

# The role of Entrepreneurial Mindset in Entrepreneurial Pivot

Student Number: 21854042

A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

Tuesday, 07 March 2023

#### Abstract

The ability to act strategically is crucial for entrepreneurs to adapt to new changes and maintain the sustainability of their businesses (Kirtley & O'Mahony, 2023). However, despite the importance of this topic, studies (Devece et al., 2016; Morgan et al., 2020; Shepherd, 2020) have noted a lack of research on how entrepreneurs and small enterprises navigate through exogenous shocks or recover from such events.

This paper aims to fill this research gap by exploring the entrepreneurial mindset's role in successful pivoting. Pivoting offers entrepreneurs the opportunity to develop new ideas, products, and renew their firm's business model and identity (Hart, 2012; Sadeghiani et al., 2021).

The study used a qualitative approach to collect data from 10 entrepreneurs from various industries, including mining, hospitality, beauty, healthcare tech, logistics, healthcare services, financial services, agri-tech, and marketing tech.

The study developed a conceptual framework which elucidates the circumstances surrounding an entrepreneur's decision to pivot and that highlights the cognitive, behavioural, and emotional aspects of the entrepreneurial mindset when pivoting. The findings have practical implications for entrepreneurs, policymakers, and business consultants. Entrepreneurs can use the framework when pivoting, policymakers can use it to develop training programs, and business consultants can use it to guide entrepreneurs through the challenges associated with pivoting their businesses.

# Keywords

Entrepreneurial Mindset (EM), Entrepreneurial cognition, Entrepreneurial behaviour, Entrepreneurial emotions, Entrepreneurial Pivot.

#### Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

.....

Tshimangadzo Rakhuhu Student number: 21854042 Date: Tuesday, 07 March 2023

# TABLE OF CONTENTS

| Abstract  | i                        |
|---|--------------------------|
| Keywords  | ii                       |
| Declaration   | iii                      |
| LIST OF FIGURES   | vii                      |
| LIST OF TABLES  | vii                      |
| CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM   | 1                        |
| 1.1 Introduction  | 1                        |
| 1.2 Background to the research problem  | 1                        |
| 1.3 Statement of the problem  | 3                        |
| 1.4 Objectives of the study   | 4                        |
| 1.5 Significance of the study   | 4                        |
| 1.6 Scope of the study  | 5                        |
| 1.7 Organisation of the study   | 5                        |
|   |                          |
| CHAPTER 2: LITERATURE REVIEW  | 6                        |
| 2.1 Introduction  |                          |
|   | 6                        |
| 2.1 Introduction  | 6<br>6                   |
| 2.1 Introduction  | 6<br>6<br>7              |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li> <li>2.2.1 Circumstances surrounding entrepreneur's decision to pivot</li> </ul>   | 6<br>6<br>7<br>10        |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li> <li>2.2.1 Circumstances surrounding entrepreneur's decision to pivot</li> <li>2.3 Entrepreneurial Mindset</li> </ul>  | 6<br>                    |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li> <li>2.2.1 Circumstances surrounding entrepreneur's decision to pivot</li> <li>2.3 Entrepreneurial Mindset</li></ul>   | 6<br>7<br>10<br>12<br>12 |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li> <li>2.2.1 Circumstances surrounding entrepreneur's decision to pivot</li> <li>2.3 Entrepreneurial Mindset</li></ul>   |                          |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li></ul>  |                          |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li> <li>2.2.1 Circumstances surrounding entrepreneur's decision to pivot</li> <li>2.3 Entrepreneurial Mindset</li> <li>2.4 EM and decision making</li> <li>2.5 EM and entrepreneurial pivot</li> <li>2.5.1 The cognitive aspect of EM and pivot</li> <li>2.5.2 Behavioural aspects of EM and pivot</li> </ul> |                          |
| <ul> <li>2.1 Introduction</li> <li>2.2 Entrepreneurial pivot</li></ul>  |                          |

|   | 3.2 RQ 1: How do entrepreneurs make the decision to pivot?       | . 20 |
|---|--|------|
|   | 3.3 RQ 2: What type of cognitive mindset is required to pivot?   | . 20 |
|   | 3.4 RQ 3: What type of behavioural mindset is required to pivot? | . 21 |
|   | 3.5 RQ 4: What is the role of emotional mindset in pivot?        | . 21 |
|   | 3.6 Conclusion   | . 21 |
| C | CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN                       | . 23 |
|   | 4.1 Introduction   | . 23 |
|   | 4.2 Choice of research design                                    | . 23 |
|   | 4.3 Population   | . 26 |
|   | 4.4 Units of analysis  | . 26 |
|   | 4.5 Sampling methods, criteria and size                          | . 26 |
|   | 4.6 Measurement instrument or discussion guide                   | . 27 |
|   | 4.7 Data collection process                                      | . 28 |
|   | 4.8 Data analysis approach                                       | . 29 |
|   | 4.9 Quality controls   | . 30 |
|   | 4.10 Research limitations  | . 31 |
|   | 4.11 Ethical considerations                                      | . 32 |
|   | 4.12 Conclusion  | . 33 |
| C | CHAPTER 5: FINDINGS  | . 34 |
|   | 5.1 Introduction   | . 34 |
|   | 5.2 Description of sample  | . 34 |
|   | 5.3 Research question 1 (RQ 1) results                           | . 37 |
|   | 5.3.1 Indications of business failure                            | . 37 |
|   | 5.3.2 Timing   | . 37 |
|   | 5.3.3 Customer needs   | . 38 |
|   | 5.3.4 Changes in market trends                                   | . 39 |
|   | 5.3.5 Radical changes in the Macro environment                   | . 39 |

|   | 5.4 Research question 2 (RQ 2) results  | . 41 |
|---|---|------|
|   | 5.4.1 Strategic thinking  | . 41 |
|   | 5.4.2 Ability to identify and evaluate opportunities (perception & attention) | . 42 |
|   | 5.4.3 Analytical thinking   | . 44 |
|   | 5.4.4 Thinking creatively   | . 45 |
|   | 5.5 Research question 3 (RQ 3) results  | . 46 |
|   | 5.5.1 Attitude  | . 47 |
|   | 5.5.2 Entrepreneurial action  | . 50 |
|   | 5.6 Research question 4 (RQ 4) results  | . 53 |
|   | 5.6.1 Self-Awareness  | . 53 |
|   | 5.6.2 Managing emotions   | . 55 |
|   | 5.6.3 Collaborating with others   | . 56 |
|   | 5.7 Other considerations  | . 56 |
|   | 5.8 Conclusion  | . 58 |
| C | HAPTER 6: DISCUSSION OF FINDINGS  | . 59 |
|   | 6.1 Introduction  | . 59 |
|   | 6.2 Research question 1 (RQ 1) discussion                                     | . 59 |
|   | 6.3 Research question 2 (RQ 2) discussion                                     | . 63 |
|   | 6.4 Research question 3 (RQ 3) discussion                                     | . 64 |
|   | 6.5 Research question 4 (RQ 4) discussion                                     | . 68 |
|   | 6.6 Conclusion  | . 70 |
| C | HAPTER 7: CONCLUSION  | . 71 |
|   | 7.1 Introduction  | . 71 |
|   | 7.2 Conclusion of findings, including the framework                           | . 71 |
|   | 7.3 Contribution of the study   | . 75 |
|   | 7.3.1 Theoretical contributions   | . 75 |
|   | 7.3.2 Practical implications  | . 76 |

| 7.4 Limitations of the study                              | 76 |
|---|----|
| 7.5 Recommendations for future research                   | 77 |
| 7.6 Conclusion  | 77 |
| Reference list  | 79 |
| Appendix I: Informed consent letter                       | 89 |
| Appendix II: Ethical clearance form                       | 90 |
| Appendix III: Interview guide                             | 91 |
| Appendix IV: Confidentiality and non-disclosure agreement | 93 |
| Appendix V: Code groups                                   | 95 |

## LIST OF FIGURES

| Figure 1: Research study conceptual framework                        | 18 |
|--|----|
| Figure 2: Coding saturation  | 27 |
| Figure 3: Factors that prompt entrepreneurs to pivot                 | 72 |
| Figure 4: Cognitive mindset  | 72 |
| Figure 5: Behavioural Mindset  | 73 |
| Figure 6: Emotional mindset  | 74 |
| Figure 7: Conceptual framework for entrepreneurial mindset and pivot | 75 |

### LIST OF TABLES

| Table 1: Methodology and analysis process                          | . 25 |
|--|------|
| Table 2: Mapping the research questions to the interview questions | . 28 |
| Table 3: Six-phase thematic analysis                               | . 30 |
| Table 4: Code subcategory and category mapping                     | . 34 |
| Table 5: Sample description  | . 36 |
| Table 6: Research question guide                                   | . 91 |

| able 7: Example code groups |
|-----------------------------|
|-----------------------------|

#### **CHAPTER 1: INTRODUCTION TO RESEARCH PROBLEM**

#### **1.1 Introduction**

This qualitative research study explores the entrepreneurial mindset before and during the pivoting process to facilitate a more profound comprehension of how the entrepreneurial mindset influences pivoting. The study uncovered a combination of the entrepreneurial mindset's cognitive, behavioural, and emotional elements, which plays a crucial role in enabling entrepreneurs to pivot effectively. This insight can be useful for entrepreneurs as it can aid them in pivoting and sustaining their businesses in unpredictable market conditions.

#### **1.2 Background to the research problem**

In the face of changing competitive environment and exogenous shocks, such as the COVID-19 pandemic, entrepreneurs are increasingly engaged in entrepreneurial actions aimed at sustaining their business models and competitive advantage. According to Röglinger et al. (2022), exogenous shocks are sudden and unforeseen events that take place beyond the purview of governing bodies and cause a substantial negative impact on the economy. Kirtley and O'Mahony (2023) suggest that acting strategically is essential in ensuring that entrepreneurs adapt to new changes and preserve the sustainability of their firms. However, studies such as those conducted by Devece et al. (2016), Morgan et al. (2020) and Shepherd (2020) note that very few studies have focused on how small enterprises navigate through exogenous shocks or recover from such events. This study focuses on understanding circumstances surrounding the decision of entrepreneurs to pivot and the role played by the entrepreneur's mindset when pivoting.

Pivoting is a strategy that can be used by small businesses and entrepreneurs to adapt to volatile market environments and exogenous shocks (C. E. Hampel et al., 2020). According to Grimes (2018), pivoting occurs when entrepreneurs decide that their existing business model is not sustainable and must be changed to secure the survival and growth of their enterprises, or, as argued by Bandera and Thomas (2022), if they perceive new opportunities and possibilities for expansion. Pivoting is particularly necessary in times of ambiguity and uncertainty as entrepreneurs search for sustainable business models (Chaparro & de Vasconcelos Gomes, 2021). Through pivoting, entrepreneurs are afforded the chance to enhance or build new

ideas and products and renew their firms' business models and identities (Hart, 2012; Sadeghiani et al., 2021).

As a strategic manoeuvre, pivoting can encompass a wide range of alterations to the business model, ranging from significant transformations to minor tweaks (Kirtley & O'Mahony, 2023). This change can occur in various components of the venture's business model, including but not limited to the value proposition, target customer demographics, distribution channels, customer engagement strategy, key business partners, essential operational procedures, critical resources, revenue generation tactics, and cost structure (Frederiksen & Brem, 2017).

The extent of change during pivoting is not always predictable and can vary significantly from one venture to another. It can be a small change of just one element of the business model, and sometimes it can be a significant change, such as shifting to an entirely new market (Bandera & Thomas, 2022).

Pivoting requires entrepreneurs to make judgements and decisions (Kirtley & O'Mahony, 2023). González-Cruz and Devece (2018) note that entrepreneurs' decision-making capacity is a vital resource that enables them to manage uncertainty, risk, and ambiguity and to adapt to complex settings. Bandera and Thomas (2022) contend that the choice between sticking to the present strategy or pivoting away from it is a challenging decision for entrepreneurs. According to De Winnaar and Scholtz (2019) and Haynie et al. (2010), this decision-making capacity during uncertain times is influenced by the mindset of entrepreneurs, yet according to Chaparro and de Vasconcelos Gomes (2021), research on how Entrepreneurial Mindset (EM) influences pivoting is limited.

According to Belousova et al. (2020), mindset, which entails the ability of entrepreneurs to act in uncertain conditions, is a reflection of the entrepreneurs' business strategies. Scholars (Kuratko, Fisher, et al., 2021; Morris & Tucker, 2021) concur that EM facilitates an individual's capacity to navigate the entrepreneurial process. The fundamental basis of EM is the ability to use knowledge to make decisions given their goals and the prevailing environmental conditions (De Winnaar & Scholtz, 2019). Additionally, EM helps entrepreneurs to identify new opportunities, mobilise resources and overcome uncertainties.

#### 1.3 Statement of the problem

Studies on EM and pivoting have mainly focused on the role of entrepreneur education in shaping EM (e.g., Handayati et al., 2020; Liao et al., 2022; Mukhtar et al., 2021; Wardana et al., 2020), the role of EM on entrepreneur intention (e.g., Hunter et al., 2021; Kwapisz et al., 2022; Morris & Tucker, 2021; Ng & Jenkins, 2018) and the conceptualisation of EM (e.g., Kuratko, Fisher, et al., 2021; Kuratko, Hornsby, et al., 2021). Most of these studies show that entrepreneurship education positively influences EM and drives entrepreneurs' intentions to start new ventures. Additionally, they conceptualise three distinct aspects of EM: cognitive aspect, behavioural aspect and emotional aspect.

Studies on business pivoting have majorly centred on analysing the pivot phenomenon in the context of technology start-up companies (Chaparro & de Vasconcelos Gomes, 2021). This is because of the lean start-up approach, which is a common characteristic of the technology business model (Sadeghiani et al., 2022). However, there is a need to explore the pivot phenomena in the broader entrepreneurial community to gain a comprehensive understanding of how businesses can effectively adapt and succeed in an ever-changing market. Additionally, although studies have attempted to identify the factors that drive entrepreneurs to pivot, there is still a lack of empirical research to fully comprehend the different concepts of pivoting and the specific triggers that lead to such a decision (Bohn & Kundisch, 2020; C. Hampel et al., 2020).

Few studies (Cohen et al., 2019; Kirtley & O'Mahony, 2023; Wood et al., 2019) have explored the interaction between entrepreneurs' individual traits and pivot. These studies show that entrepreneur capabilities influence the entrepreneur's decisions and actions to pivot. However, research has paid little attention to the influence of EM on pivot decisions and actions (Chaparro & de Vasconcelos Gomes, 2021). The few existing studies mainly examine how a single aspect of the entrepreneurial mindset impacts a specific element of the pivoting process. For example, Grimes (2018) shows that personal identity and psychological ownership influence entrepreneurs' decisions to revise their creative work, which could delay the decision to pivot.

Kuratko, Hornsby, et al. (2021) and Lynch and Corbett (2021) observe that EM can influence entrepreneur strategies and actions. Given that a pivot is a strategic decision enabling firms to adapt and navigate environmental uncertainty, it is unclear

how EM influences pivoting. A gap, therefore, remains in the literature on the influence of EM on entrepreneurial pivoting. This study will bridge this gap by exploring how different aspects of EM influence the pivoting process by studying the experiences of the founders and entrepreneurs who have pivoted.

#### 1.4 Objectives of the study

The primary objectives of this study are to:

- a. Explore the circumstances surrounding the decision of entrepreneurs to make strategic changes and pivot.
- b. Uncover the cognitive mindset entrepreneurs or founders must possess to pivot their businesses successfully.
- c. Explore what behavioural entrepreneurial mindset enables entrepreneurs or founders to pivot their businesses successfully.
- d. Explore the role of an emotional entrepreneurial mindset in successfully pivoting a business.

#### 1.5 Significance of the study

This research paper aimed to delve into the concept of pivoting, which is crucial for the continued existence and development of entrepreneurial endeavours, as highlighted by Grimes (2018) and Kunisch et al. (2017). Additionally, EM serves to facilitate strategic decision-making, which is fundamental to the entrepreneurial process of pivoting (Haynie et al., 2010). The study sought to gain an in-depth understanding of the circumstances surrounding the decision made by entrepreneurs to pivot. The purpose of the study was also to examine the EM and identify the various components that are crucial for successful pivoting.

The results of this study contribute towards enhancing the understanding of the role of EM in the context of pivoting. This includes exploring the different aspects of EM, such as cognitive, behavioural and emotional aspects in pivoting. Furthermore, the study ought to shed more light on the interplay between these components of the EM.

At a high level, this study aimed to add to the growing literature on EM and entrepreneurial pivot. The study's comprehensive analysis, which focused on the impact of different aspects of EM on the pivoting process, sets it apart from previous works by Grimes (2018) and Kirtley and O'Mahony (2023).

This study's ultimate goal was to construct a conceptual framework that connects the various elements of EM and the pivoting process. This framework can serve as a foundation for further research in the EM and pivoting field. Additionally, the framework could be used by business consultants and coaches to help entrepreneurs and small business owners navigate the challenges of pivoting their businesses by providing guidance on the mindset and skills required for success.

#### 1.6 Scope of the study

This study does not aim to create new definitions for the concepts of "Pivot" or "Entrepreneurial Mindset." Instead, it relies on established definitions provided by Kuratko, Fisher, et al. (2021) for Entrepreneurial Mindset and Bandera and Thomas (2022) for the Entrepreneurial Pivot. This study focuses on exploring the specific entrepreneurial mindset during the pivoting process to comprehend better how the entrepreneurial mindset affects the ability to pivot effectively.

#### 1.7 Organisation of the study

This chapter presents an overview of the research study, including the background and basis of the research problem, the significance of the problem from both a business and academic perspective, and the need for the study. It is widely acknowledged that the ability to pivot is crucial for entrepreneurs to adapt to changes and sustain their businesses. Despite this, there is limited research on how entrepreneurs and small businesses cope with or recover from external shocks. This study's primary objective is to fill this gap by exploring the influence of an entrepreneurial mindset on successful pivoting. The study seeks to provide insights into the type of entrepreneurial mindset that can assist entrepreneurs in pivoting successfully.

The rest of the research paper is structured in this way: Chapter 2 examines the current theoretical and empirical research regarding EM and pivoting and identifies areas where more research is needed. These gaps inform the research questions posed in Chapter 3. Chapter 4 describes the study's research design and methodology, including the methods used to gather and analyse data and the study's limitations. Chapter 5 presents the results, and Chapter 6 compares and contrasts the findings with previous studies. Finally, Chapter 7 summarises the study and offers suggestions for potential future explorations on EM and entrepreneurial pivoting.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1 Introduction

This chapter reviewed the concept of the Entrepreneurial Mindset (EM) and its influence on the experiences of entrepreneurs who pivoted their business models. We accomplished this by thoroughly analysing existing literature and drawing on diverse arguments. We initiated the discussion by exploring the concept of pivoting and its significance. Then, we delved into the various dimensions of EM and investigated its effects on the decision-making process of entrepreneurs. Furthermore, we scrutinised how EM can influence an entrepreneur's capacity to pivot. Lastly, we summarised the literature and presented a research study framework based on our analysis and identified gaps in the literature.

#### 2.2 Entrepreneurial pivot

In the face of uncertainty, entrepreneurs must make a crucial decision regarding their original business model: stick to the original idea or pivot (Bandera & Thomas, 2019). According to C. E. Hampel et al. (2020), a pivot is a structured course correction that occurs when an entrepreneur realises their current trajectory and business model are unsustainable. This realisation occurs when the entrepreneur comes to terms with the fact that they need to make a strategic shift. The strategic shifts result in variations in the company's direction, the reallocation of resources, and modifications to one or more elements of the business model.

Chaparro and de Vasconcelos Gomes (2021) describe a pivot as a strategic shift in a company's direction that is taken after the failure (or prospective failure) of the current business model. This definition suggests that a pivot is only a result of the failure or potential failure of the current model. Bandera and Thomas (2022) assert that pivots can also arise from new opportunities or possibilities for expansion. This study aligns with Bandera and Thomas (2022) more comprehensive perspective, recognising that both failures and opportunities can trigger pivots. It is important to note that pivoting can be a challenging yet crucial process for entrepreneurs to ensure their business's survival and growth.

The idea of pivoting is essential to the continued existence and growth of the entrepreneur's endeavours (Grimes, 2018; Kunisch et al., 2017). Chaparro and de Vasconcelos Gomes (2021) observe that pivot decision consists of four steps irrespective of the type or the trigger to pivot. The initial step entails recognising the

need for a considerable change in the business model. This recognition occurs when entrepreneurs are faced with failure and recognise the need to alter their business model (McMullen, 2015). The second step is the production of alternative possibilities for different courses of action. According to Kirtley and O'Mahony (2023), entrepreneurs produce options after identifying the need to pivot in response to a failure or probable failure or after identifying a new opportunity.

According to Chaparro and de Vasconcelos Gomes (2021), the third step entails seizing and testing the feasibility of the selected alternatives. In this phase, the entrepreneur chooses one of the different courses of action and tests its viability. The final step is the restructuring of resources in order to implement the tested viable alternative. Xie et al. (2022) note that the implementation of a viable strategy requires entrepreneurs to reconfigure their resources, which may modify certain elements of their business model. The modifications to the business model are executed in order to change the course of business.

Studies on business pivoting have majorly centred on analysing the pivot phenomenon in the context of technology start-up companies. This is because of the lean start-up approach, which is a common characteristic of the technology business model. For example, Sadeghiani et al. (2022) conducted a qualitative multi-case study to investigate the impact of data analytics on the founders' perspectives regarding their business models. They discovered that competitive intelligence motivated entrepreneurs to pivot their business models at their early stages.

#### 2.2.1 Circumstances surrounding entrepreneur's decision to pivot

Literature has also attempted to identify circumstances that drive entrepreneurs to pivot. According to Kirtley and O'Mahony (2023), the decision to pivot is typically driven by discovering fresh insights that highlight potential opportunities or threats to the entrepreneur firm. These opportunities and threats can originate from a variety of sources, including both internal and external factors such as changes in market conditions, shifts in consumer preferences, or advancements in technology.

Bajwa et al. (2017) and Sala et al. (2022) conducted qualitative research to identify the different types of pivots and reasons that cause entrepreneurs to pivot by investigating high-tech entrepreneurs and using secondary data, respectively. These studies identified various types of pivots that were categorised into product-related, market-related, strategy-related, and team-level-related pivots. Some of the factors that were found to trigger pivoting include negative customer reaction, technology challenges, competition, market conditions, timing, legal issues, flawed business model, cashflow and funding problems, side project success and unscalable business model.

Despite the efforts made, Bohn and Kundisch (2020) and C. E. Hampel et al. (2020) assert that there is still a lack of sufficient empirical research to fully comprehend the different concepts of pivoting and the specific triggers that lead to such a decision. While some studies have explored the factors affecting pivoting decisions in technology and software startups, the broader entrepreneurial community remains largely neglected in this research area. This highlights a crucial gap in the literature, as the pivoting decisions made by entrepreneurs from various industries require further investigation to deepen our understanding of this phenomenon.

According to Sala et al. (2022), the factors that trigger a pivot can either stem from internal or external sources and can present either a threat or an opportunity to the firm. For instance, changes in customer needs resulting from internal factors can catalyse innovation and develop new products and services that align with customer demands (Sala et al., 2022). Conversely, external changes driven by factors outside of the firm's control can threaten its relevance if it fails to adapt its offerings (Berends et al., 2021).

Keiningham et al. (2020) recommend that entrepreneurs constantly monitor their external environment to stay informed about evolving customer needs and emerging trends and pivot as necessary. This view is supported by Rashid and Ratten (2021) and Hanelt et al. (2021), who stress the significant impact that radical shifts in the economic environment have on firms and the potential need for entrepreneurs to pivot as a result. However, Snihur and Clarysse (2022) caution that pivoting, while potentially beneficial, can be a difficult and challenging process, particularly due to the need to reallocate limited resources towards activities related to the new business model. Kunisch et al. (2017) and Coviello et al. (2017) similarly suggest that entrepreneurs should consider the timing of their pivot carefully, as market readiness for a shift is a critical factor to take into account.

