levels in GenAI often aligned with their broader decision-making logic, whether they are more causal or effectual. Entrepreneurs expressing greater trust in GenAI adopted more of effectual reasoning. They

utilized GenAI and focused on leveraging available means, predefining and working with what they can afford to loss, as well as navigating uncertainty. In contrast, causal entrepreneurs displayed distrust in GenAI. They favored traditional methods of planning and strategic alignment. The study also determined that entrepreneur's usage of GenAI was a signal of trust. Additionally, co-creating value emerged as one of the key themes across several effectual entrepreneurs. They put importance on internalizing customer feedback as well as personalizing services.

These findings were then analyzed in relation to the four propositions included in the theoretical framework. Out of the four propositions, three were reflected in the results. Proposition 1 suggests that causal entrepreneurs use GenAI as a tool to help them with their business planning however this was not supported. Proposition 2 was proved, with effectual entrepreneurs making use of GenAI tools to fill in the gap of their current means. Proposition 3 was confirmed, where it proposed that effectual entrepreneurs utilize GenAI tools to explore actions or options within their acceptable risk or loss. Lastly, proposition 4 was supported where the entrepreneurs use GenAI to be able to address unexpected challenges rapidly and also learn from them in the process.

Overall, this study suggests that novice entrepreneurs' trust in Generative AI can influence their approaches depending on the role that it has on their decision-making. Entrepreneurs who have more trust in GenAI tend to adopt effectual logic as the technology enables them to explore, embrace contingencies, and leveraging existing means. On the other hand, entrepreneurs with distrust on the technology are likely to maintain causal reasoning by following what are known and tested processes to minimize risks and maintain in control of their situation. These insights highlight the importance of trust in determining how and when causal and effectual entrepreneurs integrate GenAI into their entrepreneurial decision-making practices.

5.2 Discussion

Building on the Gioia method analysis, the discussion examines how the different levels of trust in GenAI – high trust, partial trust, and distrust – align with causal and effectual decision-making, and what this contributes in technology adoption and the field of entrepreneurship. The following paragraphs will elaborate on the propositions and how well it was reflected in the findings.

Those expressing higher and partial trust in GenAI leaned towards adaptive and experimental approaches (effectual) while those with distrust in GenAI engaged in predictive strategies and processes within their control (causal).

Proposition 1: Novice entrepreneurs with causal approach in decision-making use GenAI to help them with their business planning.

Proposition 1 suggests that causal entrepreneurs use GenAI for their business planning. However, this proposition was not strongly reflected in the data, as a few of the participants with causal reasoning described GenAI tools as lacking creativity and insights. These entrepreneurs developed their business or are operating their business without the help of GenAI tools. Their approach to business development is doing the tasks – creating plans or assessing possible outcomes – manually.

As argued by Sarasvathy (2001) causal individuals engage with predictive strategies and processes within their control. This definition is well reflected in the findings of this study as the causal participants preferred to follow a structure - to conduct their own market research and financial forecasts. These actions

strongly aligns with causal logic however, the findings were not enough to prove the proposition that causal entrepreneurs utilize GenAI to help or assist them with business planning. As mentioned in the conclusion, the use of GenAI tools can imply trust. With the entrepreneurs not using GenAI, it can be viewed as that they do not have enough trust in the output from GenAI.

It is worth looking back to Sarasvathy's (2001) framework where the causation logic captures goal-orientation, predictive planning, and usage of forecast, tools, and rational control. As illustrated in the Results section, it was observed in a few of the participants with a causal logic, that they preferred to base their decisions on personal intuitions and from the knowledge and experience they have gathered in the field. This highlights how, theoretically, causal logic is associated with the usage of tools and structured analysis, but in practice entrepreneurs substitute tools like AI systems with their own expertise when they perceive it more reliable. With distrust, they act with caution in regard to the usage of GenAI and ultimately rely on traditional methods and processes which they know and have tested. This also reflects causal entrepreneurs need to be in control.

Moreover, unfamiliarity of these tools may also be a factor to entrepreneurs not integrating it. The entrepreneurs were not inherently resistant to the new developments. They were more cautious about using a tool that is relatively new and has not met their standards. Several of the participants have also shared that it can be used for simple tasks as well as emphasizing the irreplaceability of human capital.

As every individual differs from one another, it is important to note that the interviewed entrepreneurs came from different countries and industries which may have shaped the way they think and interact with GenAI tools. The usefulness and trust in GenAI can differ across industries as they may have different needs of information and creativity. Additionally, they have different challenges to address. Therefore, the findings are not universally applicable but instead context-dependent.

