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## **Determining Strategies Entrepreneurs Use for Addressing Risks Created by Business Uncertainties**

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# Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Raju F. Gomes

has been found to be complete and satisfactory in all respects,  
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Walden University  
2023

Abstract

Determining Strategies Entrepreneurs Use for Addressing Risks Created by Business

Uncertainties

by

Raju F Gomes

MS, Post University, 2018

BS, Post University, 2016

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December, 2023

## Abstract

Some entrepreneurs lack the knowledge and skills to deal with risks created by business uncertainties. Small business entrepreneurs must develop strategies to help them run successful businesses for a long time. Grounded in the uncertainty management theory and enterprise risk management, the purpose of this qualitative study was to explore strategies entrepreneurs, especially those with startups within the food service industry, use to deal with risks created by business uncertainties. Participants were five food and service entrepreneurs within the Northeast region of the United States who successfully dealt with risks caused by business uncertainties. Data were collected using semistructured interviews with open ended questions. Using Meijer's classification tool, eight themes emerged: financial planning, diversification, quality control, and environmental, technological, resource, political, and competitive uncertainties. A key recommendation is investing in complementary products and services, incorporating technology, investing and communicating with employees, managing finances, accepting and learning from mistakes, and developing professional networks. Implications for positive social change include the potential to prevent failure because and increase employment opportunities for the community in the Northeast region of the United States.

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## Dedication

I dedicate this study in the cherished memory of Linda Clymer, a beloved mother whose influence continues to shape the person I have become. Her enduring impact resonates in every aspect of my life, and her absence is deeply felt every day.

Additionally, I extend my gratitude and dedicate this work to my unwavering wife, Melissa Gomes. From the outset, her steadfast support has been my rock, providing encouragement and belief in my abilities. Her unwavering faith in me has been a driving force behind my accomplishments.

Furthermore, I dedicate this study to my sister, Veronica Woodard, whose constant belief in my potential has been a source of motivation. Her unwavering presence and support have been a guiding light, reminding me that I am never alone in my journey. In honoring these remarkable individuals, I acknowledge the profound impact they have had on my life and express my deepest appreciation for their love, encouragement, and unwavering belief in my abilities.

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I wish to extend my heartfelt gratitude to Dr. Walter McCollum, whose unwavering support and mentorship have been instrumental in shaping this dissertation. Dr. McCollum has consistently served as a beacon of positivity throughout this journey, consistently motivating and guiding me towards producing the highest quality of work at every stage. I would also like to express my sincere appreciation to my second chair, Dr. Beehner Chris. His consistent and timely feedback has proven invaluable, offering not only constructive insights but also a deep well of knowledge to refine and steer my work in the right direction. Furthermore, I want to acknowledge the unwavering support and guidance provided by my advisor, Dr. Hays Richard. Dr. Richard has been a pillar of support, always ready to offer his wisdom, guidance, and assistance whenever I needed it. His presence has been reassuring, making this dissertation a more enriching and enlightening experience. The contributions of Dr. McCollum, Dr. Beehner Chris, and Dr. Hays Richard have been invaluable to the successful completion of this work, and I am deeply appreciative of their mentorship and unwavering support.

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## Section 1: Foundation of the Study

The survival of firms depends on the ability to respond and identify external and internal threats that exist as uncertainties. Business uncertainties affect decision-making, internal processes, and organizational structures within firms. Managing business uncertainties is one of entrepreneurs' most challenging tasks. Managers need persistent, consistent, and long-term plans to continuously increase the performance of their organizations (Kabeyi, 2019). Most firms make decisions under uncertainty. Companies that need complete and perfect information must be faster to generate innovations (Arranz et al., 2019). As a result, many organizations fail or close down. Organizations need to find ways through which they can overcome business uncertainties.

### **Background of the Problem**

Small business entrepreneurs represent 99.9% of all United States (U.S.) employer firms, which makes them essential for growth of the American economy (U.S. Small Business Administration [SBA], 2021). However, not all startups or small businesses survive. Failure rates are a result of business uncertainties. *Business uncertainty* is an unobservable phenomenon that is difficult to measure and affects firm operations (Himounet et al., 2021). Business uncertainty can also refer to situations whereby information is unstable, inaccessible, or conflicting for entrepreneurs. In uncertain situations, entrepreneurs tend to have limited cognitive capabilities, which affects their behavior, affective states, and perceptions (Yustian, 2021). Limited cognitive abilities makes it hard for entrepreneurs and managers to make decisions. Unfortunately,

making these difficult decisions has contributed to the failure of startups in the U.S. To avoid business failures, entrepreneurs should identify strategies contributing to high rates of small business survival and reduction of business uncertainties.

### **Problem Statement**

High rates of small business failure due to risks created by business uncertainties discourage aspiring entrepreneurs from venturing into business (Tomy & Pardede, 2018, p. 2). Alsaaty and Makhoul (2020, p.1909) noted that approximately 52% of small businesses fail within the first five years. The general business problem is that some entrepreneurs may need more proper planning and understanding of running startups successfully. The specific business problem is that some entrepreneurs in the food service industry need more strategies for reducing risks caused by business uncertainties.

### **Purpose Statement**

I used this qualitative multiple-case study to explore strategies that entrepreneurs in the food service industry use to reduce risks caused by business uncertainties. The targeted population for this study was five food service entrepreneurs within the Northeast region of the U.S. who have successfully dealt with risks caused by business uncertainties.

Addressing business uncertainties can lead to social change by helping food service entrepreneurs reduce associated risks. Individuals seeking to open businesses in the food service industry may use recommendations from this proposed study to improve their chances of success and thereby improve profit margins. Improved profit margins

can contribute to positive social change by increasing job opportunities, local economies, and people's living standards within communities in the Northeast region of the U.S.

### **Nature of the Study**

Saunders et al. (2015) asserted qualitative studies are practical approaches to determining intangible factors such as socioeconomic status, social norms, religion, and other factors whose roles are not readily apparent. I used the qualitative research method for this study to address opinions, trends, and thoughts regarding the problem under study. According to Yin (2018), researchers use quantitative approaches to analyze numerical data with specific statistical techniques. The quantitative approach is not appropriate for this study as I want to explore complex social and cultural issues within a real-world context. For mixed methods, researchers must integrate qualitative and quantitative methods to address complex research questions; this was not required to address my proposed study's purpose.

I used a multiple-case study design for this study to get in-depth information about strategies entrepreneurs use to reduce risks created by unforeseen business circumstances. The phenomenological study design was not sufficient to address strategies entrepreneurs can use to reduce risks created by uncertainties as the approach involves commonality of personal meanings of lived experiences within specific groups rather than revealing causes of a phenomenon or why it is experienced (Qutoshi, 2018). I did not use the grounded theory approach since I did not intend to develop a theory to explain a subject phenomenon. Ethnography involves studying and documenting cultural

differences and similarities to understand human behavior and social systems (Sharma & Sarkar, 2019). I did not explore social groups or cultures for the proposed study, so the ethnographic approach was unsuitable for this study. Therefore, I used a multiple-case study design to thoroughly explore multiple cases (five in this case) that were bound in space and time and generate insights from interviews in real-life settings.

### **Research Question**

What strategies can entrepreneurs in the food service industry use to reduce risks created by business uncertainties?

### **Interview Questions**

1. What are the risks created by uncertainties that you have faced since the start of your business?
2. How did you handle the risks?
3. What strategies have you used to deal with risk created by business uncertainties within your food service business?
4. How have your strategies reduced risks created by business uncertainties?
5. What skills do you have as an entrepreneur that have helped you manage risks arising from business uncertainties?
6. What training do you offer to prepare your employees for managing risks resulting from unforeseen circumstances?
7. What were the key challenges to implementing your strategies for reducing risks created by business uncertainties?