Recently, scholars have begun to focus their attention on how companies change after being subjected to external shocks and experiencing failure. For example, Morgan et al. (2020) describe how new enterprises may be better positioned to exploit arbitrage opportunities as a form of pivoting, whereas existing firms will do well pursuing innovation opportunities as a form of pivoting following an external shock. This is due to the fact that new enterprises are more likely to be in a position to capitalise on arbitrage opportunities.

Currently, there is limited research that centres on the entrepreneur's level in the domain of entrepreneurial pivot. Some recent studies that try to address this include (Grimes, 2018), who researched the cognitive biases of business owners and how these biases may influence entrepreneurs' decisions to pivot. Grimes analysed 59 distinct entrepreneurs, and their respective business plans to understand how entrepreneurs' self-concept (identification) and the psychological ownership felt by entrepreneurs over their creative work influence how they respond to feedback. The study results showed that entrepreneurs' ability to incorporate feedback when updating their creative work is influenced by informational limitations (received feedback) and identity-based restrictions.

Furthermore, C. E. Hampel et al. (2020) investigated the impact of pivoting on stakeholder relationships. They created a model of stakeholder engagement management that entrepreneurs can use to establish relationships with stakeholders after pivoting. While studies highlight certain phases of pivoting, they do not provide a comprehensive conceptual framework for the pivot process (Chaparro & de Vasconcelos Gomes, 2021). Additionally, there is uncertainty about what triggers pivot decisions; for instance, a gap remains on the influence of the macro-environment (e.g., politics, law, sociocultural etc.) on entrepreneur pivot decisions and actions (Foss et al., 2019). Lastly, Grimes (2018) and Kirtley and O'Mahony (2023) suggest that entrepreneurs must change their beliefs and ideas before and during the pivot process. However, it is not clear when and how these changes should occur.

In summary, the literature on entrepreneur pivot highlights the importance of this phenomenon for the continued existence and development of entrepreneurial endeavours. The definition of pivot ranges from a structured course correction in response to a failure or prospective failure to a strategic shift triggered by either failures or opportunities. The pivot decision process consists of recognising the need for change, producing alternative possibilities, testing feasibility, and restructuring resources. Although studies have attempted to identify the factors that drive entrepreneurs to pivot, there is still a lack of empirical research to fully comprehend the different concepts of pivoting and the specific triggers that lead to such a decision.

The literature has primarily focused on technology and software startups, neglecting the broader entrepreneurial community. This gap highlights the need for further investigation into the pivoting decisions made by entrepreneurs from various industries. The pivoting triggers can stem from internal and external sources, presenting either a threat or an opportunity to the firm. Entrepreneurs are recommended to monitor their external environment and pivot as necessary to stay relevant to evolving customer needs and emerging trends.

#### 2.3 Entrepreneurial Mindset

The EM is a cognitive framework that helps a person to develop value as an entrepreneur (Daspit et al., 2021). This is accomplished through the ability to recognise and capitalise on opportunities. In addition to this, it enables the entrepreneur to make judgments in uncertain and challenging circumstances with only a limited amount of information (Morris & Tucker, 2021). According to Kuratko, Fisher, et al. (2021, p. 1683), an EM is a method of conceptualising "how to think" and how to "actually think about an opportunity".

Kuratko, Fisher, et al. (2021) observe three distinct features of an "entrepreneurial mindset: cognitive aspect, behavioural aspect, and emotional aspect" (p. 1862). Lynch and Corbett (2021) note that there is no clear concept of an entrepreneurial mindset. In this study, we adopt Kuratko, Fisher, et al. (2021) framework of an entrepreneurial mindset. The cognitive aspect pertains to the mental process that explains how and why entrepreneurs think and behave as they do (Daspit et al., 2021). It entails a mechanism for formulating how to think, followed by actual thought about an opportunity. The behavioural aspect of the EM involves the way in which entrepreneurs behave and act in response to an opportunity and start a business (Mariz-Pérez et al., 2012; McMullen & Kier, 2016; McMullen & Shepherd, 2006) or, more generally, launch opportunity development process (Lynch & Corbett, 2021).

The emotional aspect of EM encompasses what entrepreneurs feel in entrepreneurship, which frequently motivates an entrepreneurial attitude (Kuratko, Fisher, et al., 2021). Studies (e.g., Kuratko, Fisher, et al., 2021; Naumann, 2017) have shown that the interaction between the cognitive, behavioural and emotional aspects fosters EM. This is further reinforced by Lynch and Corbett (2021), who show that a novice entrepreneur's mindset shifts between elaboration (cognitive aspect) and implementation (behavioural), and the entrepreneur must unlock both to advance their entrepreneurship objectives and endeavour. Nonetheless, the effect

of emotions on entrepreneur action has received limited attention from the literature (Kwapisz et al., 2022).

Entrepreneurship research has tended to focus mostly on determining the factors that impact EM. For instance, Wardana et al. (2020) and Handayati et al. (2020) investigated the relationship between entrepreneur education and EM and discovered that entrepreneur education positively influences EM. Furthermore, using university students' data, Liao et al. (2022) analysed the effect of entrepreneur education and entrepreneur mindset on entrepreneur intention and found that entrepreneur mindset and entrepreneur education are crucial for fostering entrepreneur behaviour. Liao et al. (2022) study also found that entrepreneur education fosters an entrepreneurial mindset.

Few papers have discussed how mindset influences entrepreneur actions. For example, Lynch and Corbett (2021) explain that the entrepreneur mindset consists of two predominant orientations, the first of which focuses on identifying and selecting solutions and the second on implementing the solutions. They demonstrate that entrepreneurs use the two orientations to discover opportunities and expand their businesses. Although studies have shown the importance of EM on entrepreneur actions, there is no commonly agreed construct of what constitutes the different aspects of EM (Pidduck et al., 2021). Furthermore, the role of the interaction between specific EM aspects, for instance, emotions and behaviour, in entrepreneur processes remain largely unexplored (Daspit et al., 2021).

In summary, the entrepreneurial mindset (EM) is a critical aspect of entrepreneurship that has received significant attention in the literature. It is a cognitive framework that helps entrepreneurs recognise and capitalise on opportunities, make judgments in uncertain and challenging circumstances, and develop value as an entrepreneur. The EM consists of three aspects: cognitive, behavioural, and emotional. The literature has explored the impact of various factors, such as entrepreneur education, on the development of an entrepreneurial mindset. While the importance of EM on entrepreneur actions is widely recognised, a gap remains in understanding the specific aspects of EM and their interaction with each other during entrepreneurial endeavours. Additionally, the role of emotions in the EM and its influence on entrepreneur action remains an under-researched area. Further research is needed to fill these gaps and provide a more comprehensive understanding of the entrepreneurial mindset.

#### 2.4 EM and decision making

Given that entrepreneurs operate in a dynamic and unpredictable environment, the key premise of EM is that they are able to apply cognitive techniques to make decisions (De Winnaar & Scholtz, 2019). Entrepreneurs are required to make decisions when working in a dynamic or uncertain business environment or when launching a new venture. González-Cruz and Devece (2018) note that entrepreneurs' decision-making capacity is a vital resource that enables them to manage uncertainty, risk, and ambiguity and adapt to difficult settings.

In addition to EM cognition, metacognition is a crucial component of EM that allows entrepreneurs to make decisions and adapt to uncertain surroundings (Haynie et al., 2010). According to Shepherd et al. (2010), metacognition is a higher-level cognitive ability that enables entrepreneurs to conceive and choose cognitive strategies. Metacognitive EM empowers entrepreneurs to make adaptive judgments and change fast to changing external situations. This enables entrepreneurs to modify their cognitive paradigms and construct decision-making knowledge systems (Lombardi et al., 2020).

De Winnaar and Scholtz (2019) suggest that an entrepreneur's decisions are impacted by the approach that the entrepreneur takes, whether it be rational, intuitive, or emotional, as well as the manner in which the entrepreneur perceives the characteristics of the decision. Barba-Sánchez and Atienza-Sahuquillo (2012) and Lombardi et al. (2020) argue that an entrepreneur's actions are a reflection of an entrepreneur whose mindset, values, needs and attitudes play a critical role. Accordingly, entrepreneurial decisions can be said to reflect the mindset of the entrepreneur.

#### 2.5 EM and entrepreneurial pivot

Entrepreneurship is a process marked by significant risk and ambiguity, and entrepreneurs are likely to encounter unanticipated occurrences that need them to decide whether to stick with their original concepts or veer away from them (Berends et al., 2021). Pivoting is an entrepreneurial response to uncertainty (Sadeghiani et al., 2021). According to Morris and Tucker (2021), the mindset allows the entrepreneur to overcome uncertainty and respond creatively to obstacles as they appear. Because of this, we can argue that EM is necessary for the entrepreneurial pivot.

#### 2.5.1 The cognitive aspect of EM and pivot

As indicated earlier pivot process involves four steps: recognising the need for a considerable change in the business model, the production of alternative options for alternative courses of action, seizing and testing the feasibility of the selected alternatives and restructuring resources in order to implement the tested viable alternative. According to Helfat and Peteraf (2015), perception and attention are crucial cognitive abilities for recognising emerging possibilities and predicting competitive threats, which are the fundamental basis of change.

Perception is the subjective mode of conceiving that accounts for the construction of emerging business opportunities and the mobilisation of business resources to extend beyond the current business model (Zhu & Lin, 2019). The cognitive ability of perception influences the perception of opportunities in a variety of ways. Helfat and Peteraf (2015) note that perception entails a multitude of cognitive processes, such as pattern recognition and data interpretation, which are crucial for sensing opportunities. The precise interpretation of data is vital for proper opportunity recognition and opportunity generation, which rely on environmental feedback as entrepreneurs implement new company concepts. The early detection of environmental hazards and the ability to respond in a more effective and timely manner are made possible through pattern recognition.

Attention is the capacity to observe potential entrepreneurial opportunities without actively seeking them out (Lanivich et al., 2022; Valliere, 2013). By paying attention to the surrounding environment, entrepreneurs are able to gain confidence in potential new opportunities (Pidduck et al., 2021). Thus, attention facilitates the identification and creation of new pivoting opportunities. For example, using hierarchical regression analysis, Montiel-Campos (2021) examined the association between entrepreneurial passion for developing (EPD) and strategy change. EPD refers to naturing, growing and expansion of a venture after inception (Montiel-Campos, 2021). He discovered that entrepreneurs with higher scanning and search dimensions, or, in other words, who are alert and able to perceive opportunities linked with the existing and future state of the business, will experience a greater rate of strategic change. Moreover, he discovered that those with higher assessment and judgment dimensions would experience more strategic change because they are able to filter out irrelevant information and assess whether the changing conditions present opportunities that others are overlooking.

According to Healey et al. (2021), the knowledge and prior experience of the entrepreneur are essential for developing alternative courses of action. Entrepreneurial knowledge and prior experience may pertain to market knowledge, market service knowledge, or customer problem knowledge. Knowledge enables entrepreneurs to rigorously evaluate a broader range of opportunities. According to Shane (2000), it is difficult to recognise opportunities without prior knowledge. Thus, the opportunities identified are likely related to the information people already have, which may have been acquired through work experience, education, or other means.

Prior experiences can help entrepreneurs develop crucial skill sets for strategic change. Additionally, the experience can aid entrepreneurs in acquiring the knowledge required to accurately identify alternative courses of action (Lu et al., 2021). Haynie et al. (2012) looked into the ability to effectively change decisions while carrying out an entrepreneurial task in response to feedback. The study considered people who had no prior understanding of entrepreneurship. According to the findings of the study, entrepreneurs with little to no prior knowledge who make efficient use of meta-cognitive resources like knowledge and experience are better able to digest feedback.

According to Helfat and Peteraf (2015), problem-solving and deductive reasoning are the fundamental cognitive abilities for seizing opportunities. Evaluation of market opportunities based on logic enables entrepreneurs to capitalise on the most alluring opportunities (Williams & Wood, 2015). Problem-solving enables the entrepreneur to design efficient business models and choose more astute profitable alternatives. As they are deeply rooted in individual information processing, problem-solving cognitions may not contribute to sustainable pivoting outcomes (Laureiro-Martínez & Brusoni, 2018; Mohaghegh & Größler, 2021).

Helfat and Peteraf (2015) state that the entrepreneurs' cognitive abilities for language, communication, and social skills are crucial to successfully reconfiguring resources. Asset reconfiguration may depend on the entrepreneur's ability to persuade other stakeholders, such as investors, to undertake the new initiatives. Entrepreneurs can use language to communicate their objectives and rely on their social skills to facilitate alignment among various stakeholders (Volk & Zerfass, 2018). In addition, language and social skills can facilitate strategic change and foster coherence by directing stakeholders toward common objectives (Lim & Greenwood, 2017; Liubertė & Dimov, 2021).

14

While there is a substantial body of research on entrepreneurial cognition as the mental frameworks or knowledge structures that entrepreneurs utilise in decision-making (Haynie et al., 2010; Shepherd & Patzelt, 2018b), there is limited literature on what these frameworks or structures actually are or how they influence pivoting (Lynch & Corbett, 2021).

#### 2.5.2 Behavioural aspects of EM and pivot

According to Futterer et al. (2018), there are two entrepreneurial behavioural approaches: effectuation and causation. Effectuation is a general theory of decision-making in uncertain times that emphasises human action as the most influential factor in shaping the future. In contrast, the causation theory predicts the future based on the information available (Brettel et al., 2012). Predicting the future is difficult in a constantly changing business environment.

In the context of the pivot, each phase requires a different entrepreneur behaviour approach. Effectuation is important for entrepreneurial search behaviours and efforts to introduce innovative new products or services or new business practices (Grégoire & Cherchem, 2020; Yang et al., 2019). It involves an emphasis on experimentation and working with available resources to create opportunities. Entrepreneurs who adopt this approach are proactive in seeking opportunities and are solution-oriented in problem-solving. They also have a propensity for risk-taking and a willingness to embrace uncertainty. In addition, the effectuation approach emphasises forming partnerships and obtaining pre-commitments from stakeholders, which facilitates the reconfiguration of resources during pivoting to capitalise on new opportunities (Grégoire & Cherchem, 2020).

Causation is mostly related to the entrepreneur execution behaviours, which in the context of pivots include: the seizing and testing stage and reconfiguration (Zhang et al., 2021). Yang et al. (2019) find that entrepreneurs use effectuation cognition to search for alternative opportunities. Moreover, they find that cognitive causation is associated with entrepreneurial strategic change.

Fisher et al. (2020) note that the entrepreneurial hustle has recently emerged as a new concept that explains action-oriented entrepreneurial behaviour. The entrepreneur hustle behaviour, which refers to an entrepreneur's urgent, unconventional actions designed to address immediate challenges and opportunities, can lead entrepreneurs to support new business ideas as improvisations (Fisher et al., 2020; Kuratko, Fisher, et al., 2021). Entrepreneurial hustle enables entrepreneurs to adapt and transform in the face of uncertainty and crisis. However, hustling behaviour may make new opportunities appear less legitimate because they may not align with the current environmental conditions (Fisher et al., 2016).

Chaparro and de Vasconcelos Gomes (2021) noted a gap in the literature on entrepreneur cognitive, affective and behaviour and pivoting and have made recommendations for future research on these aspects.

#### 2.5.3 Emotional aspect of EM and pivot

The most common emotional biases identified in the literature which may affect pivot decisions include psychological ownership, fear of failure, overconfidence and emotional persistence (Chaparro & de Vasconcelos Gomes, 2021). The degree to which an entrepreneur feels psychological ownership over his or her concept may have an effect on the degree to which the entrepreneur is willing to lose control over his or her ideas (Grimes, 2018), even to the point where the entrepreneur is unable to recognise market opportunities or threats that necessitate modification of the original idea. In addition, an entrepreneur's commitment to their idea can hinder their ability to evaluate the viability of other options, as they will always be biased towards their own original concept (Zhu et al., 2018).

Their fear of failing might sway an entrepreneur's judgment regarding an opportunity, and this fear can hinder them from acting in response to problems. Fear can cause entrepreneurs to develop failure-driven biases, which might result in the entrepreneur continuing along a given path even though it may not be optimal (Cacciotti et al., 2020). On the other hand, when faced with risks, business owners may be motivated to adjust their approach out of concern for failing their enterprise. According to Hunter et al. (2021), the fear of incurring losses linked with failure can be a powerful motivator for business owners to take steps toward achieving success and avoiding prospective losses.

Overconfidence can encourage entrepreneurs to act because they overestimate the likelihood of a positive outcome (Singh, 2020). Consequently, they are more inclined to take advantage of opportunities to overcome risks and hurdles. On the other hand, an excessive amount of self-assurance can cause entrepreneurs to make mistakes in judgment, which in turn causes them to ignore feedback from the market and

persist with their initial concepts (Kraft et al., 2022). Lastly, emotional persistence can serve as a driving force or inspiration for entrepreneurs to pursue a business opportunity they have already chosen (Caliendo et al., 2020). This can lead entrepreneurs to ignore other opportunities, even if those other opportunities have the potential for greater economic gains and benefits.

Literature on EM and entrepreneurial actions have tended to focus on the effect of emotions (overconfidence) on entrepreneurial behaviour. For example, Kraft et al. (2022) analyse the effect of overconfidence on the entrepreneurial process. They find that overconfidence stimulates entrepreneurial opportunities and new venture creation while it hampers venture performance at later stages. Moreover, Tang et al. (2022) explore how the overconfidence of entrepreneurs influences incubation performance. They discover that there is an unfavourable association pertaining to the overconfidence of entrepreneurs and the performance of start-ups during the gestation period.

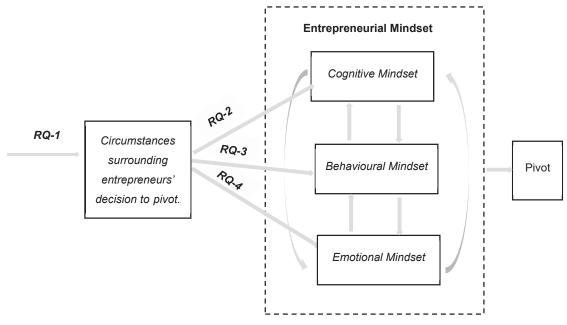
On the other hand, there has been limited research on the influence of fear of failure on entrepreneurial intentions. For instance, Ng and Jenkins (2018) investigate how fear of failure moderates the connection between entrepreneurial self-efficacy and entrepreneurial intention. Their research suggests that fear of failure may hinder the entrepreneurial pursuits of confident individuals.

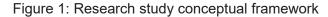
Recent studies have shown that entrepreneurs' emotions impact their ability to recognise opportunities (Grimes, 2018; Kraft et al., 2022), assess the risk associated with new opportunities (Singh, 2020), evaluate and process new business opportunities (Cacciotti et al., 2020; Hunter et al., 2021), and successfully exploit new opportunities (Caliendo et al., 2020). Lynch and Corbett (2021) suggest that inflexibility in thinking can cause delays during the pivoting process. Grimes (2018) and Kirtley and O'Mahony (2023) note that entrepreneurs must alter their attitudes and perspectives before and during pivoting, but it's uncertain when and how these changes should take place. This creates a research void in the literature to examine the association between emotional mindset and pivoting, as well as the interaction between different mindsets and pivoting (Lynch & Corbett, 2021).

In summary, the entrepreneurial mindset's cognitive, behavioural, and emotional aspects play a crucial role in the pivoting process. The cognitive aspect involves perception and attention, knowledge and experience, problem-solving and deductive reasoning, and language and social skills. The behavioural aspect involves

effectuation and causation, while the emotional aspect involves entrepreneurial passion and the ability to handle stress and uncertainty. Despite a substantial body of research on the role of the entrepreneurial mindset in decision-making, there is limited literature on how these frameworks impact pivoting. This highlights a gap in the literature that requires further research to understand the full extent of the interaction between the entrepreneurial mindset's cognitive, behavioural, and emotional aspects and their impact on pivoting.

The following framework summarises the conceptualisation of this study based on the literature on pivoting, Entrepreneurial Mindset (EM), and the role of cognitive, behavioural, and emotional aspects in the pivoting process and the gaps identified.





Source: Author's literature synthesis

#### 2.6 Conclusion

The literature on the entrepreneurial pivot, EM, and the role of cognitive, behavioural, and emotional aspects in the pivoting process highlight the significance of these phenomena for the continued existence and development of entrepreneurial endeavours. While the pivot decision process and the importance of the EM in entrepreneurial actions have been studied, there is a gap in the understanding of specific concepts of pivoting, triggers that lead to a pivot decision, the specific aspects of EM and their interaction, and the impact of the cognitive, behavioural, and emotional aspects of the EM on pivoting. Further research is needed to fill these gaps and provide a comprehensive understanding of these phenomena. In the following chapter, we present the study's research questions to address the identified gaps in the literature.

#### **CHAPTER 3: RESEARCH QUESTIONS**

#### **3.1 Introduction**

This research paper sought to investigate the circumstances that prompt entrepreneurs to pivot and the EM that empowers them to do so. Kuratko, Fisher, et al. (2021) and Chaparro and de Vasconcelos Gomes (2021) have made suggestions for future research on EM and pivoting. The following four research questions were developed based on their suggestions for future research and the identified gaps in the existing literature on the topic.

#### RQ: How does Entrepreneurial Mindset (EM) influence entrepreneurial pivots?

To address the primary research question, four sub-level research questions were formulated as follows:

#### 3.2 RQ 1: How do entrepreneurs make the decision to pivot?

The primary objective of the first research question was to investigate the circumstances surrounding the decision of entrepreneurs to make strategic changes and pivot. The topic of entrepreneurial pivoting has received considerable attention in recent years, with numerous authors highlighting the significance of understanding the underlying drivers of this phenomenon (Bajwa et al., 2017; Chaparro & de Vasconcelos Gomes, 2021; Sala et al., 2022). Kirtley and O'Mahony (2023) posit that the decision to pivot is often driven by the discovery of fresh insights that presents either opportunities or threats to the entrepreneur and their firm. Despite this, the decision-making process behind entrepreneurial pivoting remains poorly understood, as noted by Chaparro and de Vasconcelos Gomes (2021). While previous research has attempted to shed light on this topic, as evidenced by the study done by Bajwa et al. (2017) on software startup entrepreneurs, or the work of Sala et al. (2022) on tech startup entrepreneurs, a substantial gap remains in the literature regarding the general pivoting decisions made by entrepreneurs.

#### 3.3 RQ 2: What type of cognitive mindset is required to pivot?

This research question aimed to uncover the cognitive mindset entrepreneurs or founders must possess in order to pivot their businesses successfully. The cognitive aspect of entrepreneurship refers to the mental models that entrepreneurs use to make decisions (Kuratko, Fisher, et al., 2021). While there is a substantial body of research on entrepreneurial cognition as the mental frameworks or knowledge

structures that entrepreneurs utilise in decision-making (Haynie et al., 2010; Shepherd & Patzelt, 2018b), there is limited literature on what these frameworks or structures actually are or how they impact pivoting (Lynch & Corbett, 2021). Additionally, Lynch and Corbett (2021) highlight that the relationship between the interaction or shift between mindsets and pivoting has not been extensively explored in academic literature.