Proposition 2: Novice entrepreneurs with effectual approach to decision-making use GenAI to leverage the means available to them.

Proposition 2 proposes that effectual entrepreneurs use GenAI to leverage available means. This was strongly reflected in the data. Several of the participants who displayed effectual reasoning engage with GenAI to make the most of what they already have at hand. As defined by Sarasvathy (2001) means could be any existing resources like skills, knowledge, relationships, and assets. The analyses reveals various types of resources used by different entrepreneurs. In particular, majority of the entrepreneurs funded their startup with their own money and started with the knowledge and skills they already have. Other entrepreneurs expressed that they were able to start their new venture because of the motivation and encouragement from other people such as their family and friends.

In this context, GenAI was used as a tool to enhance the existing resources like skills and knowledge. For instance, many of the participants expressed using GenAI to generate content for marketing purposes. This is the type of task that many novice entrepreneurs may not have the time, skills, or budget for. However, with the presence of AI, it becomes easier and cheaper to do. The entrepreneurs would not have to spend a lot of time thinking about what text to include or what image to use. This is also a cheaper option for them since they do not have to hire or pay another person to do the work. Moreover, they do not have to take any certifications and courses to learn how to work with it. Most GenAI tools are user friendly and its interfaces are often intuitive, catering to the vast majority of users. Rather than

seeking costly alternatives, they use GenAI to compensate for areas where they lacked experience or resources. This aligns with Sarasvathy's (2001) view of effectual entrepreneurs starting their venture with existing resources at hand.

One entrepreneur, for example, mentioned using GenAI tools like Gemini to assist in generating replies for their customer emails because it was a task that consumed a lot of time. Another relied on GenAI to generate text and images for their social media postings, despite not having any background related to marketing or communications. Others spoke of using GenAI as a tool to research about the market and the market leaders. This saves them a lot of time as it is able to provide detailed and concise information of what they are looking for. These results show that the integration of GenAI was a means to further strengthen the available means and to cover for what is lacking. In this way, the entrepreneurs were able to work creatively within constraints reflecting the effectual decision makers practicality and flexibility.

Importantly, the willingness of the entrepreneurs to use GenAI for such tasks reflects the level of trust in the tools quality - whether it is for experimentation or a resource substitute. As GenAI is still in its early stages and is continuously still being updated, the entrepreneurs are not aiming to receive perfect results. Instead, they are taking advantage of the tools affordability, accessibility, and processing speed.

In sum, the findings prove proposition 2. Effectual entrepreneurs adopted GenAI as a tool that will support them and their current means. Their engagement with GenAI was driven by their resourcefulness, reflecting how their trust in this tool leads them to taking small and adaptive steps based on what they already have.

Proposition 3: Novice entrepreneurs with effectual decision-making approach trust GenAI by using it to explore actions that are within their affordable loss limits.

Proposition 3 suggests that effectual entrepreneurs express trust in GenAI by using it as a tool to explore options that align with what they can afford to lose. This was also reflected in the data where the findings revealed entrepreneurs engaging with GenAI to determine different actions or options that fall within their acceptable risk. Sarasvathy (2001) emphasized that a core strength of effectual entrepreneurs is being able to predetermine the level of acceptable risk or loss they are willing to take before taking action. This risk can be in terms of money, time, energy, or resources. The analyses showed some entrepreneurs not waiting for ideal conditions to come or to obtain complete information, but instead jumped into the venture and learned through their actions. They later on adjusted based on what worked for them. Other entrepreneurs also takes action not based on the immediate gains, but based on what other opportunities this action can open in the future.

For example, one entrepreneur shared how they use GenAI to explore with different parameters they can use for their marketing campaigns. This emphasizes how they willingly use this tool to experiment with outputs, knowing that it could fail or provide undesirable results. However, as effectual entrepreneurs, they have a mindset and way of approach that enables them to act despite of the uncertainty. The results – whether a fail or success – is considered a learning point which they can use or discard for future opportunities. Unsuccessful results are also treated as part of the process and a low-cost method to learn more about what resonates with their customers or audience – reflecting the affordable loss principle.

As mentioned in the discussion of proposition 2, the entrepreneurs are well aware of the current GenAI's capabilities.