8. How did you address the key challenges to implementing your strategies for reducing risks created by business uncertainties?
9. What additional information would you like to share about the strategies you have developed and implemented for managing risks created by uncertainties that we have not discussed?

### **Conceptual Framework**

I used the enterprise risk management (ERM) and uncertainty management theory (UMT) composite conceptual framework to understand entrepreneurs' strategies to overcome risks resulting from business uncertainty. The Committee of Sponsoring Organizations (COSO) first introduced the ERM in 2004 as a guide to managing risks within organizations (Jayantha, 2018). The ERM framework is used to inform researchers, business managers, and entrepreneurs about how top firm directors and executives can respond to risks created by uncertainties (Jankensgard, 2019).

The principal components of the ERM involve addressing operation, strategic, and financial risks. Managers can use the ERM framework to identify, assess, address, monitor, and report risks resulting from unforeseen future events. Managers can then use this information to make detailed timetables and plans to reduce these risks (Jankensgard, 2019). Yang et al. (2018) posited ERM practices influence competitiveness of firms because it improves financial literacy. Essentially, the ERM framework advocates for managers to acquire financial education to perform risk analysis. Businesses using ERM

understand the importance of communicating about risks which helps entrepreneurs manage uncertainties and reduce surprises (Yang et al., 2018).

Nocco and Stulz (2022) argued the ERM framework helps business managers limit, measure, and identify acceptable levels of a company's net exposure and cushion downside outcomes. According to the Office of Inspector General (2022), entrepreneurs should use the ERM framework to help identify risks early, assess risks, and effectively manage risks. Additionally, the ERM framework provides a platform where all employees speak the same language regarding uncertainty and risks. Thus, the ERM framework is suitable for entrepreneurs who seek to grow their businesses.

ERM is also used with the uncertainty management theory (UMT) to inform entrepreneurs about how to respond to risks related to unforeseen circumstances. The UMT principal construct is information seeking and avoiding. Using the UMT enables entrepreneurs to seek strategies that refine relationships and reduce these risks. Using both the UMT and ERM offers entrepreneurs opportunities to identify uncertainties and develop effective management strategies to reduce risks created by business uncertainties.

### **Operational Definitions**

*Business Failure:* Collapse or closure of business operations because of the inability to make profits or enough revenue to cover the expense (Foss et al., 2018).

*Business Manager:* A supervisor who oversees operations of a business, organization, or company (Jankensgard, 2019).

*Business Uncertainties:* Unforeseen or unmeasurable risks that businesses face because of ongoing or unprecedented changing events (Pomerol, 2018).

*Entrepreneur:* Individuals who identify business opportunities intending to make profits (Tomy & Pardede, 2018).

*Food and Service Industry or Hospitality Industry:* Service industry that offers services such as lodging, food and drinks, travel and tourism, theme parks, and event planning. It includes restaurants, bars, hotels, and tourism agencies (Ozdemir et al., 2021).

## **Assumptions, Limitations, and Delimitations**

### **Assumptions**

Assumptions are unverified facts in qualitative research studies that are out of the researcher's control (Fountouki & Theofandis, 2019). Researchers make assumptions within studies to ensure that it is possible to conduct research. A fundamental assumption for this study was that all the respondents understood terminologies and definitions involved in the study (Rashid et al., 2019). I also assumed that a sample size of 5 entrepreneurs from the food service industry was adequate. Another assumption was that participants were truthful and honest in their responses. The last assumption was that a multiple-case study research design was most appropriate for this study.

### **Limitations**

Limitations are restrictions within the study that are out of the researcher's control and influence study outcomes (Fountouki & Theofandis, 2019). One major limitation of

this study was that participants were from a specific geographic location, and study results could not be generalized. According to Fountouki and Theofandis (2019), conducting a study within a specified geographical area with a small sample size makes it difficult to generalize findings.

### **Delimitations**

Delimitations are boundaries of a study or choices researchers make in terms of focus of their studies. (Fountouki & Theofandis, 2019). Interviewees were from the Northeast region of the U.S. Participants were small food and service industry owners and not from any other industry. Findings may not apply to small businesses from other industries.

### **Significance of the Study**

Entrepreneurs want to maximize profits and ensure they can control and predict future occurrences (Pomerol, 2018). Food service entrepreneurs who identify with this study can obtain practical strategies that will ensure they remain knowledgeable about handling business risks created by uncertainties.

The implication for positive social change is that entrepreneurs can learn how to handle risks created by business uncertainties. Given the role of uncertainty in the failure of businesses, entrepreneurs need to be knowledgeable about ways to mitigate associated risks. Entrepreneurs can use results of these study to make informed decisions about what strategies to use. Business managers can also use these strategies to improve business growth, competitive advantage, and organizational performance. An improved

understanding of risks resulting from uncertainties can help create an enabling environment to improve employee performance, communication, knowledge, and work ethics. Business managers and entrepreneurs can use study results to catalyze beneficial social change by creating employment opportunities for local communities.

### **A Review of the Professional and Academic Literature**

Through this qualitative multiple-case study design, I aimed to provide in-depth information about strategies entrepreneurs in the food service industry use to reduce risks created by unforeseen business circumstances. My objective was to explore the current state of research related to risks created by business uncertainties. This literature review includes a detailed account of current and previous studies related to this topic, with most references dating between 2018 and 2022.

The literature review has five essential topics: failure, Meijer's classification tool, risk, uncertainty, and business performance indicators. I further divided the literature review into several subtopics that richly inform my study. The following keywords were used: *business uncertainties, risk, business failure, enterprise risk management, business strategies, strategic management, startups, business environment, and business performance.*

To ensure academic rigor, I ensured most of my references were published between 2019 and 2023. I used Research Gate, Wiley Online Library, Frontiers, Springer, SAGE journals, Google Scholar, and the Walden University Library to acquire peer-

reviewed articles for my literature review. I used 130 academic sources, with 90% being peer-reviewed sources.

Entrepreneurs are people who find gaps within an economy and seek to exploit these opportunities (Foss et al., 2018). However, there are barriers to such opportunities that arise from circumstances that are probabilistic, ambiguous, unpredictable, or intricate (Magnani & Zucchela, 2018). These uncertainties present unique problems leading to strategic management and entrepreneurship risks. Lack of sufficient and stable knowledge of risks that can arise from unpredictable situations affects entrepreneurs' behavior, affective state, and perceptions (Tomy & Pardede, 2018). Businesses should address these risks to maintain a competitive edge while investing in available market gaps. Researchers need more literature on the role uncertainties play in creating business risks and fluctuating business cycles. I discussed literature on uncertainties and associated risks that affect success of businesses.

A firm's survival depends on their ability to respond to and identify external and internal threats. As per Meijer's classification tool, these threats are classified in terms of the external and internal environment. External threats negatively affect decision-making, internal processes, and organizational structures within firms, which in turn causes competitive and performance risks (Tomy & Pardede, 2018). Internal threats negatively affect the purchasing power of firms and pose financial risks. Managing these threats is one of the most challenging tasks entrepreneurs or managers can do. Entrepreneurs and managers must establish persistent, consistent, and long-term plans to continuously

improve organizational performance (Alvarez & Barney, 2005, as cited in Zhang & Burg, 2019). Pecina et al. (2022) posited using the ERM framework preserves and creates value for invested capital and promotes long-term corporate sustainability. Entrepreneurs can use the ERM framework to find ways to lower financial uncertainties and threats which would translate to successful businesses and reduced business risks.