#### 3.4 RQ 3: What type of behavioural mindset is required to pivot?

This research question aimed to explore what behavioural entrepreneurial mindset enables entrepreneurs or founders to pivot their businesses successfully. The behavioural aspect focuses on entrepreneurs' actions when faced with opportunities (Kuratko, Fisher, et al., 2021). According to Cui and Bell (2022), simply having a good idea or being motivated is not enough to start an entrepreneurial venture. In order to actually launch a venture, entrepreneurs need to take action. This question aimed to highlight the significance of the behavioural aspect in addition to the cognitive aspect of an entrepreneurial mindset, particularly in the context of pivoting a business.

#### 3.5 RQ 4: What is the role of emotional mindset in pivot?

The purpose of this research question was to explore the part played by an emotional entrepreneurial mindset in successfully pivoting a business. The emotional component refers to the feelings experienced by entrepreneurs and how these emotions influence their entrepreneurial mindset (Kuratko, Fisher, et al., 2021). As noted by Pidduck et al. (2021), prior research has emphasised the significance of emotions on entrepreneurial behaviour and the consequences of ignoring them. Previous studies have shown that entrepreneurs' emotions impact their ability to recognise opportunities (Grimes, 2018; Kraft et al., 2022), assess the risk associated with new opportunities (Singh, 2020), evaluate and process new business opportunities (Cacciotti et al., 2020; Hunter et al., 2021), and successfully exploit untapped possibilities (Caliendo et al., 2020). This question aimed to highlight the significance of the emotional aspect in the context of pivoting an entrepreneurial venture.

#### 3.6 Conclusion

In this chapter, we introduced research questions central to the study, which were derived from the gaps in the current literature. These questions sought to develop a

more comprehensive insight into the entrepreneurial mindset and the entrepreneurial pivot constructs. A thorough investigation was carried out to address these questions using the research design and methodology detailed in the next chapter. The next chapter provides a comprehensive overview of the approach used to conduct the research, including the methods and techniques employed.

#### **CHAPTER 4: RESEARCH METHODOLOGY AND DESIGN**

#### 4.1 Introduction

This chapter outlines the study's research design and research method chosen to answer the questions posed in Chapter 3. The study's design and methodology were guided by the nature of the research questions in Chapter 3. The study adopted an interpretivism, exploratory qualitative research approach, employing a narrative strategy and mono methodology to collect data from semi-structured interviews with a purposefully selected population of entrepreneurs and founders who have pivoted their ventures. The collected data were analysed using a qualitative inductive method. The limitations and ethical considerations of the study are also addressed in this chapter.

#### 4.2 Choice of research design

This study employed epistemology and interpretivism as its philosophical frameworks to investigate the entrepreneurial mindset before and during the pivot. Epistemology, as defined by Bonache and Festing (2020), explores knowledge and beliefs. Interpretivism, on the other hand, analyses social phenomena by considering social actors in their natural settings (Alharahsheh & Pius, 2020; Saunders & Lewis, 2017) and interprets subjective intentions and meanings without imposing a prior analytic category (Babones, 2016; Hadi & Closs, 2016). Thus, epistemology and interpretivism research philosophy is best suited for qualitative research, especially when the research focus is on understanding social phenomena and human experiences, beliefs and perspectives.

Hence, epistemology and interpretivism were chosen as the research philosophy for this study, which aimed to comprehend the entrepreneurial mindset that facilitates successful pivoting from the viewpoint of entrepreneurs who have undergone the experience. The study's focus on capturing the entrepreneurs' subjective experiences and understandings related to their pivoting journey make these philosophical approaches ideal.

This study's research purpose is exploratory. According to Creswell (2009), an exploratory study is often conducted when little information is available about the topic or population being investigated, and the aim is to gather insights from participants and construct understanding through their perspectives and experiences. As Saunders and Lewis (2017) demonstrated, the purpose of the

exploratory study is to gain novel perspectives by posing inquiries and assessing things from a new angle (Akhtar, 2016); this approach is applied when there are few or no earlier research on the phenomena. The choice to use an exploratory research approach is because the study sought to gain new insight into the influence of an entrepreneurial mindset on pivoting from the perspective of entrepreneurs and founders who have pivoted, a field that has not been comprehensively investigated in existing literature (Chaparro & de Vasconcelos Gomes, 2021).

This research study applied a narrative research strategy to explore and gather detailed accounts of respondents' thinking, actions and emotional mindset during their pivoting experience. According to Mills and Birks (2014), narrative strategy is commonly used in qualitative research for exploring personal experiences and when the researcher wants to understand the narrative structures and themes that emerge from those experiences. The narrative strategy was chosen due to the humanistic approach required to allow participants to communicate their lived pivoting "experiences in their own words" (Neubauer et al., 2019, p. 91).

This study employed a mono method for data collection. Business and management research usually employ mixed methodological choices because they are believed to produce deeper and richer data compared to the single method (Saunders & Lewis, 2017). However, for this study, we chose to employ a single-study approach because of the narrow time frame to collect the data. During the virtual interviews, a guide was utilised to direct the interview process. The semi-structured approach was preferred, as it allowed for diverse perspectives to be shared and enabled the researcher to gather insights from the respondents, which were then used to address the research questions. Additionally, single-method studies (e.g., Ejupi-Ibrahimi et al., 2020; Sala et al., 2022; Snihur & Clarysse, 2022) which have employed qualitative semi-structured interviews have presented reliable findings.

Furthermore, the study employed an inductive research approach as there is limited research on the topic of entrepreneurial mindset and pivoting (Gioia et al., 2013; Hsieh & Shannon, 2005). This approach allowed the researcher to collect data to reveal novel perspectives into the required entrepreneurial cognitive, behavioural and emotional mindset to pivot. The analysis's consequence was finding key themes through the individual insights that were analysed (Saunders & Lewis, 2017). The decision to employ the inductive approach was informed by the predominantly employed approach in prior related studies (Chaparro & de Vasconcelos Gomes,

2021; Thomas, 2006). Additionally, we utilised the inductive approach because literature (e.g., Chaparro & de Vasconcelos Gomes, 2021; C. E. Hampel et al., 2020; Kouakou et al., 2019; Kuratko, Fisher, et al., 2021; Naumann, 2017; Sadeghiani et al., 2021) has shown there is the disintegration of theories surrounding the EM and pivot constructs.

The study's findings reflect the opinions of the participants at a particular moment, which means that the study has a cross-sectional time frame. This means that the research data was collected at a single point in time (Saunders & Lewis, 2017). A summary of this study's research methodology and analysis process is presented in Table 1.

Table 1: Methodology and analysis process

#### Purposive sampling

The researcher located potential participants for the study through online searches and Google of pivoting entrepreneurs in South Africa. They initially reached out to 12 potential entrepreneurs through LinkedIn to request participation and gather information about their pivoting experiences. To expand the sample, the researcher utilised the snowball sampling method.

#### Data collection technique

The research used a qualitative approach and collected data through semi-structured interviews with 11 entrepreneurs from different industries who had undergone a pivot. One of the eleven interviews was not usable for the study.

#### Transcribing and initial coding

The first half of the research interviews and transcripts were transcribed by a professional transcriber, and the researcher transcribed the second half. The researcher reviewed each transcription for accuracy. ATLAS.ti software was utilised to code compiled data. The coding procedure is described in section 4.8 of the research report. A total of 377 codes were identified.

#### Final coding

To ensure that the codes, code groups/categories, and themes were consistent and that there were no duplications, the coding process was repeated. Both this and the preceding steps were iterative.

#### Analysis and data interpretation

Analyses substantiated circumstances that prompt entrepreneurs to pivot and uncovered cognitive, behavioural, and emotional mindsets that allow entrepreneurs to pivot.

#### 4.3 Population

The target population, which is a subset of the population (Saunders & Lewis, 2017) identified as relevant for this study, was individuals who have initiated a pivot process in the last five years, particularly entrepreneurs and founders from different business sectors. A change was considered a pivot if there was an alteration in one or more elements of the business model. We decided to consider only entrepreneurs who have pivoted since 2017 because we believed that individuals will still remember personally experienced past events they went through in detail within the five-year period (Miller et al., 2015).

#### 4.4 Units of analysis

According to Bless et al. (2006) and Sedgwick (2014), the unit of analysis pertains to the individual or object that serves as the source of data collection and for which data analysis and conclusions are drawn. For this study, the unit of analysis was entrepreneurs or founders who have pivoted their businesses.

#### 4.5 Sampling methods, criteria and size

A non-probabilistic purposive sample was used to select a small, specific sample of entrepreneurs and founders who have pivoted and possessed the necessary data to address the Chapter 3 research questions (Campbell et al., 2020; Palinkas et al., 2015). Entrepreneurs and founders who have pivoted across a variety of industries were considered to maximise the diversity of perspectives on pivoting. The researcher applied discretion to select sample members according to predetermined criteria (Saunders & Lewis, 2017).

Initially, the researcher utilised publicly available information to identify South African entrepreneurs who have made a pivot. Twelve potential entrepreneurs were discovered in the public domain. Eight of the twelve individuals reached via their personal LinkedIn networks expressed interest in participating in the study. However, only four of the entrepreneurs who initially agreed to be interviewed were available for interviews. As the interviews continued, the researcher accessed a larger sample of interviewees through snowball sampling.

The size of the study's sample was not defined at the beginning of the study but was estimated to be between 12 and 18 in order to account for theoretical saturation (Creswell et al., 2007). Dukes (1984) suggests interviewing three to ten people for a qualitative study (as cited in Creswell & Poth, 2016, p. 274). As shown in Figure 2,

sampling continued until the theoretical point of saturation was reached (Corbin & Strauss, 1990; Guest et al., 2006). The participant selection criteria were as follows: a) the individual is an entrepreneur or business founder; b) they have pivoted their business model; c) the pivot occurred within the last five years ending in 2022; and d) the business model pivoted to is still operational or active.

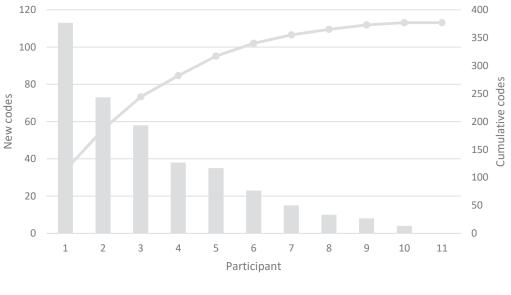


Figure 2: Coding saturation

New codes — Cumulative codes

The eleventh interview was not coded as it was discovered during the interview that the entrepreneur had not yet pivoted but was considering doing so. This interview was disregarded for further examination.

#### 4.6 Measurement instrument or discussion guide

The study employed a qualitative research methodology, utilising an interview guide as a measurement tool to gather insights from entrepreneurs who have undergone a pivot. The interview guide was improved through a review process conducted by the supervisor and an expert in entrepreneurship. The final interview guide is presented in Appendix III.

The use of the interview guide served several purposes, such as keeping the interview focused on the topic and making sure that the relevant information to answer the research question was collected (Jacob & Furgerson, 2012). Additionally, the interview guide helped to ensure consistency across all interviews.

As recommended by Jacob and Furgerson (2012), the researcher began the interviews by sharing and asking for some personal information in order to establish rapport and trust with the participants. The interview questions, which were openended, as recommended by Creswell and Poth (2016), enabled the participants to narrate their stories according to their own perspectives.

The questions explored various aspects related to the questions outlined in Chapter 3 of this report derived from existing literature (e.g., Chaparro & de Vasconcelos Gomes, 2021; Grimes, 2018; Kirtley & O'Mahony, 2023). The first interview question investigated the circumstances that prompted the entrepreneurs to pivot. The subsequent questions aimed to uncover the entrepreneurial mindset of the entrepreneurs during their pivoting journey.

| Research question  | Interview question  |
|--|---|
| RQ 1: How do entrepreneurs make the decision to pivot?       | Why was there a change, and which elements of your business changed?  |
| RQ 2: What type of cognitive mindset is required to pivot?   | What factors did you consider during the change?<br>Elaborate on your thinking process during the pivot.      |
| RQ 3: What type of behavioural mindset is required to pivot? | What steps did you take during the process that you believe contributed to your successful pivot?             |
| RQ 4: What type of emotional mindset is required to pivot?   | Describe your emotional state during the pivoting<br>process and how it affected your pivoting<br>experience. |

Table 2: Mapping the research questions to the interview questions.

## 4.7 Data collection process

Ten entrepreneurs from different industries, including mining, hospitality, beauty, healthcare tech, logistics, healthcare services, financial services, agri-tech, and marketing tech, participated in in-depth semi-structured interviews to explore the circumstances that motivated them to pivot and the entrepreneurial mindset that facilitated the process. Virtual interviews were conducted using either TEAMS or ZOOM, depending on the interviewee's preference. The data collection process took place over the course of two months, from mid-September to the end of November 2022. With an average duration of about 45 minutes, the interviews varied in length from the shortest, which lasted 35 minutes, to the longest, which lasted 70 minutes.

Before the meetings, the interviewees were provided with a consent letter detailing the study's purpose, the expected length of the interview, and the fact that participation was voluntary. A copy of the consent document is attached in Appendix I. The candidates were asked to sign the letter or express their consent via email to ensure data collection was ethical and did not violate participants' rights, in accordance with Saunders and Lewis (2017).

Before commencing the discussions, the interviewees were reminded of the research purpose and their consent. The interviews were recorded using TEAMS recording functionality or with the audio recording function on a cell phone in the case of ZOOM. The interviewees were notified of the recording in advance.

During the interviews, the researcher took minimal notes to allow for maximum attention to the interviewee. The interviewees were given the freedom to tell their pivoting journey from their own perspectives, and the researcher used subtle prompts only when necessary to redirect the focus of the interview to the entrepreneurial mindset.

After each interview, the researcher sent the audio recordings and transcripts to a transcriber who agreed to maintain confidentiality by signing a confidentiality nondisclosure contract. The agreement can be found in Appendix IV. As part of the quality assurance activities, the researcher reviewed the transcripts to confirm their accuracy, and these transcripts were then used to analyse the data with ATLAS.ti.

#### 4.8 Data analysis approach

The data points utilised for exploration in this study were gathered using the semistructured interview technique in a qualitative approach from entrepreneurs and founders. After data collection, the research process included transcription, coding, themes classification, and results interpretation (Braun & Clarke, 2006).

The researcher took notes during the interviews, which were cross-checked with the transcriptions to ensure that the transcripts accurately reflected the interviews and included all pertinent details. The researcher reread the transcriptions to familiarise herself with the data and comprehend the entrepreneurs' pivoting experience. The transcripts were then uploaded to ATLAS.ti for coding.

The technique of open-ended coding was utilised to recognise emerging themes from the data (Gioia et al., 2013), a method that has been effective in various recent

research studies (Kirtley & O'Mahony, 2023; Sala et al., 2022). The following table summarises the steps taken to analyse the data.

Table 3: Six-phase thematic analysis

| Phase                           | Researcher Actions   |
|---------------------------------|--|
| Familiarisation with data       | Immediate transmission of interview recordings to the transcriber followed each interview. After receiving the transcripts from the transcriber, the researcher read each transcript to ensure that it accurately reflects the interview and the notes taken during the interviews, as well as to obtain a better understanding of the data.   |
| Generation of initial codes     | The transcripts were uploaded onto ATLAS.ti for coding. Open-coding was utilised to generate data codes and categories. This process was iterative. During the initial phase of coding, the researcher coded all information contained in the transcripts. The researcher maintained an open mind and labelled the respondents' statements while remaining receptive to the data (Strauss & Corbin, 1998). As the labelling process progressed, codes emerged, and as we compared texts, we began labelling similar groups of texts and establishing code categories. Multiple times, the researcher read, reread, and recoded the data based on their evolving understanding of the data (Ryan et al., 2011). After coding data in its entirety five times, Identical codes were merged, resulting in 377 codes. See Appendix V for examples. |
| Searching for themes            | Using the methodology proposed by (Braun & Clarke, 2006), the researcher went through the codes, analysed and categorised them into code groups, and then began searching for emerging themes and patterns. Themes were developed using similarities between narratives (Sanders, 1982).   |
| Review of themes                | The researcher reviewed, refined, and defined themes to ensure there were no overlaps; identified subjective reflections of the created themes; and identified the essences present in the identified themes (Hsieh & Shannon, 2005; Sanders, 1982). The themes were reviewed against the research questions to ensure adherence.  |
| Definition and naming of themes | This phase is built upon the previous phase, ensuring that the themes are well-<br>defined and distinct in preparation for the framework described in Chapter 7.   |
| Production of the report        | Write a report to present the findings of the analysis as presented in Chapters 5 & 6.   |

Source: Adapted from (Braun & Clarke, 2006)

## 4.9 Quality controls

In qualitative research, the legitimacy of the research outcomes is highly dependent on the researcher's capabilities and efforts (Golafshani, 2003). To ensure the credibility of this study's findings, the interview guide questions were formulated by drawing insights from existing literature, and the questions were designed to facilitate an unbiased interaction with the respondents, encouraging them to share their perspectives on the subject matter. Before conducting the interviews, the questions were pilot tested by a consultant with prior experience with pivoting to ensure that the questions were relevant.

To establish the clarity and coherence of the responses, follow-up questions were posed during and after the interviews (Morse et al., 2002). The supervisor acted as a peer reviewer and scrutinised the interview transcripts to ensure that the results were unbiased and credible (Forero et al., 2018).

Only entrepreneurs who had undergone a pivot were interviewed to ensure a representative sample and transferability. Data collection continued until theoretical saturation was reached, indicating that adequate data points were collected to account for all aspects of the entrepreneurial mindset and pivot concept (Morse et al., 2002). The sample was also varied to include entrepreneurs from different industries.

The researcher triangulated the responses to ensure the credibility and dependability of the results. This involved gathering information from multiple sources and perspectives to comprehensively understand the entrepreneur's mindset during the pivot process. Additionally, all research activities were documented to enhance the study's transparency, dependability, and confirmability. This documentation included a research diary, interview recordings, interview transcripts, and a coding book. In doing so, the researcher ensured that the study's results were trustworthy and accurate. This approach aligns with Patton (1999) recommendation to use triangulation and document research activities for methodological rigour.

### 4.10 Research limitations

This study collected data through semi-structured interviews. According to Creswell (2009), interviews as data collection methods contain inherent biases because data is filtered through the interviewees' perspectives, and not everyone is equally articulate and perceptive. Additionally, the presence of a researcher may influence the interviewees' responses (Agee, 2009).

The second limitation of the study is that it aimed to determine the type of entrepreneurial mindset required to pivot at each stage of the pivoting process, but it was difficult to obtain evidence of how mindset influenced pivoting at each distinct stage. The study's participants did not think of their pivoting journey in stages for the purpose of identifying the mindsets as their thinking process, behaviour or actions they took and emotions they felt at each stage. The respondents could remember what triggered them to pivot and the mindset throughout the overall process but not distinctly for each stage of pivoting. During the pilot interview, this limitation was identified as a constraint, and it was anticipated that it would be difficult to obtain the relevant data using the cross-sectional study to understand the type of mindset at each stage of pivoting.

Thirdly, another limitation of this research is that the study only looked at entrepreneurs who have pivoted successfully. This introduces the risk of a "winner's bias" because the study only looked at those who were successful in their pivot and not those who failed (Sterne et al., 2001). This can lead to an overgeneralization of the findings and may not be representative of the population of entrepreneurs who have attempted to pivot.

Fourth, as acknowledged by Dukes (1984), the narrative study has an inherent selfreporting bias, which is also a limitation of this research. The entrepreneurs were requested to narrate their experiences, emotions, and thoughts throughout the pivot process. This data collection method depends on the entrepreneurs' ability to accurately recall their experiences and their willingness to report them honestly. This may lead to a bias in the results as people may not accurately recall events or may be hesitant to report certain information.

Lastly, the limitation related to the sampling approach (purposive sampling) is that the results cannot be generalised beyond the sample (Acharya et al., 2013; Etikan et al., 2016).

### 4.11 Ethical considerations

Qualitative studies involving human subjects must adhere to ethical standards to uphold the rights and respect the dignity of the participants (Creswell & Poth, 2016). To this end, the researcher acquired ethics clearance from the GIBS Research Ethics Committee, Appendix II. Additionally, Appendix I presents the informed consent used to gain consent from participants, which provides clear information about the study, its purpose, and the participant's role. Furthermore, to safeguard the confidentiality of the interviewees, the transcriber agreed to a non-disclosure agreement, and the respondents were anonymised for reporting purposes. Transcripts were also stored without identifiers to ensure participant anonymity throughout and after the study. By taking these steps, the researcher made certain that the study was carried out in an ethical fashion.

# 4.12 Conclusion

This chapter presented the study design and research method that was utilised in this study. The study adopted an interpretivism, exploratory qualitative research approach, utilising a narrative strategy and mono methodology to gather data from a purposively selected population of entrepreneurs who have pivoted their business model in the last five years through semi-structured interviews. A qualitative inductive approach was employed to analyse the collected data, and thematic analysis was used to arrive at the findings. This chapter also discussed the study's limitations and ethical considerations.

#### **CHAPTER 5: FINDINGS**

### 5.1 Introduction

This chapter presents the primary results of the in-depth semi-structured interviews. Thematic analysis was employed to analyse the data, comprising coding, categorisation, and grouping of data into relevant themes to address the research questions posed in Chapter 3. The data yielded 377 codes, with examples of codes provided in Appendix V. The codes were organised into 35 subcategories, which were further grouped into 16 categories displayed in Table 4. The final column of the table denotes the groundedness of the codes, as they arose from the data itself. The data analysis outcomes are structured according to the research questions and the themes uncovered for each research question.

Table 4: Code subcategory and category mapping

| RQ    | Code Subcategory  | Code Category                                      | Grounde | dness |
|-------|---|--|---------|-------|
| RQ1   | Impact of covid on business                                     | Macro environment impact                           |         | 0.6%  |
|       | Impact of venture failure on entrepreneurial ecosystem          | Aspects of venture                                 |         | 0.2%  |
|       | Indications of business failure                                 | Aspects of venture                                 |         | 0.6%  |
|       | Lived experience of pivoting                                    | Lived experience of pivoting                       |         | 8.3%  |
|       | Lived experience of starting and directing a venture            | Lived experience of pivoting                       |         | 1.9%  |
|       | Pivot decision drivers_timing to launch                         | Strategic considerations for pivoting              |         | 0.4%  |
|       | Managing a portfolio of businesses                              | Managing a portfolio of businesses                 |         | 1.9%  |
|       | Pivot decision drivers  | Strategic considerations for pivoting              |         | 1.5%  |
|       | Recommendation  | Macro environment impact                           |         | 0.2%  |
|       | Competency pillars leveraged to pivot                           | Optimising venture pivot processes                 |         | 0.8%  |
|       | Strategic approach to shaping a new venture                     | Strategic approach to shaping a new venture        |         | 9.8%  |
| RQ2   | Strategic considerations for pivoting                           | Strategic considerations for pivoting              |         | 8.3%  |
| TROLE | Strategic options for loss making ventures                      | Reflections on learnings from failure              |         | 0.4%  |
|       | Operational implications of a pivot                             | Optimising venture pivot processes                 |         | 5.7%  |
|       | Optimising venture pivot processes                              | Optimising venture pivot processes                 |         | 2.8%  |
|       | Entrepreneur behaviour  | Entrepreneurial venture ecosystem, Managing self & | 8       | 1.1%  |
|       | Impact of venture failure on founder business acumen            | Aspects of venture                                 | L       | 0.6%  |
|       | Monitoring and reviewing for a venture to thrive                | Taking action                                      |         | 0.9%  |
|       | Practical interventions to stay afloat                          | Managing a portfolio of businesses                 |         | 0.2%  |
| RQ3   | Reflections on learnings from failure                           | Reflections on learnings from failure              |         | 3.2%  |
| 1 CQU | Reflections on strategic choice errors                          | Reflections on learnings from failure              |         | 0.6%  |
|       | Taking action   | Taking action                                      |         | 9.1%  |
|       | Response to macro environment pressures                         | Macro environment impact, Managing self & team     |         | 0.2%  |
|       | Review of personal disposition towards business                 | Personal impact consciousness                      |         | 1.5%  |
|       | Review of personal mistakes made by founder                     | Personal impact consciousness                      |         | 0.8%  |
|       | Managing self   | Managing self & team                               |         | 15.1% |
|       | Managing the team   | Managing self & team                               |         | 0.9%  |
| RQ4   |   | Entrepreneur emotions                              |         | 7.6%  |
|       | Emotional response to business failure                          | Emotional response to business failure             |         | 2.1%  |
|       | Value of an engaged team  | Value of an engaged team                           |         | 0.4%  |
| Other | Challenges faced by entrepreneurs in monitoring venture perform |  |         | 2.8%  |
|       | Challenges faced by entrepreneurs in shaping a pivot agenda     | Challenges faced by entrepreneurs                  |         | 0.2%  |
|       | Challenges faced by entrepreneurs                               | Challenges faced by entrepreneurs                  |         | 2.6%  |
|       | Character of entrepreneurial venturing contexts                 | Challenges faced by entrepreneurs                  |         | 0.2%  |
|       | Entrepreneurial venture ecosystem                               | Entrepreneurial venture ecosystem                  |         | 6.6%  |

## 5.2 Description of sample

Table 5 below provides sample data, describing the pivot information and the types and reasons for pivot for ten respondents across various industries. A maximum purposive sampling approach was utilised to choose the interview participants. Participants' names have been removed to protect their identities.