Despite GenAI's limitations, they trust it enough for exploration. They observed the outcomes and refined it based on the feedback they receive. This approach in decision-making emphasizes learning by doing as well as adapting or making changes as more information arise.

In this sense, GenAI facilitates effectual reasoning by enabling the entrepreneurs to become resourceful and to conduct low-risk experimentations. Its accessibility and speed enables them to act within their limits while still being able to respond to uncertainties in the market or industry. Therefore, entrepreneurs express enough trust in GenAI to act but stays in control of interpreting or adapting these outputs. The responses of the entrepreneurs can also be interpreted as that they willingly accept imperfections and that their trust in this tool is based on the possibilities it can help them reach.

Overall, the analysis supports proposition 3. The findings revealed that effectual entrepreneurs trust GenAI tools in discovering and conducting low-risk experimentations. This also highlights how they value learning and adaptability over prediction and control.

Proposition 4: Novice entrepreneurs with effectual decision-making approach trust GenAI by using it to embrace contingencies.

Proposition 4 proposes that effectual entrepreneurs trust GenAI to use it as a tool to embrace contingencies. This is reflected in the data as some entrepreneurs use GenAI to generate ideas that will help them to address unexpected events. In accordance to the description by Sarasvathy (2001), effectual entrepreneurs do not avoid surprises but instead embrace them by adapting and leveraging these unforeseen events or changing conditions. Through the analysis, it was determined that there were entrepreneurs that encountered unexpected client requests and creative dead-ends. However, they leveraged GenAI to overcome these challenges and generate actionable responses.

For instance, one entrepreneur shared a time when their team was facing creative fatigue while attempting to generate more marketing contents. They turned to GenAI for inspirations and this helped them discover new ways they had not previously considered. Another entrepreneur shared about times they handle client requests that were outside of their capabilities and comfort zone. They also turned to GenAI to draft a plan that can help them provide the results while internalizing this new information. This enables them to provide the service to their future clients. This shows how GenAI was used to respond to real time challenges they encounter whilst being adaptable – reflecting consistency with the principle of embracing contingencies.

The entrepreneurs did not implement every idea generated by GenAI. However, their willingness to utilize this tool and use it as a thinking partner in times of uncertainty shows a form of trust. The results that GenAI provided to them may have not been perfect or are guaranteed solutions to their challenges but they valued the fact that it brings new ideas or offers new possibilities to consider. This further reinforces Sarasvathy's (2001) description of effectual entrepreneurs to welcome surprises as opportunities to become innovative and adaptive.

In this way, the integration of GenAI tools enabled the entrepreneurs to respond rapidly to challenges with a flexible mindset. The findings support proposition 4 as the results show that entrepreneurs trust in GenAI facilitated adaptive behaviors. This behavior aligns with the effectual logic where the entrepreneurs leaned towards GenAI when faced with unexpected challenges and using it this tool for inspirations, improvements, and to create more opportunities.

6. IMPLICATIONS

6.1 Theoretical Implications

This study contributes to the existing literature of entrepreneurship theory by highlighting trust in Generative AI tools as one of the factors influencing entrepreneurial decision-making under uncertainty. Previous studies on effectuation theory by Sarasvathy (2001) focused on the characteristics of the entrepreneurs, the environment they operated in, and their experiences as a whole. However, this research contributes by illustrating how trust or distrust in GenAI affect the entrepreneurs' approach to decision-making or how they engage with causal and effectual principles – such as leveraging available means, embracing contingencies, and affordable loss. For causal entrepreneurs, the findings show a lack of trust in GenAI suggesting that they may have a preference for traditional and intuitive planning approaches. This insight provides an opportunity to further look into the conditions for entrepreneurs trust and adopt AI systems like GenAI.

6.2 Practical Implications

From a practical viewpoint, the findings provide clear insights into how GenAI can benefit entrepreneurs, specifically novice entrepreneurs. The findings present that effectual entrepreneurs found GenAI to be a helpful tool for exploring options or conducting low-cost experimentations – aligning with the principle of affordable loss. GenAI served as a resource substitute or to support entrepreneurs and their available means. For novice entrepreneurs with limited resources such as personnel, capital, or technical resources, GenAI offers a cheaper and accessible alternative. However, integration of this tool into their business activities depends on trust. Entrepreneurs displaying distrust did not integrate GenAI tools into their workflow, thereby missing potential benefits. In essence, entrepreneurs with limited means could potentially benefit from this tool if it is integrated more confidently into the flow of their business. The findings can also be seen as an emphasis of the benefits of adopting effectual thinking and the exploration of various technological tools like GenAI. Integrating responsible AI literacy into trainings and programs for entrepreneurs can empower them to use these tools effectively.