The creation of startups increases competitive risks by introducing new services, goods, and technologies or by capital accumulation from situations involving temporal monopolies. The resulting situation creates unknown patterns of uncertainty. Shivam (n.d.) claimed these unknown patterns are sources of risk and argued there will always be unexpected events occurring in the business environment. Shivam (n.d.) explained annual rainfall may be sufficient for a particular year; however, rainfall distribution is uncertain, and there may be a risk of crop failure due to changes in rainfall distribution patterns. Shivam (n.d.) referred to these uncertain patterns as the true ambiguity level of uncertainty, whereby it is difficult to predict future variables. However, Shivam (n.d.) argued that nonlinear dynamic prediction models could help solve ambiguity problems. The models are used for predicting probability of events occurring in future. The information from these models can help entrepreneurs make informed decisions on the direction of their businesses.

Shabani et al. (2023) posited uncertainty patterns can exist in one or more of the following phenomena: foreseen uncertainty, chaos, unforeseen uncertainty, and variations. Foreseen uncertainty patterns are events affecting activity performance.

Unforeseen uncertainty patterns are unknown events that can negatively or positively affect business performance. Variations are changes that affect business outcomes. Chaos is uncertainty resulting in different solutions than earlier envisioned. Syrett and Devine (2012, as cited in Jankensgard, 2019) recommended firms engage in scenario planning and risk management to solve foreseen uncertainties. Despite rich literature on uncertainties, only a few studies classify uncertainties. Researchers need to provide solutions to entrepreneurs to learn about the local nature of business uncertainties and thus comfortably formulate strategies to reduce associated risks. Additionally, aspiring entrepreneurs need to understand why small businesses are essential and instances that led to business failure. With this knowledge, entrepreneurs will have an easier time evaluating strategies that can reduce risks created by business uncertainties.

### **Conceptual Framework**

A conceptual framework defines a study's relevant variables and how they relate to each other (Jankensgard, 2019). A conceptual framework gives an idea of the relationship between the properties or variables the researcher intends to study (Jankensgard, 2019). I used the ERM and UMT composite framework to understand strategies entrepreneurs use to overcome risks resulting from business uncertainty.

### **ERM**

Risk refers to any uncertain event involving reduced control and unpredictability of the world and events. A risk delays an organization from meeting its objectives or goals. One prominent risk framework is the ERM framework which informs researchers

about how top firm directors or executives respond to risks created by external and internal threats (Assibi, 2022). Managing situations involving risk is vital for businesses worldwide as it is a tool that can help managers align knowledge, people, processes, strategies, and technologies. Additionally, risk management can help entrepreneurs positively change the business environment characterized by technical, political, natural, and economic resources (Jankensgard, 2019). Traditionally, organizations viewed risk as a series of unrelated elements in which individual risks were coordinated and classified separately. Over time, researchers have changed the narrative to deal with risk comprehensively to ensure long-term growth and high performance.

The principal components of the ERM involve addressing operation, strategic, and financial risks. Managers can use the ERM framework to identify, assess, address, monitor, and report risks that result from external and internal threats. Differences involving levels of information people have about individuals, situations, and events determines how confident or uncertain they feel about an event or situation (Assibi, 2022). Risk management ensures that the organization's leadership has information about an event, person, or situation (Jankensgard, 2019). Entrepreneurs can use the ERM framework and the UMT to study how entrepreneurs can respond to risks created by business uncertainty.

## **UMT**

Researchers use the UMT to help them understand the role of entrepreneurs in solving daily business problems. The UMT principal construct is information seeking and

avoiding. Managers using the UMT treat information and uncertainty as two distinct concepts (Yang et al., 2021). The general principle is that people have different levels of information about individuals, situations, and events (Wang & Zhou, 2021). However, businesses using the UMT tend to have information about an event, person, or situation and still feel insecure or uncertain about the state and amount of information (Yang et al., 2021). This situation affects decision-making processes that are essential to the success of startups.

Monteiro de Carvalho (2021) noted project risk management is synonymous with uncertainty management. Risk management helps managers identify and control variations and predictable uncertainties. Monteiro de Carvalho (2021) noted risk management is essential for innovative managers. Entrepreneurs and managers must explore opportunities and mitigate risks to ensure their projects are successful. I incorporated the UMT as a viable framework for studying how entrepreneurs can respond to business risks created by uncertainties. The UMT helps entrepreneurs investigate cultural diversity, emotions, communication, and social support to inform them about how to deal with business risks created by uncertainty (Wang & Zhou, 2021). Culture, past experiences, and national origins affect entrepreneurs' different degrees of business uncertainty and anxiety. These factors also affect how entrepreneurs understand business uncertainties and implement specific directives or leadership styles over others for similar or different situations (Wang & Zhou, 2021). Comparing entrepreneurs' differing responses to similar or different situations provides insight regarding the causes of

business failure (Yang et al., 2021). The UMT is a framework through which researchers can learn about risks business uncertainties impose on entrepreneurs and advocate for strategies that can reduce these risks.

### **Meijer's Classification Tool**

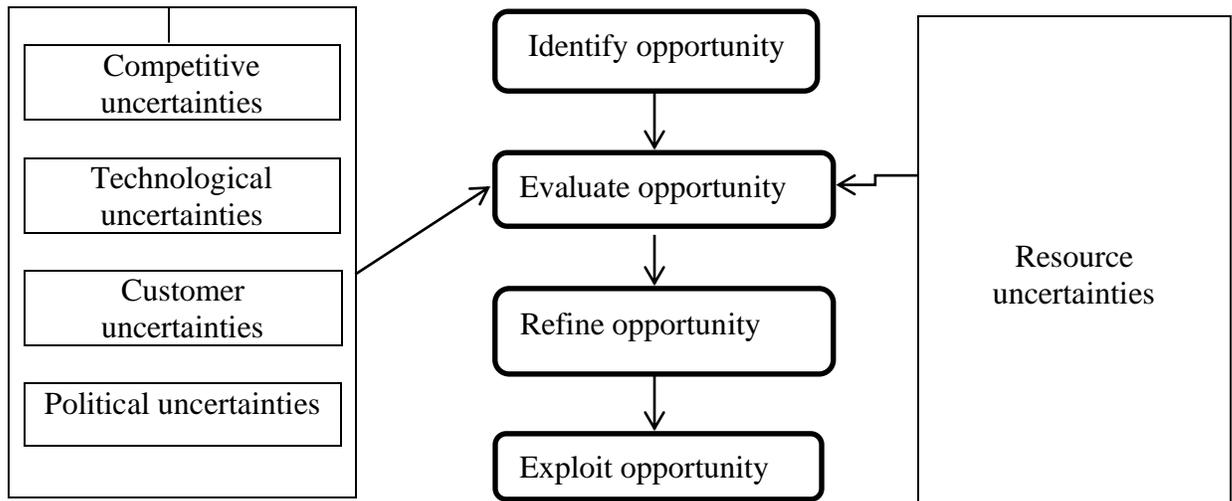
The Meijer's classification tool is used to help individuals classify the various types of uncertainty entrepreneurs may encounter while running their businesses. These classifications lead to themes that I will use to analyze qualitative data. Starting a business is relatively more straightforward than sustaining one. Startups must contend with competitive market forces such as entry barriers, substitute threats, buyers' power, suppliers' power, and competitive rivalries (Isabelle et al., 2020). Entrepreneurs must analyze these market forces to develop strategies that increase their chances of being successful. These forces exist as uncertainties that entrepreneurs must look to understand (Tomy & Pardede, 2018). Entrepreneurs who use Meijer's classification analysis tool is a tabular representation of the various forms of uncertainty. The tools helps entrepreneurs classify the various uncertainties and address the associated risks (Tomy & Pardede, 2018). It classifies uncertainty by describing the type of business environment each uncertainty affects. Meijer's classification tool classifies uncertainty into five major categories as shown below.