Overall, the sample includes examples of different types of pivots, such as financial pivots, customer need pivots, value capture pivots, and platform pivots. The reasons for pivot also vary and include internal factors such as business financials, investor influence, side project success, and external factors such as customer feedback, market conditions, and technology changes. Additionally, the sample includes 60% male and 40% female respondents from a variety of industries such as mining, hospitality, beauty, healthcare tech, logistics, healthcare services, financial services, agri-tech, and marketing tech.

# Table 5: Sample description

| Responden<br>t ID | Gender | Industry                     | Pivot information  | Type: factor - Reason for<br>Pivot   |
|-------------------|--------|------------------------------|--|--|
| Respondent<br>1   | Male   | Mining                       | Closed down loss-making business<br>units and redirected business from coal<br>mining to renewable energy.   | Financial pivot: <i>Internal -</i><br><i>Business financials</i>   |
| Respondent<br>2   | Female | Hospitality                  | Pivoted from banting only meals to all meals.  | Customer need pivot: <i>External</i> - customer feedback   |
| Respondent<br>3   | Female | Beauty                       | Pivoted from beauty directory app to e-<br>commerce platform.  | Value capture pivot: <i>External</i><br>– technology changes;<br>customer feedback                         |
| Respondent<br>4   | Female | Healthcare Tech              | Pivot from Medicine delivery App to<br>@home and @work health care<br>platform services.   | Platform pivot; Customer<br>segment pivot: Internal –<br>Influence of investor                             |
| Respondent<br>5   | Male   | Logistics                    | Pivot from an on-demand alcohol<br>delivery App with one bottle store to an<br>on-demand grocery delivery App.   | Customer segment pivot:<br>External – market conditions  |
| Respondent<br>6   | Male   | Healthcare                   | Expanded from employee wellness<br>services to debt review and medical<br>and legal assessments.   | Customer need pivot: <i>External</i> - <i>Market conditions</i>  |
| Respondent<br>7   | Male   | Serial<br>entrepreneur       | Expanded operations to PPE in 2020.<br>Shifted business from Casting agency<br>to events management, printing,<br>strategic planning for sensors,<br>healthcare consumables, skills<br>development and training and<br>business-oriented events. | Value capture: <i>Internal – Side</i><br>project success   |
| Respondent<br>8   | Female | Financial                    | The business started with RE training<br>and then shifted to financial planning.<br>Other interim changes in between that<br>did not work out.   | Customer need pivot: <i>External</i><br>- <i>Customer feedback; Internal</i><br><i>Influence of mentor</i> |
| Respondent<br>9   | Male   | AgriTech                     | The business started with a main focus<br>on agricultural engineering, specifically<br>irrigation, drainage, and renewable<br>energy; now, the business has shifted<br>to business development and planning<br>services.                         | Customer need pivot: <i>External</i><br>- Customer feedback  |
| Respondent<br>10  | Male   | Services<br>(marketing tech) | Pivot from HR AI solution to Marketing AI solution.  | Customer need pivot: <i>External</i><br>– wrong timing   |

36

# 5.3 Research question 1 (RQ 1) results

## RQ 1: How do entrepreneurs make the decision to pivot?

The term "pivoting" refers to the process of making an adjustment to a business's strategy or model. When entrepreneurs realise that their original plan is not working or when a new opportunity presents itself, pivoting may be necessary. The ability to pivot is commonly viewed as a sign of an entrepreneur's success, as it demonstrates their adaptability and agility in the face of changing circumstances.

A variety of factors prompts the decision to pivot. Respondents noted that they realised a pivot was necessary when they saw their business experiencing difficulties, when they observed changes in customer behaviour toward their offering, or when customer feedback or market research revealed new market gaps. This section will focus on the various constructs that emerged from the data, namely indications of business failure, timing, customer needs, changes in market trends, and radical changes in the macro-environment.

## 5.3.1 Indications of business failure

The study found that potential business failure was one of the common reasons for the respondents to consider pivoting. Some respondents realised it was time to pivot when they started failing to meet monthly obligations,

*"When we started failing to pay the monthly obligations of the specific businesses – that is when we made the decision."* Respondent 1

"Many properties were closed because the properties that we have, they are much closer to universities. So that meant that we didn't have any tenants at some point, so it was quite rough because, I mean, they're financed by banks, and banks, wanted their money. So yeah, that was quite challenging. So, with minibuses, I even had to let go the business. I sold all the cars." Respondent 6

or when they received liquidation applications from creditors.

"...as well as when we started getting liquidation applications from creditors – that is when we made the decision." Respondent 1

## 5.3.2 Timing

One of the respondents decided to pivot when they realised that the target market was not prepared to pay for the product they had developed, and as a result, the business was running out of money fast. The findings highlight that sometimes entrepreneurs provide solutions to a market that is not ready to accept them due to the wrong timing.

"So, we had a business, the product was an automated AI engine, and it was targeting the HR industry; it was an HR marketplace. And we discovered that there was not a market for it, that it was too early. And it was too disruptive. And the HR industry did not want to buy it because the HR industry did not want to be disrupted." Respondent 10

#### 5.3.3 Customer needs

Catering to the relevant customer needs is important for business success. Changes in customer needs can affect the demand and profitability of the business. Respondent 10 proposed that entrepreneurs validate their business by seeking payment from their customers. If the customers are unwilling to pay, it may indicate that the entrepreneur is in the wrong business and needs to pivot the business model.

"...the way to realise you need to pivot is by talking to your customers, asking your customers for money. And if they're willing to pay you for it, then you're onto something; if they're not willing to pay you for it, then you look like you may have a problem. And that's what we talk about a lot is, you know, ask your customers for money early in the journey and ask them for money often"..."... get the customer validation, if you're not getting traction from the customer, start looking at your pivot, you may need to do a big pivot, or you may need to do a small pivot." Respondent 10

Most respondents decided to pivot when they realised changes in customer demand for their products. They received feedback from their customers that they preferred a different offering,

"Honestly, I generally realised that because of my cooking skills and how my Banting meals were actually normal, non-Banters were buying Banting meals. However, they were complaining that they want some starch like 'pap', bread, and many other non-Banting meals." Respondent 2

"And the people on the app were saying it would be really cool if we could buy the products." Respondent 3 or they realised that their target customers had other more pressing needs that needed to be addressed.

"so my first line was offering irrigation and drainage design. And drainage and renewable energy. So, I was specialising in those three lines, but I realised as time goes on that (...noooo no...) my people are not on at that level. Let me let me try something else."

## 5.3.4 Changes in market trends

Monitoring market trends closely and being prepared to pivot when necessary is important for companies to stay competitive and capitalise on new opportunities. The following quote shows scenarios where the market shifted, and the demand for the offering reduced, leading the respondent to pivot.

"Yeah, and also just bring in what's happening overseas because I mean, I look at websites like Sephora and it's just I mean, Sephora's website is incredible, the things that it does. So you want somebody who can take the shopping experience to the next level for the consumer." Respondent 3

The following quotes show scenarios where new market trends emerged and presented new opportunities for the respondent to pivot to.

"...And then as we grew, we pivoted now into other Home Care Services or Primary Health care services at home and also in the workplace because we saw that is where the market is going." Respondent 4

"So when I started, I was more focused on teaching and educating, particularly in the field of real estate, but I quickly realised that the market's demand for advisory services is growing rapidly. Now we do financial planning and advisory services." Respondent 8

#### 5.3.5 Radical changes in the Macro environment

A variety of factors, including changes in the market, changes in technology, climate change, or changes in the overall economic environment, can drive radical changes in the macro environment. The following quotes are examples where respondents had to pivot due to radical changes in the macro environment.

*"I saw a lot of resistance, or rather unsure of buying or not buying from clients, you know, due to the constant changes and the increase on petrol."* Respondent 2

"...and then we came to know there was a ban. And we went to Pick 'n Pay and said you guys don't have an on-demand delivery yet, we don't have a business. We have 35 employees to look after, let's pivot, and then we did it very, very quickly after that." Respondent 5

"And then came 2020 COVID. And then my company, fortunately, was ready, you know, had references. So now when people started wanting PPEs, then obviously my company was positioned strategically." Respondent 7

Radical changes in technology, such as the broad acceptance of the internet or the introduction of new software, can also lead to changes in the macro environment. This can make it difficult for companies that rely on older technology to compete with newer companies that are able to take advantage of the new technology. In these cases, entrepreneurs may need to pivot their business model in order to stay relevant and competitive.

"We are living in terms of you know, fourth industrial revolution, artificial intelligence and all those things taking our jobs and all that. But you ask yourself the question how do I stay relevant? So whatever research I do I will come and implement that in the business." Respondent 6

Radical changes in the macro environment can be challenging for entrepreneurs, but they also present opportunities for innovation and growth. If done correctly under these circumstances, pivoting can help a company adapt to the changes and come out stronger on the other side.

Overall, the study's results emphasise the importance of monitoring the business environment closely and being prepared to pivot when necessary, whether due to indications of business failure, wrong timing, changes in customer needs, market trends, or radical changes in the macro environment. Respondent 2 suggested that entrepreneurs should *"thoroughly know their business from head to toe so that if there are any problems, they are able to diagnose them and equally treat them, you know. So yeah, that's one piece of advice I can give out to anyone who would want to know when it is time to pivot their business". Pivoting can be a risky move, and it is important for companies to conduct a thorough analysis before making any decisions.* 

## 5.4 Research question 2 (RQ 2) results

#### RQ 2: What type of cognitive mindset is required to pivot?

A cognitive EM refers to the cognitive framework and approach that entrepreneurs utilise to run their businesses. In this study, a cognitive mindset manifested itself through the entrepreneur's creative thinking capabilities, planning strategically, identifying and solving problems, and thinking analytically.

## 5.4.1 Strategic thinking

Entrepreneurs must be able to think ahead and plan for the long-term success of their businesses. They should clearly understand where they want their business to be in the long term and use this vision to guide their decision-making when evaluating opportunities. The ability to plan strategically emerged as a crucial aspect of pivoting, particularly when determining the new funding models and when configuring resources during the pivot. The following quotes illustrate the strategic mindset construct.

"I guess with the planning part. I think one of the most important things was that we continued refining our strategy and continued pitching to investors and people and continuously improved based on all the 'no's and all the questions and all the challenges." Respondent 5

"I would want funding from a very tech-heavy hard hitter VC, that's the only kind of funder I would consider, is that it has to be a funder with very strong technical or IT background.... Because I know a lot of funders, if you are a non-tech person, they insist that the cofounder be a tech person." Respondent 3

"We see it as stable, and because our other buffer is that we're building something that's scalable. Hence, we are putting so much money on product development so that you build a product that will scale us out of the country no matter what happens." Respondent 4

"I had a co-founder right from the beginning and always have a financial person and a technical person on my team...I think it's critically important to have, you know, two or three or four co-founders. And I noticed in the marketplace that companies that are getting large investments from VCs, they seem to have a lot of co-founders on the team... So co-founders that have

from different domains. So my domain is sales marketing. So, therefore, I need co-founders from a finance background and from technical data science background" Respondent 10

Having a long-term strategy and a clear vision is crucial for pivoting. It helps entrepreneurs to make strategic decisions that will put their business in the best position for long-term success. The ability of respondents to pose strategically oriented questions aided in the decision to pivot.

"The first thing you think about is how do I salvage the wreckage that I have, when the initial startup did not work." Respondent 10

"...I looked at strengthening the teams that were running the businesses by asking them in terms of what they think is needed to grow,..." Respondent 1 "And the dilemma was, do we close those or do we let them continue?" Respondent 1

### 5.4.2 Ability to identify and evaluate opportunities (perception & attention)

Identifying and evaluating opportunities is a critical skill for entrepreneurs, especially when it comes to pivoting their business. The entrepreneur's perception and attention to detail can help entrepreneurs to identify potential areas for growth and expansion, even in the face of changing market conditions or other macro-environmental factors.

"So we were like 70% there, continued with the decision with that 70% information, but then after this new information, 'Like OK, we have to walk away from this one' because it means it is going to be up and down for the next five years, and with our intellectual property - and once it goes to the government and the tender stage, it means now we won't even have a chance or will have a 10% chance of getting a project that we conceptualised." Respondent 4

For some respondents, this construct manifested itself through a thorough knowledge of the market and the industry in which they operate. Respondent 3 had conducted comprehensive research on the beauty industry, and as a result, she was confident that a gap in the beauty industry existed and that it was time to pivot the business.

*"I knew very well that there was a gap in the market, like I knew that for sure, and my only constraint was that I was so small as a business. But I knew that* 

this is something that's needed in the South African market, I need to show the value that this business brings to people's lives, and I know it will grow." Respondent 3

Respondent 6 is trying to explain below that because he understood how the industry operates, he was able to reduce the cost of his business pivot by acquiring resources from large industry players.

"And when it started, our subcontracted to big EAP companies. So, meaning that, you know, in South Africa, one of the biggest Wellness companies is ICAS. And then the second biggest is CareWays. So, I was their subcontractor ...So, they would give me their resources. So tried and test EAP or employee Wellness consultants. So, when I started, I go to them so they give me all the resources financially sometimes to make sure sometimes they will pay my office spaces." Respondent 6

For some respondents, this construct manifested itself through having a thorough knowledge of the key trends, challenges, and emerging opportunities in the market, as well as the competitive landscape. By having a good understanding of the trends in the market, Respondent 3 realised that their original idea was going to limit sales, and they had to listen to what the market was saying and add other ranges of products to their platform.

"Umm I mean, we started off saying we want to sell natural products only, and we saw that's going to be too niche and we had to change now and start selling other stuff, and I mean there's a whole lot of categories and stuff that we want to add, of things that I didn't think I'd want to add before, but the market is saying, 'This is what we want'." Respondent 3

Respondent 6 identified a new opportunity to expand their offering to debt review services for their existing clients.

"So, who are like no, how do we help these people with financial problems because it looks like everyone you see, regardless of what they're there for, financial issue It's also in the centre of the problem whether it's divorce, financial problem is the centre of the problem. So, we're like, Nope, we are going to introduce that debt review services and that's when our business grew leaps and bounds." Respondent 6 It is in carefully evaluating the potential risks and rewards of different opportunities, weighing them against the risks and rewards of continuing with their current business model, that entrepreneurs are able to make an informed decision to pivot.

"But because of I weighed clients and the market, actually, I realised that there were more clients of non-Banters than the way of Banters. And so that is why I even changed my branding from ...", Respondent 2

One important step in evaluating opportunities is to conduct market research. This may include researching the target market, gathering information about the competition, and identifying potential partners or suppliers. Additionally, entrepreneurs should evaluate their available resources, such as their financial resources, talent and capacity, and expertise. All these factors can help the entrepreneur determine if a particular opportunity is a good fit for their business and if they have the resources necessary to take advantage of it.

## 5.4.3 Analytical thinking

Analytical thinking allows businesses to make data-driven decisions, which is critical for making successful pivots. It involves considering the resources and capabilities of the business in evaluating potential options for the pivot. Analytical thinking is used in key stages of a pivot, such as problem identification, opportunity identification, evaluation of options and decision making.

Respondent 4 stressed the point that when considering options, it's not about whose idea is best but which idea is good for the business based on the data and information at hand.

"It's not about whose idea is best, it is which idea is good for the company... So any ideas that works for the best of the company and nudges towards our vision, that's the idea I go for." Respondent 4

However, she also pointed out that although data is very important in her decisionmaking, she does not need to have 100% of the information. She is able to make sound decisions with limited or scant data. And sometimes, she relies on her gut feeling.

"So, if I'm 70% happy with the information at hand, then I'll move, then if something happens there in front, then we learn from those lesson" Respondent 4 Respondent 3 noted that relying on data to make decisions has prevented them from pursuing some business opportunities that appeared promising at first glance, but a cost-benefit analysis revealed they were not worth pursuing. Respondent 3 received multiple customer requests to ship products internationally, indicating an opportunity to scale abroad. However, when considering the data closely, the international shipping costs were too expensive to consider the opportunity.

"...But once you start going further, even to Namibia and Nigeria, the shipping fee becomes really, really expensive, and so we kind of right now hesitant to do it just because the shipping fee doesn't make sense ... But as soon as we can get the price right then I think then we'll start doing it. But right now, it's just it's like 1000 Rands to ship to Namibia. It doesn't make sense so we're working on it slowly". Respondent 3

### 5.4.4 Thinking creatively

While analytical thinking is utilised to achieve profound insights into the current situation, identify potential opportunities, and evaluate each potential pivot's potential risks and benefits, creativity is used to generate new and innovative ideas for how to approach the pivot. Creative thinking can be used in key stages of the pivot process, including idea generation, solution development and implementation plan for the pivot.

The following quotes outline the respondent's ability to think creatively.

"And we looked at our technology, which was an AI engine. And we thought about how we could reconfigure that for a different industry so that we would not lose the money that we had invested in it. And we thought about that, and we came up with the idea of turning it into a marketing platform." Respondent 10

"And besides just growing our audience on social media, we are looking at other traditional advertising avenues because sometimes with social media, you start to attract a specific demographic, you don't kind of reach a wider audience. So, we're trying to branch out into other advertising" Respondent 3

"...I had to think out of the box. So medical-legal assessments are something that I never had any experience. I just did my research and saw that it is fit for our clients and there is demand for it. I work with people with experience." Respondent 6 "We are based in Muraga Village, and it was intentional to do this. Yeah, because we believe that people in different spaces, more especially, people within our communities, they also deserve quality financial planning, and advice" Respondent 8

"And try to differentiate ourselves from what other people are doing, you know 2020-2021 when we are talking about the rehabilitation of COVID, one thing that so many people were doing was to train entrepreneurship. There was so much training about entrepreneurship. But to us, it was saying, OK, let us come with an angle." Respondent 9

"And we had to look at innovative ways to fund our launch and our marketing of the new products. So we looked at building an in-house team of interns and giving them a messaging strategy so they could reach out and do what we call digital selling at that point in time, digital selling was very topical. And it was the idea to use LinkedIn Sales Navigator to reach out to target buyers and start conversations with them." Respondent 10

In conclusion, this study found that a cognitive entrepreneurial mindset, specifically a strategic mindset and the entrepreneurs' perception and attention, which enhances their ability to discover and evaluate new prospects, played a crucial role in the success of pivoting for entrepreneurs. The ability to think ahead and plan for the longterm success of their business, as well as having a clear understanding of where they want their business to be in the long term, helped entrepreneurs make strategic decisions that put their business in the best position for long-term success. Additionally, the ability to discover new opportunities, even in the face of changing market conditions or other macro-environmental factors, was crucial for entrepreneurs to identify potential areas for growth and expansion. Furthermore, thinking creatively and analytically manifested in entrepreneurs' ability to look into their business from a different perspective to generate novel ideas and use data to make decisions. Overall, this study highlights the importance of a cognitive entrepreneurial mindset for successful pivoting.

### 5.5 Research question 3 (RQ 3) results

#### RQ 3: What type of behavioural mindset is required to pivot?

Responses to the behavioural entrepreneurial mindset reflected two broad categories of entrepreneurial actions and attitudes. The emerging views on attitude

include self-efficacy, determination, a positive attitude, and openness to change and to new ideas. The emerging views on entrepreneurial action include continuous experimentation, propensity for risk-taking, proactiveness in seeking opportunities, ability to adapt to change, and solution-oriented problem-solving.

### 5.5.1 Attitude

## 5.5.1.1 High self-efficacy

Self-efficacy is confidence in one's ability to succeed in a given situation or complete a given task. High self-efficacy can increase motivation and perseverance in the face of adversity, whereas low self-efficacy can lead to self-doubt and a tendency to give up easily. Multiple factors, such as past experiences, social support, and the difficulty of the task, can affect one's self-confidence.

Respondent 10 described how his prior experiences aided in pivoting. Because he had dealt with similar obstacles in the past, when his startup almost failed, he was confident that he would find a way to save the business.

"...So previous experience, you asked, because it meant that I understood that companies run into problems. I had worked primarily in business development in my previous jobs. So I always understood that you would hit roadblocks and run into problems and that you can always overcome that. So when it came to being faced with the startup closing down, I was able to draw on previous experience in sales and marketing." Respondent 10

Similarly, because Respondent 6 was shifting to an industry in which he had vast experience, he was confident that he would make it work.

"I was consulting alone when I started off. Actually, I was working full time, and during my spare time, I would consult on Thursdays and weekends and sometimes after working hours. And then eventually decided to resign from this to start a big company and incorporate other people into the business." Respondent 6

Respondent 3 demonstrated how having her family support gave her more confidence in her work.

"...So much, because you know, when I was alone during the pandemic and orders were just, you know, becoming worse, my little brother was helping me when I wasn't around on holiday. He'd say like it's fine, I'll pack your orders for you, and my mom's always like, 'If I have too many orders, just call me.' I'm like, 'Girl, you don't even know where to start.' But they've been very supportive, you know, they believe in what I'm trying to do, and I think now that I've proven that there's something here, they buy into it a lot more." Respondent 3

#### 5.5.1.2 Determination

Determination allows entrepreneurs to persevere despite difficulties and setbacks and keep working towards their goals even when things don't go as planned. This is especially important when pivoting, as it can be difficult to let go of an initial idea or plan, and it takes a strong determination to make the necessary changes and move forward. Additionally, determination also helps entrepreneurs be open to feedback and adaptable, which is key when pivoting.

"And then to adapt the app for a grocery experience as opposed to a liquor experience. So it's a liquor experience is 3 to 4 items, very defined categories, a very simple shopping journey -with groceries, it is a much more complicated journey...But we were determined to make it work, and we updated the system in 72 hours". Respondent 5

"Now I was generally after work cooking, preparing the meals for the next day, waking up the next day early, going to town and selling, then around after 7 make my way to my actual job, which was a claims assessor job. And then I would also continue to sell during my lunch hour, so I would sacrifice my 1 hour of lunch just to continue selling." Respondent 2

"You have to knock on doors. I'm telling you. There's no quick fix to that. Well, now people will just like able to use social media. You can e-mail here and there. And if you want to touch a person's heart, you have to knock on doors. And I mean, I teach people this time like, imagine if you were to go to potential clients like 5 potential prospects every day. By the end of that week, you've got 25 new potential prospects by the end of that month, you've got about 100, my sister. To answer your question I knocked on doors and I was persistant." Respondent 7

"Sometimes you find that you have contracts. They're not going according to your need or to what you think. I think 2018 when things were not going well with the business I was like, OK, Let me go back to Malaysia where I was doing my renewable energy thing. But I come to my senses to say, If I run from what I've started, how am I going to build my empire going forward? Because that is the vision to say there is something big that I want to achieve." Respondent 9

#### 5.5.1.3 Positive attitude

A positive attitude can help an entrepreneur navigate the challenges and uncertainty that come with pivoting and approach the process with confidence, creativity, and determination.