7. LIMITATIONS

This study contributes to existing literature but has limitations. First, out of the five principles identified by Sarasvathy's (2001) effectuation theory, the research examined three principles; means orientation, affordable loss, and embracing contingencies. While all principles are equally as important, the selected principles aligned most with the research aim and was conceptually fit with startup phase or early-stages venture. Prior to the data collection, the principles 'control orientation' and 'partnerships' were excluded to allow for more focus on exploring the three principles. Second, a methodological difference between this study and Brettel's which adopted Structural Equation Modeling (SEM). This research utilized averages to provide a general trend of the responses from the survey but does not capture the complex interplay between variables as robustly as SEM. Lastly, the use of self-reported data for the survey and interviews reflects the information interpreted and processed by the interviewed entrepreneur. It provides in-depth personal perspectives and experiences but is subjective and prone to biases – inaccurate recollection of events or over/underestimation of behaviors.

8. FURTHER RESEARCH

While this paper focused on the extent to which trust in GenAI impacts the decision making of entrepreneurs, it also revealed areas that deserve to be explored in greater detail. First, future

studies could examine how personality traits – such as The Big Five personality traits – can affect the entrepreneurs trust in GenAI. Having a focus on individual personality traits may help to gain deeper insight into how trust is shaped especially with regard to the adoption of GenAI tools. Although findings of this study included hints of personality traits influencing the entrepreneurs trust, it was not substantial enough to be included in the analysis. Personality traits are also components in Sarasvathy's effectuation theory, making it a relevant dimension to focus on. Second, as this study offered insights on novice entrepreneurs, future research could examine more experienced entrepreneurs to draw comparisons. Their broader experience and exposure to different situations may yield more insights, potentially revealing their experiences' impact on trust. Third, a longitudinal approach could be adopted to examine the change and development of an individuals trust in GenAI over time. Through the data collection, patterns may emerge which could potentially offer a different view of the relationship of these variables. Lastly, aligning with the first and second limitations mentioned, future studies can explore all principles – means orientation, affordable loss, embracing contingencies, partnerships, and control orientation. Since the principles partnership and control orientation were not examined in this research, insight gained from a follow up of this would be valuable. They can also employ SEM to explore the interplay between the variables – decision-making logic and trust in Generative AI.

9. ACKNOWLEDGEMENTS

I would like to thank my thesis supervisors, Dr. Martin Stienstra & Dr. Igors Skute, for their guidance, critical feedback, and encouragement throughout the whole process of this research. I am grateful to the entrepreneurs for giving their time to share their knowledge and experience. My fellow students under the same bachelor thesis circle – Entrepreneurial Decision-Making with AI – have also been a great group to collaborate with. Finally, a special thanks to my friends and family for keeping me grounded.

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11. APPENDIX

11.1 Appendix A

Figure 2. Survey results

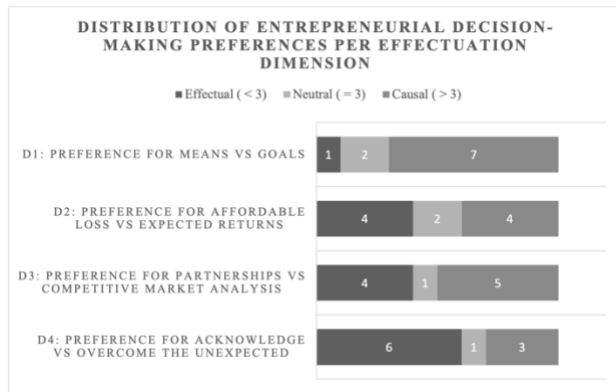


Table 2. Participants

Participant ID	Location	Business Type	Business Function
Entrepreneur 1	Netherlands	Relocation Services	Founder
Entrepreneur 2	Global	Marketing Consultancy	Founder
Entrepreneur 3	Philippines	Hostel Accommodation	Founder
Entrepreneur 4	Netherlands	Marketing Consultancy	Founder
Entrepreneur 5	Philippines	Tourism Services	Co-founder
Entrepreneur 6	Netherlands	Data Storage Solutions	Founder
Entrepreneur 7	Netherlands	Agriculture	Co-founder
Entrepreneur 8	Netherlands	Tech/Social App Development	Co-founder
Entrepreneur 9	Global	Therapy	Co-founder
Entrepreneur 10	Netherlands	Fitness Technology	Co-founder

11.2 APPENDIX B

Interview Questions

Please make sure that you start the interview with concisely introducing yourself and the objectives of the interview. Then, make sure you receive their consent to start and record the conversation.