#### **Figure 1**

#### **Tabular Representation of Meijer's Classification Analysis Tool**

**External Environment**

**Internal Environment**



Entrepreneurs use Meijer's classification tool to evaluate and classify the uncertainties within the external and internal environment that may delay business opportunities. This strategy incorporates new technology as a source of uncertainty. Meijer's classification tool is essential to entrepreneurs during opportunity evaluation as it helps them decide whether to pursue or ignore a perceived opportunity. During the opportunity evaluation stage, the entrepreneur investigates and evaluates internal and external environments (see Figure 1) to determine uncertainties associated with the identified opportunity (Tomy & Pardede, 2018). Knowing the categories of uncertainty fall, via Meijer's classification tool, enables entrepreneurs to identify potential business risk factors and plan accordingly.

Economic trends influence entrepreneurs' decisions to introduce new ventures. Usually, entrepreneurs venture into business when needed capital is low and there is high

economic growth (Foss et al., 2018). Entrepreneurs should be aware of vast and varied business opportunities created by economic growth (Foss et al., 2018). Meijer's classification analysis tool helps entrepreneurs synchronize information about uncertainties which improves decision-making processes while identifying new markets (Assibi, 2022). Consequently, entrepreneurs can seek more information, educate themselves on the uncertainties related to opportunities and avoid any predictable risks.

Organizations compete to retain and make new customers, increase profit margins, and expand their market share. Hence, they need to conduct competitive analyses to identify ways to penetrate the competitive market and grow (Assibi, 2022). Entrepreneurs must understand that limited resources and lack of established suppliers and consumer channels negatively affects their new ventures (United Nations Conference on Trade and Development, 2022). Entrepreneurs need to make appropriate decisions that will help them determine their market and identify their competitors and respective market strategies. Using the ERM framework helps entrepreneurs gather up-to-date and relevant market information to establish risks of starting a new business (Pecina et al., 2022). Entrepreneurs can use the ERM framework to evaluate opportunities that they can exploit. For repeated events, entrepreneurs can use their experiences to reduce business risks associated with uncertainties. Zayadin et al. (2022) posited entrepreneurs using their experience to navigate business uncertainties must be knowledgeable and confident in their skills. Entrepreneurs should also keep an open mind and consider different possibilities while working on their startups (Mensah et al., 2021). Meijer's Classification

tool also provides entrepreneurs with a cognitive map that guides their imagination and assumptions, especially when dealing with complex decisions in uncertain environments (Hartwell, 2022). Therefore, it provides directions to entrepreneurs whenever they are uncertain with business opportunities.

Availability of resources and starting capital are crucial to entrepreneurs venturing into or maintaining their businesses. Entrepreneurs can use Meijer's classification analysis tool to accurately forecast capital and resource investments because it is used to question skills, expertise, knowledge, and revenue (Tomy & Pardede, 2018). Usually, uncertainty classification acts as a screening mechanism that increases an entrepreneur's understanding of the nature and characteristics of risks when opening a shop with uncertainties. Such understanding helps managers improve firm's profit margin, sales, and innovation power and allows it to grow. Meijer's classification tool increases knowledge that is essential for deciding what business they want to open.

### **Importance of Small Businesses**

Small businesses are essential constituents of the U.S. economy. The 2020 United States small business profile report noted that small businesses were responsible for employing 60.6 million people in 2017 (SBA, 2020). In 2019, small businesses created 1.6 million net jobs (SBA, 2020). Interestingly, small businesses have shaped the world into what it is today. These ventures have provided individuals with meaningful opportunities for financial independence and success.

The economic growth of industries and countries is dependent on the creativity of the citizens and employees (Correa-Quezada et al., 2018). According to the Small Business & Entrepreneurship Council [SBE] (2022), small businesses produce more significant innovation than large firms. The SBE (2022) reported small businesses generate approximately 1.2626 patent citations per million dollars of R&D stock. These small business patents contrast with the 0.5712 patent citations per million dollars of R&D stock reported for large firms (SBE, 2022). The high patents numbers indicate that small businesses are more creative and innovative than large firms. This creativity lead to economic growth of industries. The United States government should protect small businesses and their employees to increase economic growth.

According to SBA (2018), small businesses are more involved in innovative programs than large businesses. Small businesses' high innovation levels result from focused research programs, fast decision-making processes, and adequate compensation structures that highly reward top performers (Mandula, 2018). The success enjoyed by small businesses has forced large firms to downsize and separate employees into work units spark creativity and innovation (Correa-Quezada et al., 2018). This tendency to downsize large firms shows the importance of the innovative capabilities of small businesses to sustainability. Scholars need to study small businesses or startups to help eliminate or reduce risks created by uncertainties that may lead to their failure.

Small businesses are also advantageous as they provide entrepreneurs with equity (SBA, 2018). Most entrepreneurs run their business and later sell or pass it on to future

generations. Additionally, these businesses are a source of social prestige and status (SBA, 2018). Small business owners have complete control of the business operation and immerse themselves in daily operations out of passion and the desire to achieve the set goals (SBA, 2018). An entrepreneur establishes a certain level of control over the business, allowing him or her to create a satisfying brand for self and consumers (Mandula, 2018). Status, social prestige, and equity provide entrepreneurs with significant satisfaction from engaging in a business. This satisfaction offers more significant financial gain and independence, ensuring that small businesses or startups thrive, providing job security, and driving the local economy.

Small businesses within the U.S. require formalized risk management system because they form the largest and most important sector of the American economy. The ERM is a proactive risk prevention tool that addresses risk in all functional areas for small businesses and improves the probability of the businesses achieving their strategic objectives (Glowka et al., 2021). The ERM framework increases the value and effectiveness of a firm and reduces the risk of small business failure (Manas et al., 2021). The ERM framework provides entrepreneurs and managers with various risk mitigation options allowing them to improve their ability to forecast future business uncertainties. However, small business entrepreneurs rarely use the ERM framework to mitigate risks because they need to gain awareness of ERM benefits, fear change, and need more familiarity with the framework and the cost of implementing ERM.

### **Small Business Failure Statistics**

Each year, thousands of entrepreneurs in America start new business ventures. In 2021, there were 5.4 million applications for new businesses (The White House, 2022). Approximately half of these startups close or exit their respective industries within the first five years. Titus (n.d.) noted over 50% of startups fail within the first year, while 95% still need to make it to the sixth year. Titus (n.d.) posited startups with less than 20 employees have a 37% survival rate within the first four years and a 9% survival rate over ten years. The uncertainties surrounding these startups lead to massive business closures and low survival rates. According to Elbahjaoui et al. (2022), these businesses fail because of managers' inexperience and incompetency. Inexperience and incompetency are associated with the lack of appropriate skills, knowledge, and resources to handle a business. Entrepreneurs need to learn how to plan for the success of their businesses by learning about uncertainties and strategies to overcome them.

Dautovic (2019) also shared the same view and supported his argument using the U.S. Bureau of Labor statistics to inform aspiring entrepreneurs of the small business failure rates. According to the Bureau, 66.3% of small businesses founded in 2008 did not make it to 2018. Another 49.3% of startups founded in 2013 closed before 2018. Mansfield (2019) noted only 56% of small businesses started in 2014 made it to the fifth year and that their failure rate stood at 44% in the fifth year. This data indicates that many small businesses fail within the first five years. Entrepreneurs must seek ways to reduce

failure rates. Otherwise, many small businesses will continue to fail within the first five years of operation.

Entrepreneurs understanding the meaning of the term business failure can help them avoid the collapse of their businesses. Failure refers to inadequacies or deficiencies (Tomy & Pardede, 2018). When used in business, it mainly refers to the companies' closure, dissolution, disappearance, discontinuance, insolvency, bankruptcy, and entrepreneurial exit. Jayasekara et al. (2020) added small business failure occurs whenever the management fails its operational duties. Understanding terms such as disappearance, exit, insolvency, discontinuance, and bankruptcy is essential to avoiding small business failure.