"...Some people said you are going to fail, you are on your own, we won't assist you. So I make sure I am not around negative people" Respondent 9

*"It would have been easier to set up the business in the city, but I knew from experience that there are many black professionals in the villages who need financial advice. Even though it was difficult to convince, especially the black professionals, I was positive that they would eventually see the business value"* Respondent 8

A positive attitude can help an entrepreneur to bounce back from setbacks and maintain motivation when things don't go as planned.

## 5.5.1.4 Openness to new ideas and change

Entrepreneur openness to new ideas and change are crucial when it comes to pivoting, as it enables them to be flexible and adaptable to new situations and opportunities. Entrepreneurs who are open to change are more likely to recognise when a current strategy is not working and are willing to pivot to a new direction or approach.

"Umm I mean, we started off saying we want to sell natural products only, and we saw that's going to be to niche, and we had to change now and start selling other stuff, and I mean, there's a whole lot of categories and stuff that we want to add, of things that I didn't think I'd want to add before, but the market is saying, 'This is what we want'. I didn't want to open a store before, but now I'm saying, 'ohh, actually, e-commerce is slowing down a bit. Do we open a store?' So I'm very agile and very open to big shifts in the business". Respondent 3 This mindset allows them to be proactive in seeking out new opportunities and experimenting with different ideas, which can be crucial for the success of a business. Additionally, openness to change and new ideas also helps entrepreneurs to be more innovative and to think outside the box, which can lead to new and unique business models or products that can set them apart from their competition.

"We could see that app scaling in South Africa is really hard, but it was easy to pivot the business and to see the proof that ohh actually monetising here is really difficult; let's try to monetise it another way through product sales." Respondent 3

Overall, respondents with high self-efficacy were able to draw on past experiences and social support to remain confident in the face of challenges, while those with determination were able to persevere despite encountering difficulties and setbacks and adapt to changes. A positive attitude helped entrepreneurs navigate uncertainty and approach pivoting with confidence, creativity and determination.

The attitude of an entrepreneur plays a considerable role in defining their behaviour. In the following section, we will examine the specific actions taken by entrepreneurs.

## 5.5.2 Entrepreneurial action

#### 5.5.2.1 Continuous experimentation

Continuous experimentation is a crucial aspect of the process of pivoting. Continuous experimentation aims to gather data and feedback that businesses can use to make more informed decisions about what changes to make and also helps minimise the risks of pivoting.

Some of the respondents reflected on different business ideas they tried before deciding on the option to pivot to.

"So I think you know the trial and error method of a business like seeing like ohh, this doesn't work, let's try something else, and within that year you can kind of like this isn't working, let's try pivot to something else. So I always just say to people, if you have a business idea, start. You literally write your business plan as the business grows." Respondent 3

Respondent 3 reflected on how she used to see her parents come up with countless pages of a business plan and how she used to think how time-consuming that is. For her, she always felt that proof is in doing it.

*"if you feel that you have a sustainable business idea, just do it."* Respondent 3

This is in line with what Respondent 6 suggested.

*"if you think it is a good idea, just start. You are not going to open up a business today and know almost immediately that you are a success. But at least you start and reiterate from there."* 

The following paragraph presents additional quotes demonstrating respondents' sentiments about continuous experimentation.

"After we did that, we were like, OK, now it's time to experiment. Let's experiment with just one client and see how it goes. So experimentation as well has been one of our superpowers. Yes, yes, it's something that I learned when I was in Silicon Valley, that experiment, experiment" Respondent 4

"Yeah.Trial and error. To be honest with you, sometimes I would get ideas from people and try to implement them. Sometimes I fail, and sometimes I succeed, but I don't really spend too much time thinking things through and analysing. I implement, and sometimes I get it wrong, but most of the time, it works." Respondent 6

"So I would just randomly throw something either through an advert or just a joke covered in... or maybe an advert covered like a joke, and then because of the reception, I would get over that, I would then decide right after that ." Respondent 2

Respondent 4 expanded on the importance of always experimenting, stating that entrepreneurs should not sit too long on their experiments. Instead, after they have done the research, they should build a minimum viable product or the basic product and take it out to the market. That is how they will get feedback. Continuous experimentation can be used to test changes to a product, such as new features or redesigns, as well as changes to a business model, such as pricing or distribution strategy.

## 5.5.2.2 propensity for risk-taking

A risk-taking mindset allows entrepreneurs to pursue new ideas and venture into uncharted territory. However, It is important to note that not all entrepreneurs have the same level of the propensity for risk-taking, and that's alright; knowing your personal risk tolerance is key for making good business decisions as well. Entrepreneurs who can identify opportunities, measure and manage risks, and make quick decisions are more likely to succeed.

"So when Welo started, it was supposed to be a delivery platform where we're going to deliver medicine, we're going to deliver clothes, food, etcetera. Then I went to the drawing board and looked at all of the things that were on the list, what can we deliver and what has impact, and what can we scale, you know, out of the country as well. So I took everything out of that list and focused on medicine delivery because I saw it as, you know, a space where one can start that has impact, and that also doesn't have that much barrier to entry as well." Respondent 4

"So as much as we closed the other ones, letting them in go into liquidation and closure, that all also gave us free time to look at adding up new divisions that bring in new money." Respondent 1

### 5.5.2.3 proactiveness in seeking opportunities.

This could involve pursuing new projects or ideas rather than waiting for opportunities to come to you. The following quotes demonstrate respondents' proactiveness in seeking new opportunities.

"So medical-legal assessments is something that I never had any experience. I just do my research and work with people with experience." Respondent 6

"And then right then there, without actually thinking about it, I jotted down a menu, and I threw it on my social media platforms; and then everyone was excited. And right then and there, I got my first client the following day. I then noticed that there was a growth in clients the following week. From 1 client I had 10 clients. From 10 clients, I had 20 clients, which grew to be more and more." Respondent 2

Respondent 3 elaborated that she has always been alert to spot an opportunity and go for it since she can remember.

"So when I look back, I've always been entrepreneurial, like when I was little, I sold my dolls on the street. I had to go and get them back and pay everyone because my grandmother was like, 'Are you mad?' But I was kind of like people want dolls and I have second hand dolls, so let me just sell them" Respondent 3

# 5.5.2.4 Solution oriented to problem-solving

Being solution-oriented means that an entrepreneur focuses on finding solutions to problems rather than dwelling on the problems themselves. They take an active approach, identifying and implementing solutions to overcome challenges and drive their business forward.

"you have to wear different hats sometimes. We will all be packing boxes because things have to be delivered somewhere, so you can't say, 'I am a COO; I can't pack boxes.' Or sometimes you say, 'Okay, we have to be on the ground, we have to go to Cape Town, we'll be working in Cape Town this week, we have to close this client, and we need everybody on board for the meetings." Respondent 3

"And we looked at our technology, which was an AI engine. And we thought about how we could reconfigure that for a different industry so that we would not lose the money that we had invested in it.... "And once we put that team in place, and we train them, that worked really well. So it was no longer a challenge." Respondent 10

"I had to get someone who was in the delivery business so that we're able to partner together properly, and we're able to now push our businesses together." Respondent 2

# 5.6 Research question 4 (RQ 4) results

## RQ 4: What is the role of emotional mindset in pivot?

Three major themes have emerged from the responses to research question 4: selfawareness, managing emotions, and collaborating with others.

## 5.6.1 Self-Awareness

Self-awareness entails having a clear sense of one's own feelings, strengths, and limitations and being able to use this self-awareness to make better decisions.

Respondent 4 recognised her weakness as a non-technical individual and realised she required a bridge between the tech and business worlds.

"...So, uh, how I lead them is that we have a technology advisor on our Board of advisory. So he understands the language, and he understands what we need. So he will act as a bridge between us and the technology people that we are hiring. Like now we are going to be doing interviews for two engineers. So he will be acting as that bridge because he understands our business, our vision and our goals, and he understands the language on the other side." Respondent 4

Respondent 3 thoroughly understood her motivations/drive, values, and objectives, which enabled her to align her actions.

"...in order to pay myself, I need to make sure the business is functioning, I need to make sure the business makes money, it's me waking up every morning, you know, making sure that everything is functional? What are we posting on social media? Are we getting orders out on time? Why don't we have stock like you know? I always say to my team like there's nothing I don't know in the business, like every day, because I'm responsible for it. I need to make sure everyone gets paid; I need to make sure I get paid. So the drive is completely different". Respondent 3

A high level of self-awareness aids entrepreneurs in being receptive to feedback and criticism and utilising it to grow and improve.

"So if you are now to say you get attached to one idea or one business model, 'ay' I don't know if you're an entrepreneur hey. Because look at me, for instance – I started selling lingerie, and when that didn't work, I ventured into selling food, and I can see even now I'm having problems in terms of day-today selling; already now I want to change my business model to catering for events and stuff like that, which is something I've been afraid of doing in the past, you know." Respondent 2

"...there is a tendency amongst entrepreneurs not to abandon the idea. It's like having a baby. And they don't want to abandon the idea. Number one, because it's their idea, and they think often that nobody has had it, and even though they do, and the other thing is, entrepreneurs don't like admitting that they're wrong. And therefore, they can be quite slow to pivot. In our case, we all of those things apply, of course, but what takes precedence over that is the business and making the business work." Respondent 10 "The longer you hold to those that are not worth it, the more negative energy you have, and for you to succeed as an entrepreneur, you succeed in the days that you have more positive energy than negative energy." Respondent 1

## 5.6.2 Managing emotions

Entrepreneurial emotional awareness enables entrepreneurs to stay in control of their emotions and make rational decisions during times of change. When faced with the need to pivot, entrepreneurs may experience a range of emotions, such as fear, stress, uncertainty, and self-doubt. Managing emotions involves regulating and managing these emotions in a healthy and productive way rather than allowing them to get in the way of achieving goals.

"...self-doubt was there ...And what I noticed is at that sometimes you panic a lot to say, OK, will I be able to sustain the business..." Respondent 6

"When things don't go according to plan, things can actually make you doubt yourself. You wonder if you made the right decision. so you start secondguessing the next decision that you're going to be making." Respondent 7

*"My biggest fear, honestly, was to move from here to go to town and not making it in town,"* Respondent 2

*"I did not have fear that it may not work; I can say I had hope that the situation could be saved."* Respondent 1

"..sometimes you also feel you have let yourself down, especially if you have done it and the business is failing; You'll be seeing that maybe if you had not done that decision, the business would have stood a better chance.." Respondent 1

Respondent 10 reflected on how, once he started pivoting, he had to draw from his international experience instead of the conservative Irish culture where failure is not encouraged.

"Once I realised a pivotal was necessary. And I took it as a natural progression. And I took it as a part of the journey. Sure, in Ireland as a conservative culture failure is not encouraged. And, but my experience was working internationally, and particularly in UK, Europe and United States. So I was drawing on my experience of those cultures. And I felt that I had enough contacts around the world to make the business work." Respondent 10

## 5.6.3 Collaborating with others

This involves being able to work well with others, being open to feedback and different perspectives, and being able to resolve conflicts effectively.

"...people who are technically really good, and those are the people who have carried the business. I'm not a tech person, I'm not a skincare person, I don't have any formulation you know, qualifications, but somehow the businesses that I have launched in those fields have done really well, and it's just because I've surrounded myself with people who are really good at what they do" Respondent 3

"But as an entrepreneur, if you don't have a good support system in terms of managers, juniors that give you those ideas or opportunities, it is difficult for you to leave the course where you feel comfortable and run into something else." Respondent 1

"And also build a good team around you, people who complement you, not people who are a clone of you. So people who complement you culture wise and skills wise and experience wise as well" Respondent 4

The study concluded that entrepreneurs' self-awareness, emotional intelligence, and teamwork skills were crucial factors in successfully pivoting their businesses. By recognising their strengths and limitations, they knew when to seek assistance in areas of weakness. They were able to align their entrepreneurial pursuits with their personal motivations and were open to receiving feedback and making necessary adjustments.

# 5.7 Other considerations

Unexpected results from interviews revealed various types of support crucial to successful pivoting by entrepreneurs, including mentorship, coaching, and sponsorship. Respondents referred to the support that they received from their mentors, coaches and sometimes sponsors as one of the drivers that let them pivot successfully.

"...I believe in mentors. They helped me a lot. I think sometimes it takes you longer to get where you want, when you're doing things on your own, but with mentorship, you know, it's like people borrowing you their own perspective because most of them were people who were already doing, been running their companies for a period of time, who have experienced the anxiety and the fear that I was experiencing at the time. And they give you guidance in terms of how you know, how they made it" Respondent 6

"...And another thing I always say is that we don't need just coaches or mentors; we also need sponsors, people that will open doors for you. Because for me, that's why that woman did for me and in the financial services or financial planning space in particular." Respondent 8

"Don't work alone. Walk the journey with someone. It means when you are busy with your entrepreneurial thinking. Think of someone whom you want to begin with, and that would be your mentor." Respondent 9

"...after that event, my mentor gave me something that said, please make sure you build a business, don't just make money out of events, build a business". ..."I also have a life coach; you know, somebody who doesn't give a damn about me. He tells it as it is, like, stop feeling sorry for yourself when things are not going well." Respondent 7

"When you up, you are up. When you're down, you are really, really down and you just, you should never do this alone. I think that the sole founders, the guys who have done this alone, they all have suffered immensely from the fact that in the worst time, they didn't have someone to do this with" Respondent 5

Many respondents cited financial difficulties when pivoting and indicated that financial assistance would facilitate the process.

"Well, the major challenge we encountered was having to fund a new business effectively. That was the biggest challenge. And we had to look at innovative ways to fund our launch and our marketing of the new products." Respondent 10

"...the issue with PPE when the government was not paying us money and whatnot, that thing took a toll on the business, took a toll on me, relationships because you have to understand some of the money you had to borrow from friends and now you do not have money to pay them." Respondent 7 *"I think raising funds was always really hard and I think that building a tech that works was really hard, especially at the time."* Respondent 5

"Now we are getting there. We're not there yet. There's still, I think, we're still doing 60% things manually, 40% systems. But now, with this fundraise, once we close it, we'll be able now to have the funds to now build all the systems that we need, including the product." Respondent 4

# 5.8 Conclusion

This chapter discusses the study's outcomes, with an emphasis on the key themes that were uncovered from the data. The findings show that entrepreneurs must maintain engagement with customers and continuously monitor their environment to determine when it is time to pivot their business. The successful pivoting of a business model is the result of an entrepreneur's combination of cognitive thought, attitudes, behaviours, and emotional outlook.

The upcoming chapter discusses the practical and theoretical implications of the study outcomes for each of the research questions in light of the existing literature.

#### **CHAPTER 6: DISCUSSION OF FINDINGS**

#### 6.1 Introduction

This study aimed to explore the circumstances surrounding the entrepreneur's decisions to pivot and the type of mindset needed to make the pivot. Entrepreneurs and founders who have pivoted were interviewed, and the information gathered was analysed using thematic analysis to uncover key themes. This chapter thoroughly examines the outcomes and their significance for the field of Entrepreneurial Mindset and entrepreneurial pivot. The discussion aligns the results with the existing literature on EM and pivot, which was reviewed in Chapter 2, and examines whether the findings support, contradict, or add to the existing knowledge. The discussion is structured around themes identified in Chapter 5 and relates the findings to each central research problem.

#### 6.2 Research question 1 (RQ 1) discussion

RQ1: How do entrepreneurs make the decision to pivot?

Research question one aimed to investigate when and how entrepreneurs know it is time to reevaluate their approach and pivot accordingly. According to Kirtley and O'Mahony (2023), the decision to pivot is typically prompted by the introduction of novel information that highlights potential opportunities or threats to the entrepreneur firm. These opportunities and threats can originate from a wide range of sources, including internal and external factors such as changes in market conditions, shifts in consumer preferences, or technological advancements. The validated information often leads firms to make strategic changes to their business model's business concepts, elements, or products.

The research findings demonstrated that when a business faces financial difficulties and cannot meet its monthly obligations, it can be a sign that it's time to pivot. Pivoting can be an effective strategy for avoiding business failure and finding new opportunities for growth and success. Various factors can lead to business failures, and one of the most common causes is a lack of cash flow. When a business is unable to meet its monthly financial obligations, such as paying bills and salaries, it can quickly spiral into a financial crisis. This can lead to liquidation applications from creditors, who may seek to recover the money they are owed by forcing the business to close down and sell its assets. In such situations, pivoting can be an effective strategy for avoiding business failure. However, pivoting can also be difficult and risky, especially when a business is under financial pressure. According to Snihur and Clarysse (2022), the major challenge is reallocating already limited resources to activities related to the new business model. In order to pivot successfully, a business must not only be able to identify new opportunities and develop a plan for how to capitalise on them, but it often requires a significant investment of time and resources and can only be done if the business has the financial resources to do so (Bajwa et al., 2017; Gilly et al., 2014).

In these situations, it's important to work with a professional who can help you to evaluate the situation, recommend a plan of action, and help you to implement it (Snihur & Clarysse, 2022). This is the approach taken by Respondent 1; he worked with lawyers and financial advisors to develop a plan for how to pivot the business in a new direction and secure the resources and support needed to execute it.

The research findings indicate that businesses may face challenges when introducing solutions to a market that is not yet ready to embrace them simply due to poor timing. This supports previous studies by Bajwa et al. (2017), Coviello et al. (2017) and Kunisch et al. (2017), who argue that timing plays a critical role in strategic changes by balancing risk and opportunity. As noted by Axelson and Bjurström (2019), "testing new business ideas in the market means dealing with both market timing and resource timing" (p. 20).

The case of Respondent 10 provides an illustration of this concept. The company created an AI solution for the HR industry in 2016, but at that time, the industry was not receptive to such technology. As a result, the start-up had to pivot and focus on the marketing industry. However, as time progressed and technology progressed, the HR industry became more open to using AI, and the same solution developed for the HR industry became successful. This demonstrates the impact of both market timing (the HR industry was not ready in 2016 but was ready later) and resource timing (the company had the resources to pivot and succeed in the marketing industry).

The interview findings revealed that both opportunities and challenges drive pivoting. Mainly, our findings indicate that external opportunities brought about by shifts in market trends heavily influenced the entrepreneur's decisions to pivot. Market trends refer to changes in the economy that can affect a business's success. Research (e.g., Reardon et al., 2021; Snihur & Clarysse, 2022) shows that changing market conditions can prompt companies to alter their strategies and practices. In a

constantly evolving market, it's crucial for businesses to be flexible and adapt their strategies to remain competitive. Monitoring market trends and pivoting when necessary is one way to do so. As per C. E. Hampel et al. (2020), understanding these trends can help businesses better meet their customers' needs and adjust their strategies accordingly.

For instance, Respondent 8 initially concentrated on financial education but later recognised that the demand for financial advisory services was increasing rapidly. Respondent 3 initially provided a beauty App directory, but based on customer feedback, she realised that customers were interested in purchasing beauty products online. There was a shift towards online shopping, and she pivoted to a beauty e-commerce platform to cater to these customers. This change has allowed her to remain ahead of her competition and take advantage of market trends. While predicting market trends can be challenging, being alert to shifts in the industry can aid businesses in pivoting quickly and remaining ahead of competitors.

Studies by de Faria et al. (2021) and Kirtley and O'Mahony (2023) show that entrepreneurs may be motivated to modify their strategies if they discover through customer interactions that a certain innovation would better satisfy customer requirements. Our interview results showed that shifts in customer needs could significantly affect an entrepreneurial company, leading to a pivot. These changes can stem from internal or external sources and can pose both opportunities and challenges to the firm (Sala et al., 2022). Internal changes in customer needs can be seen as an opportunity for the firm to innovate and create novel offerings that align with the ever-changing demands of its customers.

For example, in our findings, Respondent 6 focused on employee wellness counselling and noticed a growing demand for debt counselling from their existing clients. They decided to pivot and offer debt counselling services. On the other hand, External changes in customer needs can be seen as a threat to a firm as they may require the company to pivot in order to remain relevant and competitive in the market (Berends et al., 2021). Adapting to external changes through pivoting is often crucial to remain relevant and continue to grow in a dynamic and constantly changing market. For instance, Respondent 5 offered on-demand alcohol delivery, but with the alcohol ban, there was no demand for such services, leading them to pivot to on-demand grocery delivery in order to remain relevant and serve their customers.

Keiningham et al. (2020) emphasise the importance of continuously monitoring customer needs and preferences to be ready to pivot when necessary, which can be accomplished through customer research, focus groups, and market analysis. A flexible and adaptable business model can also help a company pivot effectively when changes in customer needs occur, such as Respondent 5's adaptable ondemand delivery system or Respondent 10's flexible Al infrastructure, which allowed for a pivot from on-demand alcohol delivery to grocery delivery within 72 hours and a pivot from the HR industry to the marketing industry respectively.

According to Rashid and Ratten (2021), radical changes in the macro-environment can have a significant impact on entrepreneurial firms. These changes can come in the form of political, economic, social, technological, or environmental shifts that can disrupt established industries and create new opportunities for growth. One recent example of a radical change in the macro-environment is the COVID-19 pandemic. This global health crisis has profoundly impacted businesses across all industries, leading many firms to pivot to adapt to the new reality.

Radical macro-environment changes can present opportunities and threats to entrepreneurial firms (Hanelt et al., 2021). On the one hand, these changes can bring new opportunities for growth and innovation as firms pivot to address shifting customer needs, such as Respondent 7, who pivoted to supplying PPE during the COVID-19 pandemic. On the other hand, they can also pose a significant threat to firms that are slow to adapt, resulting in a decrease in revenue and market share. For example, Respondent 1 had to shut down some underperforming business units due to the impact of COVID-19.

It is important for firms to be aware of the potential for radical changes in the macroenvironment and have contingency plans for how to respond. This includes being flexible and adaptable in terms of business models, as well as being able to pivot quickly when necessary. Additionally, firms can also benefit from untapped opportunities created by radical changes in the macro-environment by being proactive and seeking out new markets or partnerships.

In conclusion, our findings align with the results of research by Bajwa et al. (2017) and Sala et al. (2022) on tech startup entrepreneurs and their pivoting behaviour. Our results have substantiated some factors they identified as triggers for pivoting and uncovered new factors, such as radical changes to the macro environment. The study results showed that most pivots are driven by external factors, such as

customer feedback on the initial product, unexpected demand for different products, and shifting market trends, rather than internal factors. This is consistent with the findings of Bandera and Thomas (2022).

# 6.3 Research question 2 (RQ 2) discussion

# RQ 2: What type of cognitive mindset is required to pivot?

The main focus of this research question was to determine what cognitive entrepreneurial mindset entrepreneurs or founders require to pivot their businesses successfully. Our findings revealed that the entrepreneur's ability to think strategically, creatively and analytically, as well as the ability to identify and evaluate opportunities, are important for different stages of pivoting.

At the recognition stage, where entrepreneurs recognise it is time to pivot, the ability to identify and solve problems is crucial. Entrepreneurs need to be able to identify the issues or opportunities driving the need to pivot and come up with effective solutions to address them. The study results showed that entrepreneurs who approached the situation strategically were able to anticipate and come up with solutions that aligned with their business's long-term goals and considered the potential impact of their decisions. These findings support the research of Frederiks et al. (2019), who emphasised that a forward-thinking mindset in entrepreneurs leads to high-quality new venture ideas.