Section A: Introduction and context

- Can you introduce your startup and your role in it?
- What inspired you to create your venture, and how has the venture evolved so far?

Section B: Startup phase identification

B1 Initial development

- How did the initial idea for your business come about, and what were the first steps you took to explore it?
- When you started, did you validate your business idea with tools, analytics, or with the help of others?

B2 Business model

- What key elements of your business model have already been defined or implemented?
- How have you gone about testing or validating your value proposition so far?

B3 Team structure

- What does your team look like today: how many people work for the company, and do they have distinct roles?
 - To what extent and how do external stakeholders influence your company? t
- Optional sub-questions:
- Can you give me some examples?
 - To what extent to your product/service?
 - To what extent to your strategy?
 - To what extent to your structure/team?

B4 Decision-making under uncertainty

- Can you describe how you make strategic decisions and how does the process look like?
 - How does it change under certain and uncertain times?
- Has your approach to planning and decision-making changed over time? If so, how?

B5 Activities

- Are you currently offering your product/service to customers?
- How do you use feedback from customers or market data in refining your offering?

Section C: Causation vs. Effectuation (Validation of survey results)

- When making key business decisions, do you usually start with a clear long-term goal and then figure out the steps to achieve it, or do you prefer starting with what you already have and seeing what opportunities emerge?
- How do you usually respond when something unexpected happens: do you try to get back on track with your plan, or explore how to turn the surprise into a new opportunity?

Section D: Strategy and resources

- What are currently the main objectives/goals of the company?
- What challenges may arise that can prevent you from reaching these goals?
- How do you see your company evolving over the next year?
- What types of resources (financial, human, technological) are currently available to your company?
- Have you raised any external funding, and what was it primarily used for?

6. What kinds of tools or methods for decision making are you using now (for example, testing ideas, doing simulations, forecasting, etc), and what do you primarily use them for?

Section E: AI

Explain what is AI: AI in business decision-making refers to tools used to analyse information, identify patterns, predict outcomes, and support or automate choices, helping businesses make faster, more informed, and often more objective decisions.

1. Do you use any AI tools for activities such as testing ideas, do simulations, forecasting, or optimise operations?
2. How do you see AI contributing to better strategic or operational decisions in your startup?
3. Can you give an example where AI helped reduce uncertainty or improved the speed or quality of a decision?
4. In your opinion, how could AI further support your decision-making processes in the future?

Section F: Enablers and obstacles to using AI

If the startup uses AI:

- a) Where and how are you currently using AI in your business? (e.g., customer analytics, product development, operations, marketing)
 - a. Optional sub-question: Can you describe previous experiences where AI played a critical role in your startup's journey?
- b) Do you think using AI in decision-making is valuable and to what extent do you trust its results? If so, how do you assess the value or return of using AI tools in your venture?
- c) What aspects have enabled you to successfully use AI in your business? (e.g., technical knowledge, funding, tools, partnerships)
- d) What challenges or obstacles have you encountered while integrating AI into your operations?
- e) How have you addressed issues such as data privacy, explainability, or ethical concerns in AI use?

- f) To what extent do you trust the outputs of these AI tools when it comes to making strategic or creative output (e.g. visuals, creative text)?

If the startup does not use AI:

- a) What do you think will enable you to start using AI? (e.g., technical knowledge, funding, tools, partnerships)?
- b) What challenges, obstacles could you encounter when considering using AI for decision making?

Section G: Culture

1. In the culture of your country, do decisions tend to be made independently by individuals or collectively as a group? And how is that organised in your company?
 - o How do you think this cultural orientation affects how AI tools are adopted and used in your business?
2. How would you describe your country's internal culture, especially in terms of openness to innovation and experimentation in early stages? (taking risks)
3. How are decisions typically made in your organization: is it more centralised at the top level or do team members at all levels contribute equally? And is that the standard in your country?
 - o Do you think this structure affects how AI tools are used or trusted within the company?

Section H: Closing

1. What advice would you give to other entrepreneurs considering the use of AI in their startup?
2. Is there anything else you'd like to add that we didn't cover but you think is relevant to AI and decision-making in entrepreneurship?