Exit means that a business moves away from a specific market or production of a specific product (Díez et al., 2021). It could also mean that the entrepreneur ended his participation in the business. The disappearance of a business means that a given company or firm merges with another to form a new united business front. Insolvency refers to the firm's inability to pay its debts (Díez et al., 2021). Bankruptcy is when the debts owed exceed the value of a company's assets, capital, and profit and usually lasts for a year (Díez et al., 2021). Bankruptcy forces entrepreneurs to sell their non-essential assets to pay creditors. Unfortunately, insolvency has dire consequences that exceed those of bankruptcy (Jayasekara et al., 2020). Nevertheless, all these terms refer to business failure. Knowing these terms helps the entrepreneur identify relevant situations that indicate the business is close to failing.

### **Impact of Small Business Failure on Entrepreneurs**

Business failure in contemporary society is a constant that must be studied to ensure that entrepreneurs maintain hope in venturing into new markets. Knowing the impact of business failure on entrepreneurs can help identify significant themes related to business uncertainties. Dias and Teixeira (2017, as cited in Lattacher & Wdowiak, 2022) analyzed the impact of business failure on an entrepreneur's ability to run another business. The two researchers analyzed the progress and ability of an individual to develop new ventures after failing during the first attempt. Additionally, the study looked at business behavior and the consequences of failure. Dias and Teixeira (2017, as cited in Lattacher & Wdowiak, 2022) added business failure is a traumatic event that can result in a series of benefits and costs depending on how organizations view it. The two researchers also focused on successful entrepreneurs with prior experience with business failure. The researchers used a qualitative approach that administered semistructured interviews to six entrepreneurs: three from the south of Europe and three from the north. The findings revealed a strong correlation between previous business failures and an entrepreneur's decision-making ability. Prior experience with business failure reduces risks created by uncertainties, especially during the decision-making process. Lattacher and Wdowiak (2022) posited age, experiences, and perception of blame affects an entrepreneur's career path.

Businesses are moving towards extending their markets by targeting foreign customers as they take advantage of globalization and international agreements.

Regrettably, some of these businesses fail because of uncertainties that exist in the form of factors such as lack of competitiveness, aggressive diversifications, poor decision-making, inadequate corporate governance, misappropriation of funds, and poor capital structures (United Nations, 2020). These factors contributing to business failure relate to profitability, profit structures, growth, and liquidity. Entrepreneurs with businesses that fail while operating in foreign markets or countries tend to take a long time to repay their debts and feel discouraged to start over. Froese et al. (2019) recommended entrepreneurs working in foreign countries invest their time in understanding foreign countries' cultural, human resource, and regulatory environments. These managers or entrepreneurs must also learn how to create structures that are relevant and in line with these environments to avoid failure in foreign markets.

Entrepreneurs start their businesses so that they can succeed. Nevertheless, thousands of entrepreneurs experience damaging and painful failures each year independent of the stage of the business life cycle: birth, growth, maturity, decline, and revival stages (Klimas et al., 2020). Jayasekara et al. (2020) noted the causes of failure for startups differed from those of older and bigger firms. Interestingly, Jayasekara et al. (2020) posited startups and small businesses failed principally because of inexperience, management inefficiencies, and insufficient financial resources. After failure, some entrepreneurs choose not to reopen other businesses because of the associated psychological costs and financial losses. Self-awareness and career ambitions force other entrepreneurs to actively prepare for re-entry into businesses. However, the latter type of

entrepreneur must have strategies in place to overcome risks created by uncertainties to avoid failure during the second attempt.

### **Risk Versus Uncertainty**

Researchers frequently confuse business uncertainties with business risks. Typically, organizations use the uncertainty and risk concepts interchangeably. Alvarez and Barney (2005, as cited in Zhang & Burg, 2019) argued uncertainty and risk are synonymous. However, Nisani et al. (2022) noted a significant difference between risk and uncertainty. Risk refers to situations where the realized events are unknown, but all their probabilities are known. In contrast, uncertainty refers to situations where the events are unrealized, and their probabilities are unknown (Nisani et al., 2022). The Covid-19 pandemic is an example of business uncertainties. During the period, businesses reacted by granting employees leaves, reducing their working hours, and laying them off (Polinkevych et al., 2021). The actions by businesses slowed down economic growth and exposed most businesses to the risk of failure. An example of an event under risk is when a business moves its data to the cloud. There is always a probability that the data may be compromised, and the business must find a way to secure such data. Understanding when a business is facing uncertainties or risks is critical to the survival and growth of small businesses.

Pomerol (2018) recommended entrepreneurs continually plan, monitor, assess, and analyze all organizational necessities to meet organizational goals. Entrepreneurs can use the ERM framework to transform strategy into operational and tactical activities that

can help reduce risks created by uncertainties. Entrepreneurs using ERM programs tend to investigate the impacts of the external and internal environment surrounding a business (Jankensgard, 2019). The programs help entrepreneurs identify the sources of business uncertainties, raise the firm's value, create a competitive advantage, and reduce the risk of failure. Some of the sources of business uncertainties are listed in the literature below and follow Meijer's classification tool.

### **Business Uncertainties that Create Risks**

Small startups face intense pressure in a rapidly evolving, chaotic, competitive, and uncertain environment (Tomy & Pardede, 2018). Primarily, entrepreneurs fail because they lack adequate strategies to deal with risks created by uncertainties. Sniashko (2019) defined uncertainties as the lack of knowledge of probabilities of future events, such as market prices, entry mode choices, and entrepreneurs' commitment levels. Tomy and Pardede (2018) referred to uncertainties as a lack of understanding of any business situation. These two authors also posited that uncertainties create threats and opportunities for the creation of new ventures. Tomy and Pardede (2018) conducted a research study where they found that their success prediction model effectively identified the weaknesses, strengths, opportunities, and threats a business opportunity poses. Also, the findings indicated that the model could identify highly significant uncertainties and help with the utilization of resources.

Furthermore, the success prediction model helps identify the effects of uncertainties on different entrepreneurial stages. Lastly, Tomy and Pardede (2018)

indicated that this model is an essential tool that gives organizations a competitive advantage over their rivals. Pomerol (2018) argued entrepreneurs feed on uncertainty and identify areas where they can develop and create new startups. What these authors have in common is that they agree that entrepreneurs can use the knowledge of uncertainties to predict associated risks and evade business failure. That is, entrepreneurs need to manage risks associated with uncertainties to avoid the collapse of these startups. According to Meijer, uncertainties greatly influence entrepreneurs' actions and innovative decisions. Hence, entrepreneurs must continuously understand the different business uncertainties to reduce business risks.

### ***Environmental Uncertainties***

Environmental uncertainties refer to the inability of an organization or entrepreneur to predict future probabilities because of environmental factors. Predicting future probabilities depends on the business or entrepreneur having information about crucial business dimensions as informed by information technology (IT), supply chains, a shift in customer demands, new competitors, and socio-political factors. Yue and Gao (2021) studied the relationship between environmental uncertainty and business investment capabilities. Yue and Gao (2021) noted that increased environmental uncertainty makes it difficult for businesses or firms to obtain information and negatively affects decision-making processes.

Globalization and the recent upsurge of the Covid-19 pandemic have led to complex changes within business environments and behavior, resulting in environmental

uncertainties. Pires and Alves (2022) noted that the war in Ukraine, the pandemic crisis, rapidly changing technologies, increased competition, and globalization had increased business uncertainties. Pires and Alves (2022) recommended that managers seek financial and non-financial information to help them make better decisions to reduce environmental uncertainties. The ERM framework allows large companies to identify, control, measure, monitor, and analyze corporate risks (Wirahadi & Pasaribu, 2021). Unfortunately, small business decision-making depends on the judgment and subjectivity of entrepreneurs and managers. Entrepreneurs tend to be reactive in the event of risks and uncertainties, which reduces their ability to mitigate risks. Small businesses should use the ERM framework because it helps entrepreneurs identify better governance systems and lucrative prospects and create competitive advantages, especially in times of crisis.