The ability to think creatively and analytically becomes important during the generation of options stage. Our findings revealed that the entrepreneurs' perception of the sensory information in their environment and their attention to focus on specific information to process deeply enhanced their ability to identify and evaluate opportunities. According to Helfat and Peteraf (2015), perception and attention are crucial cognitive abilities for recognising emerging possibilities and predicting competitive threats, which are the fundamental basis of change. Entrepreneurs need to be able to look at their business from different perspectives and consider new and unconventional options.

Entrepreneurs also need to think analytically, evaluate the potential of each option and assess the risks and benefits. This highlights the importance of having a strong sense of assessment and judgment as part of the entrepreneurial mindset (Montiel-Campos, 2021). The precise interpretation of data is vital for proper opportunity recognition and opportunity generation, which rely on environmental feedback as entrepreneurs implement new company concepts. Helfat and Peteraf (2015) assert that early detection of environmental hazards and the ability to respond more effectively and promptly are both made possible through pattern recognition, which is one of the manifestations of the cognitive ability of perception.

At the testing and seizing stage, entrepreneurs must be capable of thinking strategically, creatively, and analytically as well as solving problems. According to Helfat and Peteraf (2015), problem-solving and deductive reasoning are the fundamental cognitive abilities for seizing opportunities. Entrepreneurs need to design and implement experiments to test their options while also being able to analyse the results and make decisions based on the data. They also need to be able to prevail over any obstacles or difficulties that arise during the testing process. This is supported by Williams and Wood (2015), who assert that evaluating opportunities based on logic and data leads to the most alluring opportunities.

Finally, the ability to think strategically and analytically is crucial at the reconfiguration of resources stage. Entrepreneurs need to be able to allocate their resources effectively and make strategic decisions about how to best use them in their new business model while also being able to solve any major hurdles that occur during the process.

In conclusion, thinking strategically, creatively, and analytically and evaluating options are important throughout the pivoting process. Entrepreneurs need to be able to identify problems and solve problems, think creatively to generate new options, think analytically to evaluate those options and make decisions, and think analytically again to reconfigure resources to support their new business model and overcome challenges in order to pivot their business effectively.

#### 6.4 Research question 3 (RQ 3) discussion

#### RQ 3: What type of behavioural mindset is required to pivot?

The main objective of this research question was to determine what behavioural entrepreneurial mindset entrepreneurs or founders require to pivot their businesses successfully. Data revealed that the attitudinal characteristics and the entrepreneurs' actions were important in pivoting.

#### Attitude

Entrepreneurs with a high level of self-efficacy, determination, positive attitude, and openness to change and to new ideas are better equipped to navigate the challenges and opportunities that come with making strategic changes to their businesses. Self-efficacy refers to the internalised belief in one's ability to execute specific actions and attain desired outcomes (Chen et al., 1998). Previous research has found that there is a significant influence between entrepreneur self-efficacy and entrepreneur behaviour (Shaheen & AL-Haddad, 2018). Our findings showed that respondents with a high level of self-efficacy had higher confidence and belief that they would succeed with the pivot. For the majority of them, the high level of confidence was influenced by having previous experience in dealing with business challenges. These results align with earlier findings by Cassar and Friedman (2009), who show that self-efficacy strongly influences entrepreneur confidence in making decisions.

Determination is another important attitude in an entrepreneur's ability to pivot. Entrepreneurs who are determined to succeed are more likely to see challenges as opportunities rather than roadblocks. They are also more likely to be persistent in their efforts to achieve their goals, even in the face of obstacles.

A positive attitude is also essential for entrepreneurs looking to pivot their businesses. According to Wardana et al. (2020), the entrepreneur's attitude plays a significant role in entrepreneurs' self-efficacy and mindset. Entrepreneurs with a positive outlook are more likely to approach problems and challenges with a solutions-focused mindset rather than getting bogged down in negative thinking or feeling defeated.

Open-mindedness is another important attitude for entrepreneurs looking to pivot. Entrepreneurs who are open-minded are more likely to consider new perspectives and be willing to try new approaches. This can be especially important when pivoting, as it requires the entrepreneur to be prepared to let go of old ways of doing things and embrace new strategies. This is in contrast to entrepreneurs with a high level of psychological ownership of their business idea, who are more likely to be committed to it and less likely to give up on it in the face of challenges (Grimes, 2018).

According to Crilly (2018), entrepreneurs must actively balance persistence and adaptability. The entrepreneur's commitment to their ideas is one factor that affects this. Entrepreneurial commitment can be both a barrier to change and a catalyst for success. Their unwavering commitment to their idea can delay necessary pivots. On the other hand, entrepreneurs are expected to commit to their ideas and strategies

to succeed and not be deterred by setbacks. This commitment, however, can make it difficult to recognise opportunities for change when exploring new possibilities.

#### Actions

Continuous experimentation is important because it enables entrepreneurs to validate their assumptions about the market and customers, as well as identify new opportunities. The practice of experimentation and customer validation is widely adopted in the tech and software space (Felin et al., 2019; Khanna et al., 2018). Our findings demonstrated that entrepreneurs across industries engaged in continuous experimentation when pivoting their business model. According to the literature in Chapter 2, the entrepreneur behaviour that puts more emphasis on experimentation fits more with the effectuation behavioural approach.

This is because a lot of uncertainties characterise pivoting, and entrepreneurs who conduct continuous experimentation can quickly adjust their strategy based on the results, which can increase their chances of success. Additionally, continuous experimentation can also help entrepreneurs to identify the key drivers of success and failure, which can inform their decision-making process. This can ultimately help entrepreneurs to make better decisions when pivoting their businesses.

Our study findings showed that the respondents were not afraid to take risks in order to move their business forward; however, the results also demonstrated that they took well-thought-through risks. The decisions to take on risk were data-driven, which demonstrates a balanced risk-taking behaviour embodying elements of both the effectuation and causation behavioural approaches in entrepreneurship (Futterer et al., 2018).

On the one hand, taking calculated risks can align with the causation approach, as it involves predicting and controlling outcomes through planning and implementing a pre-determined strategy. On the other hand, experimenting and trying out new things to determine the best path forward can align with the effectuation approach, which emphasises creating value through partnerships and collaboration and working with available resources.

Both approaches can be necessary for the entrepreneur to succeed when pivoting. The effectuation approach may be required more as it allows for more flexibility and adaptation in the face of uncertainty and change. However, the causation approach provides stability and structure in decision-making, which can help mitigate risk and ensure that the pivot is executed effectively. In conclusion, a balanced risk-taking behaviour, incorporating elements of both approaches, can allow the entrepreneur to navigate the pivot with a strategic and adaptive mindset.

Proactive entrepreneurs are always on the lookout for unexplored avenues or untapped opportunities and are willing to explore new ideas and possibilities. They have an insatiable appetite for growth and are always on the lookout for ways to innovate and improve their venture. This mindset allows them to recognise new prospects and take advantage of them before their competitors do. For instance, Respondent 3 stated that she occasionally looks to overseas trends for inspiration in her business and specifically mentioned how the Sephora website has been a source of inspiration for her.

Proactivity can also help entrepreneurs anticipate pivotal market challenges and adapt their venture strategies appropriately. Entrepreneurs who are proactive in seeking opportunities are more likely to notice shifts in customer needs, technological advancements, and other external factors that can impact their business. This allows them to pivot their business promptly, which can increase their chances of success. In the interview, Respondent 6 stated that he continually examines research to see how technology is transforming the mental health field in order to determine how to incorporate the new advancements and remain relevant in the industry.

Proactivity plays a crucial role in enabling entrepreneurs to innovate and create new products and services that address the needs of their clients. This can give them a competitive edge and help them stand out in the market. Our findings, particularly among tech entrepreneurs in South Africa, show that most of them are involved in cutting-edge businesses that are just starting to emerge. These businesses range from an e-commerce beauty platform and an on-demand grocery delivery Application to a care platform for both home and work, all of which are unique to Africa. This highlights the innovative capability of these entrepreneurs and their solution-oriented approach to developing new products that address customer needs.

In summary, proactivity in seeking opportunities is an important trait for entrepreneurs when pivoting. Entrepreneurs who are proactive are more likely to spot and seize emerging opportunities, anticipate changes in the market and develop new products or services. This can increase their chances of success and help them to stand out in the market. An entrepreneur's agility in responding to change and maintaining a solution-oriented behavioural mindset is essential for success in a constantly changing business landscape. Adaptability is important because the business landscape is constantly changing. Entrepreneurs must be able to act quickly to new market conditions, shifts in consumer behaviour, and changes in technology. A solution-oriented mindset allows entrepreneurs to approach challenges as opportunities rather than roadblocks. This mindset helps them to identify and capitalise on new opportunities as they arise.

However, it's important to note that pivoting should not be done impulsively; it requires a thorough analysis of the market and the venture's present situation, as well as a clear vision of the future. Entrepreneurs should be able to pinpoint the key issues and opportunities that need to be addressed and then make informed decisions about how to pivot their business.

In conclusion, effectuation is focused on creating value through partnerships, working with available resources, and embracing uncertainty. Causation is focused on predicting and controlling outcomes through planning and execution. Our findings indicate a strong connection between entrepreneurial success in pivoting and the effectuation approach. Specifically, actions such as continuous experimentation, risk-taking, proactive opportunity-seeking, and solution-focused problem-solving are more commonly found among entrepreneurs who have effectively pivoted. Based on these findings, we can conclude that the effectuation approach is more suited for pivoting compared to the causation approach.

#### 6.5 Research question 4 (RQ 4) discussion

RQ4: What type of emotional mindset is required to pivot?

Research question four's purpose was to explore the part played by an emotional entrepreneurial mindset of entrepreneurs or founders in the entrepreneurial pivot. The study uncovered the significance of emotional self-awareness in the entrepreneurial emotional mindset. Results showed that entrepreneurs who possess self-awareness are better equipped to understand their emotions, identify their strengths and weaknesses, and make objective decisions - a key factor in pivoting successfully. This aligns with the findings of Othman and Tengku Muda (2018) and Bigos and Michalik (2020), who emphasised the relationship between emotional self-

awareness and aspects of entrepreneurship, including the importance of regulating one's emotions during decision-making.

Moreover, the ability to manage emotions such as fear, stress, and happiness was found to be crucial for entrepreneurs during a pivot. Entrepreneurs who effectively manage their emotions are more resilient to stress and uncertainty, motivated and focused on their goals (O'Shea et al., 2017). According to a study by Othman and Tengku Muda (2018), learners who are able to control their negative emotions are more likely to succeed as entrepreneurs.

On the other hand, our study revealed that self-doubt and fear of failure could impede the capacity to make decisions and limit taking advantage of unexplored avenues, aligning with the findings of Dutta and Sobel (2021), who found that self-reported fear of failure negatively impacted entrepreneurial opportunities. Nevertheless, previous research by Cacciotti and Hayton (2015) and Morgan and Sisak (2016) has demonstrated that fear of failure can have both stimulating and hindering effects on entrepreneurial behaviour. During the interviews, one experienced entrepreneur cited hope as the driving force during their pivoting journey, showcasing the power of a positive emotional mindset.

Moreover, the research emphasised the pivotal role of collaboration in the entrepreneurial emotional mindset. Effective collaboration allows entrepreneurs to leverage their team's collective knowledge and expertise, which is particularly crucial during a pivot. For example, Respondent 1 sought input from their managers to save a failing division, while Respondent 2 teamed up with another entrepreneur to navigate the challenges posed by COVID-19.

To sum up, an entrepreneur's emotional mindset can significantly influence their cognitive and behavioural mindset during a pivot (Shepherd & Patzelt, 2018a). The emotions entrepreneur experiences can shape their perspectives, decisions, and actions (Cardon et al., 2012). Entrepreneurs with a positive emotional mindset tend to have an optimistic and proactive cognitive mindset, enabling them to see opportunities instead of threats. This, in turn, leads to a proactive behavioural mindset, where they persistently take action in the face of obstacles, as demonstrated by the example of Respondent 10, who proactively searched for a new industry for their AI tool after initial failure in the HR space.

#### 6.6 Conclusion

The study substantiates factors that trigger entrepreneurs to pivot and uncover new elements, such as radical changes to the macro environment. It also highlights the importance of the entrepreneurial mindset in making pivots. The study found that a combination of the entrepreneurial mindset's cognitive, behavioural, and emotional aspects plays a vital part in enabling entrepreneurs to pivot, which aligns with the research by Kuratko, Fisher, et al. (2021) and Lynch and Corbett (2021). The next chapter outlines the framework summarising the findings of the four research questions.

#### **CHAPTER 7: CONCLUSION**

#### 7.1 Introduction

The present study has focused on investigating the entrepreneurial mindset required for pivoting, a concept identified as crucial for small businesses and entrepreneurs to adapt to volatile market environments and exogenous shocks (C. E. Hampel et al., 2020). As presented in Chapter 1, entrepreneurs need to act strategically to preserve their firms' sustainability, especially in the face of unexpected changes.

This research was designed with the primary goal of identifying the type of entrepreneurial mindset that is necessary for successful pivoting. To accomplish this goal, the study sought to first comprehend how entrepreneurs decide to pivot and then identify the cognitive, behavioural, and emotional mindset that enables them to carry out a pivot successfully. It was anticipated that a deeper understanding of these questions would expand upon the existing knowledge base of the entrepreneurial mindset required for successful pivoting, which, from the perspective of entrepreneurs, would provide a competitive advantage.

This concluding chapter of the research paper summarises the findings for each research question, highlighting this study's augmentation to the existing understanding of the entrepreneurial mindset and pivoting and the practical effects of the research outcomes. A conceptual framework is presented to illustrate factors that prompt entrepreneurs to pivot, and the conceptual framework of the entrepreneurial mindset required to pivot is drawn from the findings. Additionally, this section outlines the study's constraints and suggests avenues for further research to enhance the subject's scope.

#### 7.2 Conclusion of findings, including the framework

This section concludes each research question while at the same time trying to conceptualise a framework which organises the key findings uncovered throughout the study.

#### RQ 1: How do entrepreneurs make the decision to pivot?

Research question one aimed to investigate the circumstances surrounding the entrepreneur's decision to re-evaluate their approach and pivot accordingly. According to Kirtley and O'Mahony (2023), the decision to pivot is typically driven by discovering fresh insights that highlight potential opportunities or threats to the

entrepreneur firm. These opportunities and threats can originate from a wide range of sources, including internal and external factors such as changes in market conditions, shifts in consumer preferences, or technological advancements.

The key outcomes of this research suggest that entrepreneurs must consistently communicate with their clients to ensure that what they offer them aligns with their needs. They must also continuously monitor the market and keep themselves updated on changes and trends to stay competitive in the market. The main themes that were uncovered from research question 1 are presented in Figure 3.

Figure 3: Factors that prompt entrepreneurs to pivot.

| Factors that prompt entrepreneurs to |
|--------------------------------------|
| pivot.                               |
| - Business failure                   |
| - Wrong timing                       |
| - Changes in customer needs          |
| - Changes in market trends           |

- Radical changes in the Macro-environment

#### RQ 2: What type of cognitive mindset is required to pivot?

This research question aimed to identify what cognitive entrepreneurial mindset entrepreneurs or founders require to pivot their businesses successfully. Our findings revealed that the entrepreneur's ability to think strategically, creatively and analytically, as well as the ability to pay attention and their perception to identify and solve problems and evaluate options are important for different stages of pivoting. However, previous research by Cui and Bell (2022) has shown that simply having ideas or being motivated is not enough without action. Therefore, highlighting the influence of cognition on entrepreneur behaviour. A graphical representation of the findings pertaining to research question 2 is provided in Figure 4.

Figure 4: Cognitive mindset

#### Cognitive Mindset

-Strategic thinking -Perception & attention -Analytical thinking -Creative thinking

#### RQ 3: What type of behavioural mindset is required to pivot?

This research question aimed to identify what behavioural entrepreneurial mindset entrepreneurs or founders require to pivot their businesses successfully. Data revealed that the attitudinal characteristics demonstrated by entrepreneurs and the entrepreneur's actions were important in pivoting.

The study's outcome indicates a strong association between the effectiveness of pivoting and the effectuation approach. Entrepreneurial behaviours such as continuous experimentation, proactive opportunity seeking, solution-focused problem solving, and calculated risk-taking were identified as critical for success when pivoting.

However, it is important for entrepreneurs to maintain a balance between taking risks and being too reckless. Entrepreneurs should carefully evaluate the potential risks and rewards of each decision, taking into account their goals, values, and resources, and be ready for any eventuality with a contingency plan to manage the personal and professional risks associated with risk-taking.

Additionally, the study highlights the influence of entrepreneurial behaviour on emotions and cognition. The entrepreneurs' attitudes can affect their perception and decision-making processes, while their level of self-efficacy can impact their emotions. This highlights the interconnectedness of the emotional, behavioural and cognitive factors in entrepreneurial decision-making and pivoting.

Research question 3 findings are presented in Figure 5.

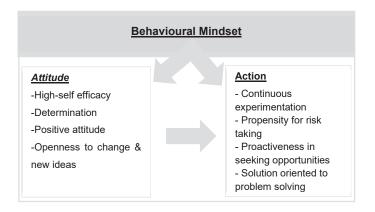


Figure 5: Behavioural Mindset

#### RQ 4: What is the role of emotional mindset in pivot?

This research question aimed to uncover the role of an emotional entrepreneurial mindset in pivoting. The study findings revealed that the emotional mindset of an entrepreneur could significantly influence their cognitive and behavioural mindset. The way entrepreneurs feel can affect how they think about issues and the steps they take during pivoting.

The study identified four central themes. The first is the entrepreneur's emotional self-awareness, which helps them understand their emotions, recognise their strengths and weaknesses, and make rational decisions. The second theme is the entrepreneur's ability to regulate emotions such as fear, stress, hope, and happiness, which contributes to their resilience and ability to handle uncertainty. The third theme is effective collaboration, which enables entrepreneurs to utilise their team's collective knowledge and skills. These findings are presented in Figure 6.

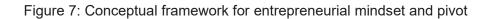
Figure 6: Emotional mindset

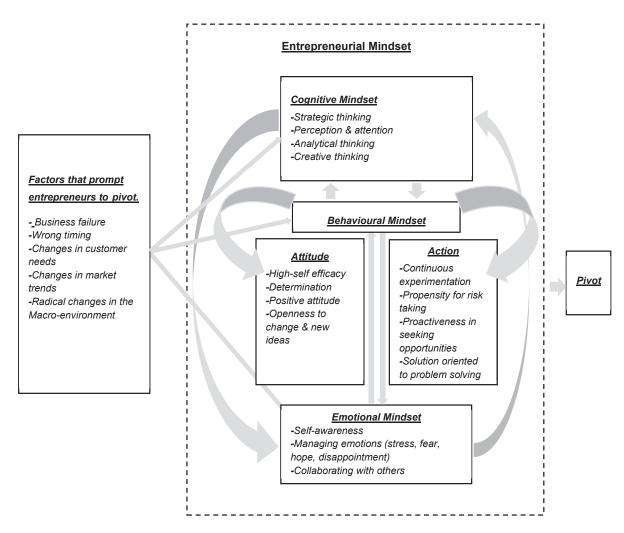
#### Emotional Mindset

- Self-awareness

- Managing emotions
- Collaborating with others

Overall, the study findings substantiated factors that trigger entrepreneurs to pivot and uncovered new elements, such as radical changes to the macro environment and uncovered that a combination of the entrepreneurial mindset's cognitive, behavioural, and emotional aspects performs a critical role in enabling entrepreneurs to pivot. This is demonstrated in the theoretical outline presented in figure 7 below.





Source: built from uncovered themes in findings

## 7.3 Contribution of the study

## 7.3.1 Theoretical contributions

The study's theoretical contributions are significant in that they extend the current knowledge base on the entrepreneurial mindset and pivot. The conceptual framework developed in this study provides a foundation for further research on this topic. Specifically, the framework elucidates the circumstances surrounding an entrepreneur's decision to pivot and the requisite mindset for a successful pivot. This mindset is comprised of cognitive, behavioural, and emotional elements, and the framework highlights the interaction between these components. The most notable contribution of this study to the literature is the development of a comprehensive framework that illuminates the factors that enable entrepreneurs to pivot effectively.

#### 7.3.2 Practical implications

The conceptual framework developed through this research has practical implications for entrepreneurs, policymakers, and business consultants. Entrepreneurs and founders can utilise the framework as a reference guide to understanding the circumstances that may necessitate pivoting and adopting the appropriate mindset for success when undertaking a pivot. Policymakers and program developers can leverage the findings to inform the creation of training and development programs that focus on the necessary entrepreneurial mindset for successful business pivots. Business consultants and coaches can also use the framework to guide entrepreneurs and small business owners through the challenges associated with pivoting their businesses by providing guidance on the mindset and skills required for success.

#### 7.4 Limitations of the study

One of the shortcomings is that the study set out to determine the type of entrepreneurial mindset required to pivot at each stage of the pivoting process, but it was difficult to obtain evidence of how mindset influenced pivoting at each distinct stage. The study participants did not think of their pivoting journey in stages to identify the mindsets as their thinking process, behaviour or actions they took and emotions they felt at each stage.

The respondents could remember circumstances that triggered them to pivot and the mindset throughout the overall process but not distinctly for each stage of pivoting. This limitation was identified as a constraint, and it was anticipated that it would be difficult to obtain the relevant data using the cross-sectional study to understand the type of mindset at each stage of pivoting.

Another drawback of this research is that it only looked at entrepreneurs who have pivoted successfully. This introduces the risk of a "winner's bias" because the study only looked at those who were successful in their pivot and not those who failed. This can lead to an overgeneralization of the findings and may not be representative of the population of entrepreneurs who have attempted to pivot.

Lastly, as acknowledged by Dukes (1984), the narrative study has an inherent selfreporting bias, which is also a limitation of this research. The entrepreneurs were requested to narrate their experiences, emotions, and thoughts throughout the pivot process. This data collection method depends on the entrepreneurs' ability to accurately recall their experiences and their willingness to report them honestly. This may lead to a bias in the results as people may not accurately recall events or may be hesitant to report certain information.

### 7.5 Recommendations for future research

Future studies adopting a longitudinal research approach can study the mindset of entrepreneurs as they pivot. This approach would enable the researcher to obtain data on the entrepreneurial mindset at each stage of the pivoting process. This would provide a more in-depth understanding of the type of mindset required to pivot successfully and how it changes over time across different stages of pivoting.

This study only investigated entrepreneurs who pivoted successfully, considering successful pivoting to be the right choice and assuming it was an appropriate and required move. Future research can conduct a study that includes entrepreneurs who have attempted to pivot but were not successful. This would provide a more thorough examination and understanding of the challenges and limitations of the pivot process and could identify areas for improvement.

Although this study looked at entrepreneurs across industries, it was not the scope of this paper to investigate the EM required for pivoting in different industries. Future research can conduct a comparative study that looks at the entrepreneurial mindset required to pivot in different industries or contexts. This would facilitate the process of uncovering any industry-specific factors that may impact the pivot process and the type of mindset required.

Additional findings during the interviews revealed that support received by entrepreneurs during pivoting plays a crucial role. Future studies can therefore explore the impact of various types of support available to entrepreneurs during the pivot process, such as mentorship, coaching, or access to funding, on the entrepreneurial mindset required to pivot.

To summarise, it is evident that there is significant potential for future studies on EM in the context of pivoting a business.

#### 7.6 Conclusion

The business landscape is continuously changing, and exogenous shocks can occur at any time. Entrepreneurs and small enterprises need to have the mindset and the skills to pivot in order to survive and also to stay relevant. It may include rethinking their business model, diversifying their product or service offerings, or exploring new markets. Adopting the right entrepreneurial mindset allows small businesses to navigate this challenging environment and emerge stronger.