High environmental uncertainty affects the ability of entrepreneurs to plan and control the performance of their businesses. Aprisma and Sudaryati (2020) examined the impact of environmental uncertainty on organizational performance. They noted that environmental uncertainty decreases sales volume, increases operating costs, and negatively affects business performance. Koç et al. (2022) examined the impact of environmental uncertainty on the supply chain. Koç et al. (2022) noted environmental uncertainty negatively affects the supply chain. Koç et al. (2022) proposed entrepreneurs must become agile and explore different supply chains to overcome environmental uncertainties. This assertion relates to the UMT framework, where entrepreneurs are encouraged to enhance their creativity, participation, and imagination to develop risk

management strategies to overcome environmental uncertainty. Later, entrepreneurs can use the ERM framework to convert the strategies into actionable solutions that reduce environmental uncertainties.

The food service industry can borrow some strategies from the healthcare industry to adapt to the external environment. The healthcare industry faces a complex and changing external environment in the form of intense government regulations, changing reimbursement schemas, workforce scarcity, and consumer demands. Adhikara et al. (2022) conducted a study to obtain empirical evidence on the effect of environmental uncertainty on hospital performance. The United States healthcare industry is moving towards value-based services to keep the population healthy. Lu et al. (2022) argued hospitals should find ways to adapt to new environments by encouraging innovations. Nevertheless, this healthcare industry has a complex structure with fragmented and idiosyncratic stakeholders who form the external environment and make it difficult to set up uncertainty management strategies.

Adhikara et al. (2022) noted the social and physical factors considered during decision-making form a firm's environment. Adhikara et al. (2022) indicated situational uncertainties in the environment cause variations in hospital performance because different managers respond differently to the uncertainties. Adhikara et al. (2022) recommended managers in hospitals use management control systems and budgetary slack to reduce environmental uncertainties while improving hospital performances. Lewandoski (2022) argued management control systems help hospital managers review,

monitor, and establish performance standards. Lewandoski (2022) stated managers using management control systems can focus on strategic uncertainties and develop effective strategies against environmental uncertainties. Adhikara et al. (2022) further recommended that healthcare managers develop adequate, complete, relevant, and related data on the professional environment to help improve decision-making processes. From the findings of this study, entrepreneurs in the food service industry should introduce information technology as an effective strategy to manage and control environmental uncertainties.

A firm's success depends on its management having an edge over its competitors. Managers do not always have an edge over their competitors because of the dynamic business environment. Firms must match their operations with the environment to improve performance and success rates. Zayadin et al., (2022) noted entrepreneurs must understand regional and local markets as their environment if they intend to make better decisions in situations with environmental uncertainties. Jabnoun et al. (2020) recommended organizations integrate environmental uncertainty with business strategy and quality management practices. Furthermore, Jabnoun et al. (2020) advocated organizations view environmental uncertainty as a function of environmental complexity and dynamism. Jabnoun et al. (2020) proposed four adaptive decision patterns to curb environmental uncertainty: reactors, analyzers, prospectors, and defenders' strategies. A defender strategy looks at market stability whereby an organization must safeguard a limited product within a given potential market segment (Jabnoun et al., 2020). A

prospector strategy encourages creativity, product innovation, market opportunity, and flexibility over efficiency. An analyzer strategy focuses on balancing innovation and efficiency. Lastly, reactors focus on responding to environmental changes (Jabnoun et al., 2020). Focusing on environmental changes helps entrepreneurs identify new opportunities, plan, tap useful resources, and improve profitability and performance of their businesses. Overall, these decision patterns help entrepreneurs maintain a competitive edge over their rivals and reduce environmental uncertainty.

Businesses need to maintain a competitive edge over rival businesses. To do so, firms must determine the effects of environmental uncertainty on their performance. Zayadin et al. (2022) argued environmental uncertainty affects entrepreneurs' decision-making capabilities and perceptions. Perceptions change dynamically affecting entrepreneurial behavior. Poor perception and decision-making abilities reduce organizational performance. Linn and Maenhout (2019) conducted a study to determine the effect of environmental uncertainty on the performance of the rice supply chain in the Ayeyarwaddy region in Myanmar. Linn and Maenhout (2019) interviewed 215 respondents who were selected using a purposive and stratified random sampling method. Additionally, the interviewed sample contained several actors—exporters, rice millers, retailers, farmers, and wholesalers—across the rice value chain. The authors also incorporated questionnaires and relevant published sources from the government and other organizations. Linn and Maenhout validated the data from the interviews and questionnaires using the Tobit regression model and the data envelopment analysis. The

study's findings indicated that high environmental uncertainty causes a delay in the delivery of finished goods, lowers efficiency, and destabilizes inventory levels within the rice value chain.

Additionally, uncertain drought occurrences and poor distribution of rainfall negatively affect rice yields. Linn and Maenhout (2019) noted high uncertainty in government policies, especially in developing countries, contributes to unpredictable levels of competition. These authors noted the rice supply chain could benefit from actively seeking relevant information to avoid environmental uncertainties. Linn and Maenhout (2019) recommended for the rice value chain to reduce environmental uncertainties, the various actors must prioritize their needs and resources, prepare for adverse climatic conditions, and work to formulate supply chain cooperatives. Koc et al. (2022) noted organizations need to seek realistic information about resource availability, market conditions, and technological advancement to gain competitive advantage over rival firms. With these information, managers can overcome environmental uncertainties.

Managers and entrepreneurs must distinguish environmental uncertainty's source, level, and nature of environmental uncertainty. Environmental uncertainty exists in the form of variability and cognitive uncertainties (Samsami et al., 2015, as cited in Drekolias, 2020). Cognitive uncertainty is dependent on the level and limitations of information and knowledge. Decision-makers reduce this form of uncertainty through learning, creating knowledge, and research. Variability uncertainty depends on a system's variability, such as cultural and social-economic dynamics, human behavior, and the

randomness of nature. Entrepreneurs also need to establish the level of uncertainty surrounding a given business situation. Koc et al. (2022) noted uncertainties constantly change and businesses must be agile while responding to uncertainties. Unfortunately, entrepreneurs could have a complete understanding to complete ignorance of a subject matter (Samsami et al. 2015, as cited in Drekolias, 2020). As a result, there will be businesses that survive while others that will fail. Overall, entrepreneurs need to be agile and informed to make better decisions to reduce high levels of environmental uncertainties.

Samsami et al. (2015, as cited in Drekolias, 2020) further indicated decision-makers are uncertain about various environments. Thus, to improve organizational performance, entrepreneurs must understand the contextual and transactional environment. Samsami et al. (2015, as cited in Drekolias, 2020) established two sources of environmental uncertainty: external and internal. The internal sources result from information processing, financial impact, and impact of organizational values. The external sources result from human and natural problems, organizational response to environmental uncertainty, rules and regulations set within a company, or a combination of two or more factors (Chen et al., 2022) . An entrepreneur must be privy to these conditions to avoid making the wrong decisions and contributing to the failure of his/her business. All in all, the knowledge of the level, nature, and sources of uncertainty helps decision-makers settle for the right choice of action.

The ever-changing technology and globalized competition have made business environments less predictable. Tweiqat and Al-Adaileh (2020) recommended organizations be flexible to survive uncertain environments. They argued that companies should adopt flexible production methods and workplace rules. Therefore, Tweiqat and Al-Adaileh (2020) conducted a research study examining the impacts of environmental uncertainty on human resource (HR) flexibility. The study used a mixed-method approach. The researchers issued valid questionnaires, which 266 managers of Jordanian banks filled out. The data collected was subjected to structural equations modeling to determine the relationship between HR dimensions under environmental uncertainty. These dimensions of HR flexibility included functional flexibility, market-oriented flexibility, behavior flexibility, financial flexibility, HR sustainability, and skill flexibility (Tweiqat & Al-Adaileh, 2020). The study revealed a relationship between HR flexibility and environmental uncertainty. According to Zandvoort et al. (2018), firms must develop a robust human resource management system to adapt to the ever-changing environment. Consequently, this will improve the chances for business success.

According to Sharma et al. (2020), the current Covid-19 pandemic presents environmental health uncertainties. The pandemic has negatively impacted the US hotel industry because of the social distancing policies and the unknown scale of the outbreak. Riaz (2020) noted hotels in the US have resulted in staff reduction, furloughs, and on the extreme, others have closed. The author also noted that hotel occupancy and revenues had dropped significantly in the United States. Correspondingly, some governments had

to give their citizens cash to survive the pandemic. The Covid-19 crisis has led to the collapse of businesses. This breakdown is because of the fear of contracting the disease in public spaces. Sharma et al. (2020) noted most governments restricted human movement, consequently impacting economic activities more so in the hotel industry. Taking that into account, hotels need to find ways to overcome the overall uncertainty associated with the pandemic.

### ***Resource Uncertainties***

Resource uncertainty within the business environment refers to a limited skilled workforce and financial resources. Difficulties in forecasting accurate capital investments and resources needed for innovation contribute to resource uncertainties. The success of any business depends on the managers' capability to find ways to avail the required expertise, knowledge, machines, revenue streams, technology adoption, cost structure, and expenditures (Foss et al., 2018). When operating a business, an entrepreneur must answer questions on the number of critical activities and resources to develop the necessary strategies to execute their business. According to Yang et al. (2018), entrepreneurs must continuously evaluate external and internal conditions and their effect on the value of resources. Additionally, entrepreneurs need to work on their networks and personal resources. Entrepreneurs should also rely on other businesspeople and businesses to acquire resources. Entrepreneurs should also rely on skilled human resources to improve innovation processes within their startups.

Resource uncertainty can also exist as a lack of access to social networks. Entrepreneurs grow by connecting with others who share ideas, messages, and businesses. Social networking provides entrepreneurs with communication channels that are particularly suitable for improving customer relations and increasing brand awareness (Foss et al., 2018). Tomy and Pardede (2018) argued that social networks help entrepreneurs reduce overhead costs and the potential risk of ownership because they provide entrepreneurs with resources without controlling them. Thus, entrepreneurs need social networks, especially those starting new ventures.

### ***Technological Uncertainties***

The high demand for new technology and innovations has created complex technologies that cause competition risks. The complexity of these technologies has increased technological uncertainties (Tomy & Pardede, 2018). These uncertainties provide a wide range of future outcomes that may threaten a startup's success. Furthermore, the speed of innovation has affected startups' ability to compete with established rival firms. Businesses must acquire technological infrastructure to manage and keep their customers (Tomy & Pardede, 2018). The availability of technological resources increases the chances of a business surviving, especially with the high uncertainty associated with emerging technologies. The high technological uncertainties call for entrepreneurs to predict a wide range of futures and research potential markets where they can introduce their products and services (Kapoor & Klueter, 2021). This future long-term strategy requires entrepreneurs to explore their creativity and intuition,

tenets of the ERM framework. Entrepreneurs should also document the objectives of their business and how they intend to achieve the goals by using a business plan. A careful analysis of a start-up business plan will reveal the dimensions of uncertainty the entrepreneur should have considered while starting the business (Welter et al., 2021). For example, the business plan may reveal that an entrepreneur made an error by postponing key innovative activities in certain phases of the business (Welter et al., 2021). These revelations will help the entrepreneur fast-track these innovative activities to save the startup from competition risks. Identifying such weaknesses and strengths is essential to developing strategies to deal with technological uncertainties.

Managers and entrepreneurs must continuously update their technology to remain relevant in their specific markets (Tomy & Pardede, 2018). The growth of companies and economies is dependent on product market innovation, rising income, and technological upgrades. These technological upgrades also translate to introducing new technology within the industry. The new technologies and their associated uncertainties influence the decision-making processes. Xiao et al. (2019) analyzed the impact of technological uncertainty on organizational product development. The authors noted that technology uncertainties affect manufacturers and suppliers. Xiao et al. (2019) recommended manufacturers tap into suppliers' knowledge of complementary resources and capabilities. The authors noted that suppliers' involvement with consumers helps inform manufacturers of designs and modifications they can make to their products as per consumer preferences. Xiao et al. (2019) further argued businesses could overcome

technological uncertainties by sharing technology and involving suppliers in product development teams. The inability of entrepreneurs to predict future outcomes originates from the unavailability of information and the lack of proper information processing mechanisms. Startups will likely experience technological uncertainties, especially when competing with larger firms. Tapping into the suppliers' knowledge of technology can help entrepreneurs obtain information related to their product designs and curb the adverse effects of technological uncertainties.

Technological uncertainty plays a significant role in decision-making and the introduction of new products and technology. Business owners are slowly increasing the use of technology and social media to advertise and market their products (Welter et al., 2021). A lack of familiarity with technological development creates indecisiveness among entrepreneurs and puts a business at risk of failure. Cedlöf and Nordengren (2021) conducted a qualitative study to explore existing literature on technological uncertainty. Additionally, the two authors interviewed company representatives to identify how decision-making processes are affected by uncertainty. The findings indicated that a lack of enough information on a potential technology made it difficult to decide on possible investments (Cedlöf & Nordengren, 2021). They recommended the use of technology vigilance and product flexibility to improve the chances of success for any business. Therefore, entrepreneurs need to invest in innovation and technology to increase their chances of success. Moreover, decision-makers must build platforms that allow their organizations to adapt, incorporate, and fine-tune new technology.

Introducing new technologies in the business environment is a challenge for most firms. The more complex a technology is, the more uncertainties it poses to firms and managers (Kapoor & Klueter, 2021). Firms that incorporate and understand the importance of IT are more likely to make better decisions than those that do not. Using IT systems allows entrepreneurs to forecast customer demands, receive consumer feedback, and make informed decisions that steer the firm in the right direction. For example, the Covid-19 pandemic negatively affected the food service industry because governments worldwide ordered restricted movement and the closure of hotels and restaurants. The food service industry reacted to this uncertainty by introducing contactless options such as live promotions, robots for food delivery, and delivery apps (Lau, 2020). For this reason, small business managers and entrepreneurs must adapt to huge technological uncertainties by investing in information technology systems.

### ***Political Uncertainties***

Analyzing political uncertainty helps entrepreneurs understand government policies that promote and regulate their businesses. Uncertainties in taxation, trade restrictions, copyrights, trade unions' policies, consumer law, safety regulations, and intellectual property significantly impact entrepreneurs' decisions (Brown et al., 2020). Meijer's classification analysis tool allows entrepreneurs to make dynamic decisions that can be amended or reconsidered with time (Tomy & Pardede, 2018). Interestingly, this method incorporates the entrepreneur's imagination and experience in solving uncertainties. For example, if the political environment is unstable, most entrepreneurs

will shy away from venturing into business (Montes & Nogueira, 2022). Further, classification allows firms to set conventions and terms within an organizational setting. Additionally, imposing a classification system increases the level of accountability. Meijer's classification analysis tool allows a startup to keep organized records of government policies and strategies to deal with business uncertainties.

Brown et al. (2020) noted government policies significantly impact the growth of startups and a country's economy. Brown et al. (2020) posited the polarization of the United Kingdom electorate is because of intensified political uncertainty. This political uncertainty has led to Brexit policies that have made the search for opportunities and forward economic planning challenging even for the most adept firms. Brown et al. (2020) indicated Brexit policies resulted in the loss of jobs, low innovative expenditure, and reduced exports for small and medium enterprises in the U.K. Montes and Nogueira (2022) noted political uncertainty affects economic policies and reduces business confidence. Uncertainty in economic policies reduces entrepreneurial opportunities and makes it difficult for opportunity entrepreneurs to venture into new businesses.