#### **Reference list**

- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, *4*(2), 330-333. <u>https://doi.org/10.7713/ijms.2013.0032</u>
- Agee, J. (2009). Developing qualitative research questions: A reflective process. International journal of qualitative studies in education, 22(4), 431-447. <u>https://doi.org/10.1080/09518390902736512</u>
- Akhtar, M. I. (2016). Research design. *Research in Social Science: Interdisciplinary Perspectives*, 1(2016), 68-84.
- Alharahsheh, H. H., & Pius, A. (2020). A review of key paradigms: Positivism VS interpretivism. *Global Academic Journal of Humanities and Social Sciences*, 2(3), 39-43. <u>https://doi.org/10.36348/gajhss.2020.v02i03.001</u>
- Axelson, M., & Bjurström, E. (2019). the role of timing in the business model evolution of spinoffs: The case of C3 technologies. *Research-Technology Management*, 62(4), 19-26. <u>https://doi.org/10.1080/08956308.2019.1613116</u>
- Babones, S. (2016). Interpretive quantitative methods for the social sciences. *Sociology*, *50*(3), 453-469. <u>https://doi.org/10.1177/0038038515583637</u>
- Bajwa, S. S., Wang, X., Nguyen Duc, A., & Abrahamsson, P. (2017). "Failures" to be celebrated: An analysis of major pivots of software startups. *Empirical Software Engineering*, 22(5), 2373-2408. <u>https://doi.org/10.1007/s10664-016-9458-0</u>
- Bandera, C., & Thomas, E. (2019). To pivot or not to pivot: On the relationship between pivots and revenue among startups. *Proceedings of the 52nd Hawaii International Conference on System Sciences*, Honolulu. Retrieved from <a href="http://hdl.handle.net/10125/59981">http://hdl.handle.net/10125/59981</a>
- Bandera, C., & Thomas, E. (2022). Pivoting Strategies: A Study of Pivot Severity, Investor Reliance, and Revenue among Startups. *Proceedings of the 55th Hawaii International Conference on System Sciences*, Honolulu. Retrieved from <u>https://hdl.handle.net/10125/79991</u>
- Barba-Sánchez, V., & Atienza-Sahuquillo, C. (2012). Entrepreneurial behavior: Impact of motivation factors on decision to create a new venture. *Investigaciones europeas de dirección y economía de la empresa*, *18*(2), 132-138. <u>https://doi.org/10.1016/S1135-2523(12)70003-5</u>
- Belousova, O., Hattenberg, D. Y., & Gailly, B. (2020). Corporate entrepreneurship: From structures to mindset. In V. Ramadani, R. Palalic, L.-P. Dana, N. Krueger, & A. Caputo (Eds.), Organizational mindset of entrepreneurship. Studies on entrepreneurship, structural change and industrial dynamics (pp. 211-233). Springer, Cham. https://doi.org/10.1007/978-3-030-36951-4 10
- Berends, H., van Burg, E., & Garud, R. (2021). Pivoting or persevering with venture ideas: Recalibrating temporal commitments. *Journal of Business Venturing*, *36*(4), 1-23. <u>https://doi.org/10.1016/j.jbusvent.2021.106126</u>
- Bigos, K., & Michalik, A. (2020). Do Emotional Competencies Influence Students' Entrepreneurial Intentions? *Sustainability*, *12*(23), 1-18. <u>https://doi.org/</u> 10.3390/su122310025
- Bless, C., Higson-Smith, C., & Kagee, A. (2006). *Fundamentals of social research methods: An African perspective* (4<sup>th</sup> ed.). Juta and Company Ltd.

- Bohn, N., & Kundisch, D. (2020). What are we talking about when we talk about technology pivots?–a Delphi study. *Information & management*, 57(6), 1-20. https://doi.org/10.1016/j.im.2020.103319
- Bonache, J., & Festing, M. (2020). Research paradigms in international human resource management: An epistemological systematisation of the field. *German Journal of Human Resource Management*, 34(2), 99-123. <u>https://doi.org/10.1177/2397002220909780</u>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <u>https://doi.org/10.1191/1478088706qp063oa</u>
- Brettel, M., Mauer, R., Engelen, A., & Küpper, D. (2012). Corporate effectuation: Entrepreneurial action and its impact on R&D project performance. *Journal of Business Venturing*, 27(2), 167-184. <u>https://doi.org/10.1016/j.jbusvent.2011.01.001</u>
- Cacciotti, G., & Hayton, J. C. (2015). Fear and entrepreneurship: A review and research agenda. *International Journal of Management Reviews*, *17*(2), 165-190. <u>https://doi.org/10.1111/ijmr.12052</u>
- Cacciotti, G., Hayton, J. C., Mitchell, J. R., & Allen, D. G. (2020). Entrepreneurial fear of failure: Scale development and validation. *Journal of Business Venturing*, *35*(5), 1-25. <u>https://doi.org/10.1016/j.jbusvent.2020.106041</u>
- Caliendo, M., Goethner, M., & Weißenberger, M. (2020). Entrepreneurial persistence beyond survival: Measurement and determinants. *Journal of Small Business Management*, *58*(3), 617-647. <u>https://doi.org/10.1080/00472778.2019.1666532</u>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: Complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652-661. https://doi.org/10.1177/1744987120927206
- Cardon, M. S., Foo, M. D., Shepherd, D., & Wiklund, J. (2012). Exploring the Heart: Entrepreneurial Emotion is a Hot Topic. *Entrepreneurship Theory and Practice*, 36(1), 1-10. <u>https://doi.org/10.1111/j.1540-6520.2011.00501.x</u>
- Cassar, G., & Friedman, H. (2009). Does self-efficacy affect entrepreneurial investment? Strategic Entrepreneurship Journal, 3(3), 241-260. <u>https://doi.org/10.1002/sej.73</u>
- Chaparro, X. A. F., & de Vasconcelos Gomes, L. A. (2021). Pivot decisions in startups: A systematic literature review. *International Journal of Entrepreneurial Behavior* & Research, 27(4), 884-910. <u>https://doi.org/10.1108/IJEBR-12-2019-0699</u>
- Chen, C. C., Greene, P. G., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, *13*(4), 295-316. <u>https://doi.org/10.1016/S0883-9026(97)00029-3</u>
- Cohen, S. L., Bingham, C. B., & Hallen, B. L. (2019). The role of accelerator designs in mitigating bounded rationality in new ventures. *Administrative Science Quarterly*, 64(4), 810-854. <u>https://doi.org/10.1177/000183921878</u>
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21. <u>https://doi.org/10.1007/BF00988593</u>
- Coviello, N., Kano, L., & Liesch, P. W. (2017). Adapting the Uppsala model to a modern world: Macro-context and microfoundations. *Journal of International Business Studies*, *48*(9), 1151-1164. <u>https://doi.org/10.1057/s41267-017-0120-x</u>

- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approaches* (3<sup>rd</sup> ed.). Sage Publications Ltd.
- Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. *The Counseling Psychologist*, *35*(2), 236-264. <u>https://doi.org/10.1177/00110000628</u>
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Crilly, N. (2018). 'Fixation'and 'the pivot': balancing persistence with flexibility in design and entrepreneurship. *International Journal of Design Creativity and Innovation*, 6(1-2), 52-65. <u>https://doi.org/10.1080/21650349.2017.1362359</u>
- Cui, J., & Bell, R. (2022). Behavioural entrepreneurial mindset: How entrepreneurial education activity impacts entrepreneurial intention and behaviour. *The International Journal of Management Education*, 20(2), 1-16. <u>https://doi.org/https://doi.org/10.1016/j.ijme.2022.100639</u>
- Daspit, J. J., Fox, C. J., & Findley, S. K. (2021). Entrepreneurial mindset: An integrated definition, a review of current insights, and directions for future research. *Journal of Small Business Management*, 61(1), 12-44. https://doi.org/10.1080/00472778.2021.1907583
- de Faria, V. F., Santos, V. P., & Zaidan, F. H. (2021). The Business Model Innovation and Lean Startup Process Supporting Startup Sustainability. *Procedia Computer Science*, *181*(2021), 93-101. <u>https://doi.org/10.1016/j.procs.2021.01.106</u>
- De Winnaar, K., & Scholtz, F. (2019). Entrepreneurial decision-making: new conceptual perspectives. *Management Decision*, 58(7), 1283-1300. https://doi.org/10.1108/MD-11-2017-1152
- Devece, C., Peris-Ortiz, M., & Rueda-Armengot, C. (2016). Entrepreneurship during economic crisis: Success factors and paths to failure. *Journal of Business Research*, 69(11), 5366-5370. <u>https://doi.org/10.1016/j.jbusres.2016.04.139</u>
- Dukes, S. (1984). Phenomenological methodology in the human sciences. Journal of Religion and Health, 23(3), 197-203. <u>https://doi.org/10.1007/BF00990785</u>
- Dutta, N., & Sobel, R. S. (2021). Entrepreneurship, fear of failure, and economic policy. *European Journal of Political Economy*, 66(2021), 1-13. <u>https://doi.org/10.1016/j.ejpoleco.2020.101954</u>
- Ejupi-Ibrahimi, A., Ramadani, V., & Ejupi, D. (2020). Family businesses in North Macedonia: Evidence on the second generation motivation and entrepreneurial mindset. *Journal of Family Business Management*, *11*(3), 286-299. <u>https://doi.org/10.1108/JFBM-06-2020-0047</u>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <u>https://doi.org/10.11648/j.ajtas.20160501.11</u>
- Felin, T., Gambardella, A., Stern, S., & Zenger, T. (2019). Lean startup and the business model: Experimentation revisited. *Forthcoming in Long Range Planning (Open Access)*. <u>https://ssrn.com/abstract=3427084</u>
- Fisher, G., Kotha, S., & Lahiri, A. (2016). Changing with the times: An integrated view of identity, legitimacy, and new venture life cycles. Academy of Management Review, 41(3), 383-409. <u>https://doi.org/10.5465/amr.2013.0496</u>
- Fisher, G., Stevenson, R., Neubert, E., Burnell, D., & Kuratko, D. F. (2020). Entrepreneurial hustle: Navigating uncertainty and enrolling venture stakeholders

through urgent and unorthodox action. *Journal of Management Studies*, *57*(5), 1002-1036. <u>https://doi.org/10.1111/joms.12584</u>

- Forero, R., Nahidi, S., De Costa, J., Mohsin, M., Fitzgerald, G., Gibson, N., McCarthy, S., & Aboagye-Sarfo, P. (2018). Application of four-dimension criteria to assess rigour of qualitative research in emergency medicine. *BMC Health Services Research*, 18(1), 1-11. <u>https://doi.org/10.1186/s12913-018-2915-2</u>
- Foss, N. J., Klein, P. G., & Bjørnskov, C. (2019). The context of entrepreneurial judgment: Organizations, markets, and institutions. *Journal of Management Studies*, 56(6), 1197-1213. <u>https://doi.org/10.1111/joms.12428</u>
- Frederiks, A. J., Englis, B. G., Ehrenhard, M. L., & Groen, A. J. (2019). Entrepreneurial cognition and the quality of new venture ideas: An experimental approach to comparing future-oriented cognitive processes. *Journal of Business Venturing*, 34(2), 327-347. <u>https://doi.org/10.1016/j.jbusvent.2018.05.007</u>
- Frederiksen, D. L., & Brem, A. (2017). How do entrepreneurs think they create value? A scientific reflection of Eric Ries' Lean Startup approach. *International Entrepreneurship and Management Journal*, *13*(1), 169-189. https://doi.org/10.1007/s11365-016-0411-x
- Futterer, F., Schmidt, J., & Heidenreich, S. (2018). Effectuation or causation as the key to corporate venture success? Investigating effects of entrepreneurial behaviors on business model innovation and venture performance. *Long Range Planning*, 51(1), 64-81. <u>https://doi.org/10.1016/j.lrp.2017.06.008</u>
- Gilly, J.-P., Kechidi, M., & Talbot, D. (2014). Resilience of organisations and territories: The role of pivot firms. *European Management Journal*, 32(4), 596-602. <u>https://doi.org/10.1016/j.emj.2013.09.004</u>
- 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. <u>https://doi.org/10.1177/1094428112452151</u>
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, *8*(4), 597-607. <u>https://doi.org/10.46743/2160-</u> <u>3715/2003.1870</u>
- González-Cruz, T., & Devece, C. (2018). Entrepreneurial innovation, judgment, and decision-making as a virtuous process. *International Entrepreneurship and Management Journal*, *14*(2), 245-248. <u>https://doi.org/10.1007/s11365-018-0510-</u> ⊻
- Grégoire, D. A., & Cherchem, N. (2020). A structured literature review and suggestions for future effectuation research. *Small Business Economics*, *54*(3), 621-639. <u>https://doi.org/10.1007/s11187-019-00158-5</u>
- Grimes, M. G. (2018). The pivot: How founders respond to feedback through idea and identity work. *Academy of Management Journal*, 61(5), 1692-1717. https://doi.org/10.5465/amj.2015.0823
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82. <u>https://doi.org/10.1177/1525822X05279903</u>
- Hadi, M. A., & Closs, J. S. (2016). Ensuring rigour and trustworthiness of qualitative research in clinical pharmacy. *International Journal of clinical Pharmacy*, 38(3), 641-646. <u>https://doi.org/10.1007/s11096-015-0237-6</u>

- Hampel, C., Perkmann, M., & Phillips, N. (2020). Beyond the lean start-up: Experimentation in corporate entrepreneurship and innovation. *Innovation*, *22*(1), 1-11. <u>https://doi.org/10.1080/14479338.2019.1632713</u>
- Hampel, C. E., Tracey, P., & Weber, K. (2020). The art of the pivot: How new ventures manage identification relationships with stakeholders as they change direction. *Academy of Management Journal*, 63(2), 440-471. https://doi.org/10.5465/amj.2017.0460
- Handayati, P., Wulandari, D., Soetjipto, B. E., Wibowo, A., & Narmaditya, B. S. (2020). Does entrepreneurship education promote vocational students' entrepreneurial mindset? *Heliyon*, 6(11), 1-7. <u>https://doi.org/10.1016/j.heliyon.2020.e05426</u>
- Hanelt, A., Bohnsack, R., Marz, D., & Antunes Marante, C. (2021). A systematic review of the literature on digital transformation: Insights and implications for strategy and organizational change. *Journal of Management Studies*, *58*(5), 1159-1197. https://doi.org/10.1111/joms.12639
- Hart, M. (2012). The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. *Journal of Product Innovation Management*, 29(3), 508-509. <u>https://doi.org/10.1111/j.1540-5885.2012.00920 2.x</u>
- Haynie, J. M., Shepherd, D., Mosakowski, E., & Earley, P. C. (2010). A situated metacognitive model of the entrepreneurial mindset. *Journal of Business Venturing*, 25(2), 217-229. <u>https://doi.org/10.1016/j.jbusvent.2008.10.001</u>
- Haynie, J. M., Shepherd, D. A., & Patzelt, H. (2012). Cognitive adaptability and an entrepreneurial task: The role of metacognitive ability and feedback. *Entrepreneurship Theory and Practice*, *36*(2), 237-265. <u>https://doi.org/10.1111/j.1540-6520.2010.00410.x</u>
- Healey, M. P., Bleda, M., & Querbes, A. (2021). Opportunity evaluation in teams: A social cognitive model. *Journal of Business Venturing*, *36*(4), 1-19. <u>https://doi.org/10.1016/j.jbusvent.2021.106128</u>
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic Management Journal*, 36(6), 831-850. <u>https://doi.org/10.1002/smj.2247</u>
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277-1288. <u>https://doi.org/10.1177/1049732305276687</u>
- Hunter, E., Jenkins, A., & Mark-Herbert, C. (2021). When fear of failure leads to intentions to act entrepreneurially: Insights from threat appraisals and coping efficacy. *International Small Business Journal*, 39(5), 407-423. <u>https://doi.org/10.1177/0266242620967006</u>
- Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report*, *17*(42), 1-10. <u>https://doi.org/10.46743/2160-3715/2012.1718</u>
- Keiningham, T., Aksoy, L., Bruce, H. L., Cadet, F., Clennell, N., Hodgkinson, I. R., & Kearney, T. (2020). Customer experience driven business model innovation. *Journal of Business Research*, *116*, 431-440. <u>https://doi.org/10.1016/j.jbusres.2019.08.003</u>
- Khanna, D., Nguyen-Duc, A., & Wang, X. (2018). From MVPs to pivots: A hypothesisdriven journey of two software startups. *Software Business: 9th International*

*Conference, ICSOB 2018*, Estonia. Retrieved from <u>https://doi.org/10.1007/978-</u> <u>3-030-04840-2 12</u>

- Kirtley, J., & O'Mahony, S. (2023). What is a pivot? Explaining when and how entrepreneurial firms decide to make strategic change and pivot. *Strategic Management Journal (John Wiley & amp; Sons, Inc.)*, 44(1), 197-230. https://doi.org/10.1002/smj.3131
- Kouakou, K. K. E., Li, C., Akolgo, I. G., & Tchamekwen, A. M. (2019). Evolution view of entrepreneurial mindset theory. *International Journal of Business and Social Science*, 10(6), 116-129. <u>https://doi.org/10.30845/ijbss.v10n6p13</u>
- Kraft, P. S., Günther, C., Kammerlander, N. H., & Lampe, J. (2022). Overconfidence and entrepreneurship: A meta-analysis of different types of overconfidence in the entrepreneurial process. *Journal of Business Venturing*, 37(4), 1-23. <u>https://doi.org/10.1016/j.jbusvent.2022.106207</u>
- Kunisch, S., Bartunek, J. M., Mueller, J., & Huy, Q. N. (2017). TIME IN STRATEGIC CHANGE RESEARCH. Academy of Management Annals, 11(2), 1005-1064. https://doi.org/10.5465/annals.2015.0133
- Kuratko, D. F., Fisher, G., & Audretsch, D. B. (2021). Unraveling the entrepreneurial mindset. *Small Business Economics*, 57(4), 1681-1691. <u>https://doi.org/10.1007/s11187-020-00372-6</u>
- Kuratko, D. F., Hornsby, J. S., & McKelvie, A. (2021). Entrepreneurial mindset in corporate entrepreneurship: Forms, impediments, and actions for research. *Journal of Small Business Management*, *61*(1), 132-154. https://doi.org/10.1080/00472778.2021.1907585
- Kwapisz, A., Schell, W. J., Aytes, K., & Bryant, S. (2022). Entrepreneurial Action and Intention: The Role of Entrepreneurial Mindset, Emotional Intelligence, and Grit. *Entrepreneurship Education and Pedagogy*, 5(3), 375-405. <u>https://doi.org/10.1177/2515127421992521</u>
- Lanivich, S. E., Smith, A., Levasseur, L., Pidduck, R. J., Busenitz, L., & Tang, J. (2022). Advancing entrepreneurial alertness: Review, synthesis, and future research directions. *Journal of Business Research*, *139*(2022), 1165-1176. <u>https://doi.org/10.1016/j.jbusres.2021.10.023</u>
- Laureiro-Martínez, D., & Brusoni, S. (2018). Cognitive flexibility and adaptive decisionmaking: Evidence from a laboratory study of expert decision makers. *Strategic Management Journal*, 39(4), 1031-1058. <u>https://doi.org/10.1002/smj.2774</u>
- Liao, Y. K., Nguyen, V. H. A., Chi, H. K., & Nguyen, H. H. (2022). Unraveling the direct and indirect effects of entrepreneurial education and mindset on entrepreneurial intention: The moderating role of entrepreneurial passion. *Global Business and Organizational Excellence*, *41*(3), 23-40. https://doi.org/10.1002/joe.22151
- Lim, J. S., & Greenwood, C. A. (2017). Communicating corporate social responsibility (CSR): Stakeholder responsiveness and engagement strategy to achieve CSR goals. *Public Relations Review*, *43*(4), 768-776. https://doi.org/10.1016/j.pubrev.2017.06.007
- Liubertė, I., & Dimov, D. (2021). "One tiny drop changes everything": Constructing opportunity with words. *Journal of Business Venturing Insights*, *15*(2021), 1-8. <u>https://doi.org/10.1016/j.jbvi.2021.e00242</u>
- Lombardi, R., Tiscini, R., Trequattrini, R., & Martiniello, L. (2020). Strategic entrepreneurship: Personal values and characteristics influencing SMEs'

decision-making and outcomes. The Gemar Balloons case. *Management Decision*, 59(5), 1069-1084. <u>https://doi.org/10.1108/MD-10-2019-1416</u>

- Lu, S., Shan, B., & Fei, Y. (2021). Exploring an inverted U-shaped relationship between entrepreneurial experience and Chinese new venture performance: the moderating role of environmental uncertainty. *Asia Pacific Business Review*, 28(4), 518-535. <u>https://doi.org/10.1080/13602381.2021.1899464</u>
- Lynch, M. P., & Corbett, A. C. (2021). Entrepreneurial mindset shift and the role of cycles of learning. *Journal of Small Business Management*, 61(1), 80-101. https://doi.org/10.1080/00472778.2021.1924381
- Mariz-Pérez, R. M., Teijeiro-Álvarez, M. M., & García-Álvarez, M. T. (2012). The relevance of human capital as a driver for innovation. *Cuadernos de economía*, *35*(98), 68-76. <u>https://doi.org/10.1016/S0210-0266(12)70024-9</u>
- McMullen, J. S. (2015). Entrepreneurial judgment as empathic accuracy: A sequential decision-making approach to entrepreneurial action. *Journal of Institutional Economics*, *11*(3), 651-681. <u>https://doi.org/10.1017/S1744137413000386</u>
- McMullen, J. S., & Kier, A. S. (2016). Trapped by the entrepreneurial mindset: Opportunity seeking and escalation of commitment in the Mount Everest disaster. *Journal of Business Venturing*, *31*(6), 663-686. <u>https://doi.org/10.1016/j.jbusvent.2016.09.003</u>
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, 31(1), 132-152. <u>https://doi.org/10.5465/amr.2006.19379628</u>
- Miller, T., Kim, A. B., & Holmes, K. (2015). 2015 Index of economic Freedom. *Washington DC: The Heritage Foundation.*
- Mills, J., & Birks, M. (2014). *Qualitative methodology: A practical guide*. SAGE Publications.
- Mohaghegh, M., & Größler, A. (2021). Exploring organizational problem-solving modes: a dynamic capabilities approach. *Management Decision*, 60(1), 254-277. <u>https://doi.org/10.1108/MD-08-2020-1097</u>
- Montiel-Campos, H. (2021). Moderating role of entrepreneurial alertness on the relationship between entrepreneurial passion and strategic change. *Journal of Organizational Change Management*, 34(5), 1107-1124. https://doi.org/10.1108/JOCM-12-2020-0386
- Morgan, J., & Sisak, D. (2016). Aspiring to succeed: A model of entrepreneurship and fear of failure. *Journal of Business Venturing*, *31*(1), 1-21. <u>https://doi.org/10.1016/j.jbusvent.2015.09.002</u>
- Morgan, T., Anokhin, S., Ofstein, L., & Friske, W. (2020). SME response to major exogenous shocks: The bright and dark sides of business model pivoting. *International Small Business Journal*, *38*(5), 369-379. <u>https://doi.org/10.1177/0266242620936590</u>
- Morris, M. H., & Tucker, R. (2021). The entrepreneurial mindset and poverty. *Journal of Small Business Management*, 61(1), 102-131. <u>https://doi.org/10.1080/00472778.2021.1890096</u>
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13-22.

- Mukhtar, S., Wardana, L. W., Wibowo, A., & Narmaditya, B. S. (2021). Does entrepreneurship education and culture promote students' entrepreneurial intention? The mediating role of entrepreneurial mindset. *Cogent Education*, 8(1), 1-18. https://doi.org/10.1080/2331186X.2021.1918849
- Naumann, C. (2017). Entrepreneurial mindset: A synthetic literature review. *Entrepreneurial Business and Economics Review*, *5*(3), 149-172.
- Neubauer, B. E., Witkop, C. T., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(2), 90-97. <u>https://doi.org/10.1007/s40037-019-0509-2</u>
- Ng, L., & Jenkins, A. S. (2018). Motivated but not starting: how fear of failure impacts entrepreneurial intentions. *Small Enterprise Research*, *25*(2), 152-167. https://doi.org/10.1080/13215906.2018.1480412
- O'Shea, D., Buckley, F., & Halbesleben, J. (2017). Self-regulation in entrepreneurs: Integrating action, cognition, motivation, and emotions. *Organizational Psychology Review*, 7(3), 250-278. <u>https://doi.org/10.1177/2041386617705434</u>
- Othman, N., & Tengku Muda, T. N. A. A. (2018). Emotional intelligence towards entrepreneurial career choice behaviours. *Education* + *Training*, *60*(9), 953-970. <u>https://doi.org/10.1108/ET-07-2017-0098</u>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. https://doi.org/10.1007/s10488-013-0528-y
- Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, *34*(5), 1189-1208.
- Pidduck, R. J., Clark, D. R., & Lumpkin, G. T. (2021). Entrepreneurial mindset: Dispositional beliefs, opportunity beliefs, and entrepreneurial behavior. *Journal* of Small Business Management, 61(1), 45-79. <u>https://doi.org/10.1080/00472778.2021.1907582</u>
- Rashid, S., & Ratten, V. (2021). Entrepreneurial ecosystems during COVID-19: the survival of small businesses using dynamic capabilities. *World Journal of Entrepreneurship, Management and Sustainable Development*, *17*(3), 457-476. https://doi.org/10.1108/WJEMSD-09-2020-0110
- Reardon, T., Heiman, A., Lu, L., Nuthalapati, C. S., Vos, R., & Zilberman, D. (2021). "Pivoting" by food industry firms to cope with COVID-19 in developing regions: Ecommerce and "copivoting" delivery intermediaries. *Agricultural Economics*, 52(3), 459-475. https://doi.org/10.1111/agec.12631
- Röglinger, M., Plattfaut, R., Borghoff, V., Kerpedzhiev, G., Becker, J., Beverungen, D., vom Brocke, J., Van Looy, A., del-Río-Ortega, A., & Rinderle-Ma, S. (2022). Exogenous Shocks and business process management. *Business & Information Systems Engineering*, *64*(5), 669-687. <u>https://doi.org/10.1007/s12599-021-00740-w</u>
- Ryan, G. W., Bernard, H. R., Denzin, N. K., & Lincoln, Y. S. (2011). *Handbook of qualitative research* (4<sup>th</sup> ed.). SAGE Publications.
- Sadeghiani, A., Anderson, A., Ahmadi, S., & Shokouhyar, S. (2021). Theorizing 'pivot'in small and micro business. *Journal of Small Business & Entrepreneurship*, *33*(4), 371-488. <u>https://doi.org/10.1080/08276331.2021.2014205</u>

- Sadeghiani, A., Shokouhyar, S., & Ahmadi, S. (2022). How digital startups use competitive intelligence to pivot. *Digital Business*, 2(2), 1-15. <u>https://doi.org/10.1016/j.digbus.2022.100034</u>
- Sala, P. K., Philbin, S. P., & Barikzai, S. (2022). A qualitative research study of the tech startup journey through entrepreneurial pivoting. *International Journal of Entrepreneurial Behavior & Research*, 28(4), 1050-1074. <u>https://doi.org/10.1108/IJEBR-07-2021-0528</u>
- Sanders, P. (1982). Phenomenology: A new way of viewing organizational research. *Academy of Management Review*, 7(3), 353-360. <u>https://doi.org/10.5465/amr.1982.4285315</u>
- Saunders, M., & Lewis, P. (2017). *Doing research in business and management* (2<sup>nd</sup> ed.). Pearson.
- Sedgwick, P. (2014). Unit of observation versus unit of analysis. *British Medical Journal*, 348(2014), 1-2. <u>https://doi.org/10.1136/bmj.g3840</u>
- Shaheen, N., & AL-Haddad, S. (2018). Entrepreneurial self-efficacy and entrepreneurial behavior. *International Journal of Development and Sustainability*, *7*(10), 2385-2402. <u>www.isdsnet.com/ijds</u>
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, *11*(4), 448-469. <u>https://doi.org/10.1287/orsc.11.4.448.14602</u>
- Shepherd, D. A. (2020). COVID 19 and entrepreneurship: Time to pivot? *Journal of Management Studies*, *57*(8), 1750-1753.
- Shepherd, D. A., & Patzelt, H. (2018a). *Emotion and entrepreneurial cognition*. Springer Nature.
- Shepherd, D. A., & Patzelt, H. (2018b). *Entrepreneurial cognition: Exploring the mindset of entrepreneurs*. Springer Nature.
- Shepherd, D. A., Patzelt, H., & Haynie, J. M. (2010). Entrepreneurial spirals: Deviation– amplifying loops of an entrepreneurial mindset and organizational culture. *Entrepreneurship Theory and Practice*, *34*(1), 59-82. <u>https://doi.org/10.1111/j.1540-6520.2009.00313.x</u>
- Singh, R. P. (2020). Overconfidence: A common psychological attribute of entrepreneurs which leads to firm failure. *New England Journal of Entrepreneurship*, 23(1), 25-39. <u>https://doi.org/10.1108/NEJE-07-2019-0031</u>
- Snihur, Y., & Clarysse, B. (2022). Sowing the seeds of failure: Organizational identity dynamics in new venture pivoting. *Journal of Business Venturing*, 37(1), 1-19. https://doi.org/10.1016/j.jbusvent.2021.106164
- Sterne, J. A., Egger, M., & Smith, G. D. (2001). Investigating and dealing with publication and other biases in meta-analysis. *Bmj*, 323(7304), 101-105. <u>https://doi.org/10.1136/bmj.323.7304.101</u>
- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: techniques and procedures for developing grounded theory* (2<sup>nd</sup> ed.). Sage Publications, Inc.
- Tang, M., Huang, H., Walsh, G., & Guerrero, M. (2022). The impact of entrepreneurial overconfidence on incubator effectiveness. *The Journal of Technology Transfer*, 48(2023), 416-440. <u>https://doi.org/10.1007/s10961-022-09938-w</u>
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American journal of evaluation*, 27(2), 237-246. https://doi.org/10.1177/1098214005283748

- Valliere, D. (2013). Entrepreneurial alertness and paying attention. *Journal of Enterprising Culture*, 21(1), 1-17. <u>https://doi.org/10.1142/S0218495813500015</u>
- Volk, S. C., & Zerfass, A. (2018). Alignment: Explicating a key concept in strategic communication. *International Journal of Strategic Communication*, 12(4), 433-451. <u>https://doi.org/10.1080/1553118X.2018.1452742</u>
- Wardana, L. W., Narmaditya, B. S., Wibowo, A., Mahendra, A. M., Wibowo, N. A., Harwida, G., & Rohman, A. N. (2020). The impact of entrepreneurship education and students' entrepreneurial mindset: the mediating role of attitude and selfefficacy. *Heliyon*, 6(9), 1-7. <u>https://doi.org/10.1016/j.heliyon.2020.e04922</u>
- Williams, D. W., & Wood, M. S. (2015). Rule-based reasoning for understanding opportunity evaluation. Academy of management perspectives, 29(2), 218-236. <u>https://doi.org/10.5465/amp.2013.0017</u>
- Wood, M. S., Palich, L. E., & Browder, R. E. (2019). Full steam ahead or abandon ship? An empirical investigation of complete pivot decisions. *Journal of Small Business Management*, 57(4), 1637-1660.
- Xie, X., Han, Y., Anderson, A., & Ribeiro-Navarrete, S. (2022). Digital platforms and SMEs' business model innovation: Exploring the mediating mechanisms of capability reconfiguration. *International Journal of Information Management*, 65(2022), 1-13. <u>https://doi.org/10.1016/j.ijinfomgt.2022.102513</u>
- Yang, X., Sun, S. L., & Zhao, X. (2019). Search and execution: examining the entrepreneurial cognitions behind the lean startup model. *Small Business Economics*, 52(3), 667-679. <u>https://doi.org/10.1007/s11187-017-9978-z</u>
- Zhang, W., Zhao, W., Gao, Y., & Xiao, Z. (2021). How do managerial ties influence the effectuation and causation of entrepreneurship in China? The role of entrepreneurs' cognitive bias. *Asia Pacific Business Review*, *26*(5), 613-641. <u>https://doi.org/10.1080/13602381.2020.1765537</u>
- Zhu, F., Hsu, D. K., Burmeister-Lamp, K., & Fan, S. X. (2018). An investigation of entrepreneurs' venture persistence decision: The contingency effect of psychological ownership and adversity. *Applied Psychology*, 67(1), 136-170. <u>https://doi.org/10.1111/apps.12106</u>
- Zhu, Z., & Lin, S.-f. (2019). Understanding entrepreneurial perceptions in the pursuit of emerging e-business opportunities: The dimensions and drivers. *Computers in Human Behavior*, 95(2019), 252-261. <u>https://doi.org/10.1016/j.chb.2018.02.015</u>

Appendix I: Informed consent letter

# **Gordon Institute of Business Science** University of Pretoria

# **Consent Letter**

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA.

I am conducting research on Entrepreneur pivot and am trying to find out more about the Entrepreneurial Mindset of entrepreneurs or founders who have pivoted their business ventures in the last five years. Our interview is expected to last about 30 Minutes to 45 Minutes and will help us understand your thought process, your emotions, and the actions you took before, during and after the change in your business.

Your participation is voluntary, and you can withdraw at any time without penalty. The interviews will be recorded. All data will be reported without identifiers. If you have any concerns, please contact my supervisor or me. Our details are provided below.

**Researcher Research Supervisor** Name: Tshimangadzo Rakhuhu Name: Prof. Kerrin Myres

Email: 21854042@mygibs.co.za Email: myresK@gibs.co.za Phone: +27 84 499 0954 Phone: +27 33 263 4175

Signature of researcher:

| Date: |  |
|-------|--|
|       |  |

Signature of participant:

Date:

#### Appendix II: Ethical clearance form

# **Gordon Institute of Business Science** University of Pretoria

# Ethical Clearance Approved

Dear Tshimangadzo Rakhuhu,

Please be advised that your application for Ethical Clearance has been approved. You are therefore allowed to continue collecting your data. We wish you everything of the best for the rest of the project.

Ethical Clearance Form

Kind Regards

This email has been sent from an unmonitored email account. If you have any comments or concerns, please contact the GIBS Research Admin team.

#### Appendix III: Interview guide

**Research Topic:** The role of Entrepreneur Mindset in Entrepreneur Pivot

**Research question:** What is the role of the Entrepreneur Mindset (EM) on entrepreneurial pivot?

I. Introduction: Business background

Thank you very much for letting me interview you today. The focus of my study is the entrepreneurship mindset and how entrepreneurs make decisions that changes the course of direction for their businesses. I am focused on learning more about you as an entrepreneur, specifically three things. **1.Your thinking process, 2. your feelings and 3. your actions**. And what I am looking for is how these three things played a role **in your journey to pivot**.

Because this is exploratory, If I feel like I have not received enough for a specific question, I have some nudging questions that I will position for you.

- a. To start can you tell me a bit about yourself and your business up to the point just before you decided to make changes?
  - i. Your name, how long have been an entrepreneur?
  - ii. Your business and the industry that you are in?
  - iii. How long has the business been operating?

| Research Question  | Interview Questions   |  |  |
|--|---|--|--|
| RQ1: How do entrepreneurs make the decision to pivot?      | <ul> <li>II. <u>Why was there a change, and which elements of your business changed?</u></li> <li><i>i.</i> What made you make this change?</li> <li><i>ii.</i> When did you realise it was time to change?</li> <li><i>iii.</i> What factors did you consider before deciding to make changes?</li> </ul>  |  |  |
| RQ 2: What type of cognitive mindset is required to pivot? | <ul> <li>III. What factors did you consider during the change? – elaborate<br/>on your thinking and process during the pivot</li> <li>i. Once you realised that you needed to make changes,<br/>what options did you consider?</li> <li>ii. How did you arrive at the chosen option?</li> <li>iii. Once you decided on the chosen option, what did you<br/>do next, or what steps did you take?</li> <li>iv. What was your thinking process during the business<br/>change?</li> <li>v. What influenced your thinking process during the<br/>change?</li> </ul> |  |  |

#### Table 6: Research question guide

| RQ 3: What type of<br>behavioural mindset is<br>required to pivot? | <ul> <li>IV. What steps did you take during the process that you believe contributed to your successful pivot?</li> <li>i. What actions did you take before, during and after the change, and what influenced your actions?</li> <li>ii. What influenced your actions?</li> <li>iii. Describe how you felt after the change?</li> <li>iv. How did your feelings influence the actions you took during the change?</li> <li>v. How did your thinking influence your behaviour?</li> </ul> |
|--|--|
| RQ 4: What type of<br>emotional mindset is<br>required to pivot?   | <ul> <li><i>Describe your emotional state during the pivoting process and</i><br/><u>how it affected your pivoting experience.</u></li> <li>i. Describe how you felt during the change?</li> <li>ii. How did your feelings influence your thinking and the<br/>actions you took during the change?</li> </ul>  |
| 5  | bu give to other entrepreneurs about the pivoting experience?<br>ut the experience that I did not ask about?   |

#### Appendix IV: Confidentiality and non-disclosure agreement

#### CONFIDENTIALLY AND NON-DISCLOSURE AGREEMENT

It is a condition of engagement that students shall aid in preserving all confidential information, ideas and plans; any confidential information or any information in respect of any data gathered in respect of their research work. The parties under this agreement agree to the following:

1. The parties of this agreement shall use its best endeavours to keep any information confidential which it has acquired or may acquire pursuant to the research initiative. For the purposes of this clause, confidential information excludes information which:

1.1 is publicly available or becomes publicly available through no act or default of any Party;

1.2 was in the possession of a Party prior to its disclosure otherwise than as a result of a breach by any party of any obligation of confidentiality to which it is subject;

1.3 is disclosed to the student by a person which did not acquire the information under an obligation of confidentiality; and

1.4 is independently acquired by a student and as a result of work carried out by a person to whom no disclosure of such information has been made;

2. No party shall use or disclose confidential information except with the prior written consent of GIBS or in accordance with an order of a court of competent jurisdiction or in order to comply with any law or governmental regulations by which any Party concerned is bound or as may be lawfully requested in writing by any governmental authority.

3. The party undertakes to permanently delete any electronic copies of confidential information received, and destroy any confidential printed

documentation or similar material in their possession promptly once they are no longer required on completion of the contracted service by the student.

4. On completion of the contracted service by the student, the party is to confirm to the student that they are not in possession of any confidential information.

| Signed at                   | on this       | day of | 20 |
|-----------------------------|---------------|--------|----|
|                             |               |        |    |
| On behalf of:               |               |        |    |
|                             |               |        |    |
|                             |               |        |    |
|                             |               |        |    |
|                             |               |        |    |
| Name:                       |               |        |    |
| Signature:                  |               |        |    |
|                             |               |        |    |
| duly authorised and warrant | ing such auth | ority  |    |
|                             |               |        |    |

Witness:

# Appendix V: Code groups

# Table 7: Example code groups

| Code Groups   |
|---|
| Pivot decision drivers_impact of market trends  |
| Pivot decision drivers_convicted of a gap in the market   |
| Pivot decision drivers_declining demand for current offerings   |
| Pivot decision drivers_failure of current venture   |
| Pivot decision drivers_wrong timing to launch   |
| Pivot decision drivers_loss of market due to COVID  |
| Lived experience of pivoting_instigated by radical change in macro environment  |
| Lived experience of pivoting_instigated by consumer demand  |
| Lived experience of pivoting_instigated by search for new market opportunities  |
| Lived experience of pivoting_may be instigated by a random opportunity  |
| Lived experience of pivoting_may be instigated by long held passions and interests  |
| Lived experience of pivoting_instigated by deliberate search for niche opportunity to make an impact  |
| Lived experience of pivoting_instigated by shift from B2C to B2B customer focus   |
| Reflections on strategic choice errors_continuing to operate loss making ventures   |
| Strategic approach to shaping a new venture_find a cofounder before confirming a venture idea   |
| Strategic options for loss making ventures_liquidate  |
| Strategic options for loss making ventures_pursue turnaround strategy   |
| Strategic considerations for pivoting_establishing new value chain partnerships to support new business competencies                          |
| Strategic considerations for pivoting_knowing how and when to take the decision to pivot  |
| Strategic considerations for pivoting_deciding on a funding model and embracing related implications  |
| Strategic considerations for pivoting_shaping a market offering aligned with resourcing capacities  |
| Strategic approach to shaping a new venture_verify thoughts on approach for every aspect with target<br>customer base                         |
| Strategic approach to shaping a new venture_every competency area of the value chain requires specific attentions to optimise excellence      |
| Strategic approach to shaping a new venture_harnassing social media platforms to launch and drive<br>customer access                          |
| Strategic considerations for pivoting_aligning approach choices with target customer preferences to<br>foster support                         |
| Strategic approach to shaping a new venture_building robust operating systems that can sustained over time                                    |
| Strategic approach to shaping a new venture_demand driven expansion of offering   |
| Strategic approach to shaping a new venture_recognising need to closely attend to evolving market conditions and resulting impact on business |
| Strategic approach to shaping a new venture_develop deep understanding of the business model of chosen venture                                |
| Strategic approach to shaping a new venture_give up equity to partner with essential complimentary skills for the venture                     |
| Strategic approach to shaping a new venture_take action on initial thoughts to reveal business model<br>clarity                               |
| Managing self_leaning on strategically relevant mentors to help guide transalation of entrepreneurial vision into actionable activities       |
| Reflections on strategic choice errors_result from loss of alignment with personal gut warning system   |
| Strategic approach to shaping a new venture_consideration of pivot venture location options versus implications for captured customers        |
| Strategic approach to shaping a new venture_considering the competency profile of team members and desired team culture                       |
| Strategic approach to shaping a new venture, develop deep understanding of new target customers   |

Strategic approach to shaping a new venture\_develop deep understanding of new target customers

Strategic approach to shaping a new venture\_develop strategic identity and positioning clarity to guide social media presence

Strategic approach to shaping a new venture\_offer equity to founding teams to meet remuneration expectations

Strategic approach to shaping a new venture\_recognising need to be different and create new experiences

Strategic approach to shaping a new venture\_scoping out roles and role players to optimise the value chain

Strategic considerations for pivoting\_balancing shift of resource attentions to new priorities while retaining established customer support

Strategic considerations for pivoting\_embracing multiple perspectives to inform decisions and onboard stakeholders

Impact of covid on business\_strategic dilemma to close or continue struggling ventures

Reflections on strategic choice errors\_continuing to operate loss making ventures

Strategic approach to shaping a new venture\_find a cofounder before confirming a venture idea Strategic options for loss making ventures\_liquidate

Strategic options for loss making ventures\_pursue turnaround strategy

Taking action\_trial execution of concieved idea to gain clarifying confirmation of viable business model

Taking action\_aligning with a venturing thought and execution partner

Taking action\_executing a decision reveals more clarity on bigger picture view

Taking action trial execution of concieved idea before full launch

Strategic approach to shaping a new venture\_take action on initial thoughts to reveal business model clarity

Taking action\_starting small with available opportunuties

Taking action\_stepping back sharpens clarity of bigger picture for new vision to emerge Managing self\_leaning on strategically relevant mentors to help guide transalation of entrepreneurial vision into actionable activities

Taking action\_as a demonstration of capabilities and inspire prospective clients to commit

Taking action\_directing emotions towards driving a new agenda

Taking action\_embracing liquidation of failed venture frees time to add new opportunities

Taking action\_innovating to meet demand creating new opportunities

Taking action\_letting failed ventures go into liquidation and closure

Taking action\_starting small with viable opportunuties that are easier to execute

Taking action stepping back to allow processes to unfold

Challenges faced by entrepreneurs\_taking action often means taking decisions with incomplete information

Entrepreneur emotions\_satisfaction and pride in achievement

Managing self\_founder should recognise and take charge of own reactions to failure

Managing self taking action despite lack of clarity of growth prospects

Reflections on learnings from failure\_quick action in recognising loss of relevance creates opportunity to cash out and redirect resources

Review of personal mistakes made by founder\_failing to take urgent action to rationalise impact of failing venture

Taking action deciding who should be in control at various stages

Taking action evaluating possible rescue options

Taking action leading the team conserving scarce resources

Taking action reveals potential clients and stimulates demand

Taking action revelation of personal impact emerges in motion

Taking action taking quick decisions after feedback

Emotional response to business failure change in risk taking appetite and behaviour

Entrepreneur behaviour\_working hard to create and meet market need

Entrepreneur behaviour\_mindset biased towards creating and pursuing opportunity to transact with others

Entrepreneur behaviour take time to be well connected and informed about all areas of the business

| Monitoring and reviewing for a venture to thrive_track customer behaviours  |
|---|
| Entrepreneur emotions_confidence from prior venturing experiences   |
| Entrepreneur emotions_fear of unknown effects   |
| Managing self_recognising need to transition emotions from subjective to rational to drive venture shaping  |
| Entrepreneur emotions_attachment to one's creation  |
| Entrepreneur emotions_emotionally attuned to the venture as the founder   |
| Entrepreneur emotions_feeling confident and happy   |
| Entrepreneur emotions_frustration over unmet need   |
| Entrepreneur emotions_confronting gender based prejudice and bias   |
| Entrepreneur emotions_disappointment with employees   |
| Entrepreneur emotions_reluctance to make decisive judgements over negative situations   |
| Entrepreneur emotions_worry and anxiety   |
| Taking action_directing emotions towards driving a new agenda   |
| Entrepreneur emotions_anger at percieved threats to the business  |
| Entrepreneur emotions_belief that personal attention would have resulted in venture success   |
| Entrepreneur emotions_burnout and fatigue   |
| Entrepreneur emotions_disappointment with self  |
| Entrepreneur emotions_feeling exhausted and drained   |
| Entrepreneur emotions_hope that the venture can be rescued  |
| Entrepreneur emotions_making peace with difficult experiences   |
| Entrepreneur emotions_pride over successful initiative  |
| Entrepreneur emotions_satisfaction and pride in achievement   |
| Entrepreneur emotions_suffering from effects of delayed business closure decisioning  |
| Managing self_letting go of negative emotions to allow positive energy to dominate disposition<br>Entrepreneurial venture ecosystem_people willing to impart specialist knowledge to build founder<br>insight and understanding |
| Entrepreneurial venture ecosystem_venture establishment partner   |
| Entrepreneurial venture ecosystem_customer responses to macro conditions  |
| Entrepreneurial venture ecosystem_family context and values   |
| Entrepreneurial venture ecosystem_other like minded people  |
| Entrepreneurial venture ecosystem_government support programs   |
| Entrepreneurial venture ecosystem_mentors   |
| Entrepreneurial venture ecosystem_the founder remains an integral part of the solutions and problems  |
| Entreprenurial venture ecosystem_suppliers & service providers  |
| Entrepreneurial venture ecosystem_creditors   |
| Entrepreneurial venture ecosystem_employees   |
| Entrepreneurial venture ecosystem_entails balancing interests of multiple stakeholders at all times   |
| Entrepreneurial venture ecosystem_funders   |
| Entrepreneurial venture ecosystem_lawyers best placed to oversee activities at failing ventures   |
| Entrepreneurial venture ecosystem_management in operational control of a venture  |
| Entrepreneurial venture ecosystem_managers  |
| Entrepreneurial venture ecosystem_manufactures  |
|   |