Amore and Corina (2021) posited political uncertainty affects firms' abilities to access resources and attain financial profitability. For example, the United States 'fiscal cliff' crisis in 2013 negatively impacted businesses in Washington. Amore and Corina (2021) noted political uncertainty rises during election periods because organizations are unsure of the voting outcomes and the effects of the policies that the incoming government will implement. Governments are critical in encouraging business expansion

and creation through tax incentives and friendly trade policies. Political uncertainties also negatively affect businesses because it lowers productivity growth rates and hinders business continuity (Ozdemir et al., 2021). Amore and Corina (2021) recommended entrepreneurs and firms seek information on specific elements of political institutions within the country they intend to invest in.

Political uncertainties relate to uncertainty regarding the future path that the government will take. Governments must adopt strategies and policies that drive the food service industry to practice corporate social responsibility (Fahad, 2022). Corporate social responsibility scores in the food service industry decrease with the increase of political uncertainty. Political uncertainty causes changes in a country's policies and risk perception that affect consumer behavior, firms' hiring behavior, and the financial markets. According to Ozdemir et al. (2021), political uncertainty negatively affects hotel occupancy and consumer confidence, with consumers avoiding visiting areas experiencing political instability. There is also the tendency for consumers to favor businesses with longer operating histories over newer businesses. Political uncertainties also cause substantial financial losses, with most hotels and restaurants being vacant during peak season (Ozdemir et al., 2021). Therefore, governments, with the help of food service industry stakeholders, must develop risk management systems for the failure of the food service industry because of political uncertainties.

### ***Innovation Uncertainties***

Small startups need to decide what innovation to incorporate to increase their chances of survival, especially if there are large and established firms in the same industry (Pomerol, 2018). Innovation refers to practices, products, or ideas considered new by business organizations that intend to adopt them (Dagan et al., 2021). By extension, innovation consists of four generic processes: struggle, variation, retention, and selection (Benner & Beunza, 2020). Variation refers to all the new ideas from which entrepreneurs select. Selection refers to picking and eliminating ideas and depends on environmental factors and organizational competencies. Struggle refers to the scarcity of resources required to implement the selected ideas. Retention refers to the duplication or preservation of new ideas for future use.

Innovation processes are surrounded by uncertainties and may not always solve the problems that the innovators intend them to. Given that the future is uncertain, it is also true that future innovations integral to business success are uncertain (Dagan et al., 2021). Luthfa (2019) noted these planned and deliberate innovative processes paradoxically could have negative and positive consequences. For that reason, entrepreneurs need to control and monitor the initiation and implementation processes for all innovative ideas that their businesses intend to adopt. Jalonen (2012, as cited in Luthfa, 2019) also noted innovation is a creative destruction in that new ideas and practices replace old organizational, technological, economic, and regulatory paradigms. The author also noted that the process is neither causal nor linear but one of failure or success. Luthfa (2019) conducted a qualitative case study research to understand

uncertainties within the business innovation processes. Luthfa (2019) noted the innovation process is uncertain and that innovations possess unanticipated, indirect, and undesirable consequences. Additionally, the interdependency of managerial, political, consequence, timing, acceptance, institutional, technical, and market uncertainty also affect the innovation process.

Success and communication are intertwined factors that are important for the survival of any organization (Van der Bles et al., 2019). Van der Bles et al. (2019) noted businesses should identify trustworthy people who communicate and relay information about uncertainties within an organization. Nevertheless, innovation creates uncertainties, as evidenced by employees who feel that their positions or jobs are threatened whenever innovation teams make progress. Having an entire organization suspicious of the intention of the innovation team will only contribute to a conflict of interest and the company's downfall. To avoid such situations, entrepreneurs and team managers should communicate to all employees why the company needs innovations. Luthfa (2019) also noted innovations provide organizations with a competitive edge because they can adapt to the ever-changing market. To drive growth, firms actively communicate about innovations within an organization.

Strategic uncertainty plays a significant role in causing innovation failure. Innovation teams that ignore corporate strategies and goals fail most of the time. Firms should ensure that those in senior leadership roles can effectively communicate the company's strategic goals (Medne et al., 2022). Innovative teams can meet the firm's

goals and targets with a clear strategy. Innovative teams also need to provide a firm's management with the necessary feedback to inform changes in the strategic goals (Johnsson, 2022). The constant communication and feedback eliminate the strategic uncertainties that can hold back the potential of innovation teams. Medne et al. (2022) proposed organizations should identify stakeholders, define their intrinsic benefits, and design strategies to increase the benefits to eliminate strategic uncertainty. These pre-planned actions help stakeholders demonstrate higher persistence toward implementing a firm's specific goals and vision. Johnsson (2022) noted continuous teamwork and strict plans create proper synergy levels that enable innovative work among innovative teams. This cooperation stimulates result integration and faster knowledge transfer in innovation teams. Johnsson (2022) acknowledged companies rely on being the first and best in developing innovation for commercial purposes. The faster the knowledge is passed, the earlier these organizations avoid strategic uncertainties.

Promoting innovation in business is inherently complex because innovations can only be partially predicted or planned. Bentley et al. (2021) examined the complexity and uncertainty surrounding innovative projects within the agricultural sector. The authors noted that businesses could overcome innovative uncertainties by identifying potential innovation gaps, involving all stakeholders in innovations, having flexible funds to seize potential opportunities, and anticipating changes during the implementation phases of innovations. Shoemaker and Day (2018) noted businesses should tolerate and encourage mistakes because it helps develop adaptive strategies to innovation uncertainties.

Entrepreneurs should also identify uncertainties at the inception phase and help change the result (Bentley et al., 2021). Shoemaker and Day (2018) argued businesses should not stick to the known because stagnation limits their capabilities to create new, innovative, and exciting products. Shoemaker and Day (2018) noted businesses could not evade uncertainties because uncertainties form a significant characteristic of future occurrences and affect present decision-making. The authors further recommended that businesses promote trial and error and experimental approaches to help businesses learn and overcome uncertainties.

Another form of uncertainty in innovation is commitment uncertainty.

Committing to an innovation project requires that employees commit to in-depth research because the research guides the employees in turning an idea into transformative innovations (Johnsson, 2022). Most employees are not prepared to work more hours, especially when there is no compensation or evaluation. As a result, an innovation team may become disinterested. Firms need to find creative ways to motivate these teams (Salisu et al., 2019). One such way can be through identifying and recruiting volunteers that want to be part of something bigger than their day job (Johnsson, 2022).

Additionally, a company can opt to include evaluation forms that measure the value of employee innovation. This strategy encourages employees to demonstrate innovation skills and improve an organization's outcome.

Salisu et al. (2019) evaluated the impact of employee commitment on innovation strategy and SMEs' performance. The two authors noted that SMEs that engage in

sustainable innovation increase their competitive edge and chances of survival. Salisu et al. (2019) adopted a quantitative survey research design to collect data from 229 managers and owners of SMEs located in Nigeria. The study revealed that innovation involved a certain degree of uncertainty, especially if the employees were not committed to the innovation process. Salisu et al. (2019) posited that effective innovation strategies and increased SME performance depend on an adequate level of employee commitment. Commitment also means that the employees must be open-minded and eager to learn to encourage innovative behavior (Johnsson, 2022). Leaders or top management must also be devoted to providing the necessary resources to allow innovations to succeed. Salisu et al. (2019) further posited that commitment uncertainty affects relationships between employees and the organization and results in demotivated employees, which negatively affects employees' innovative behavior.

### **Managing Risks**

Small businesses are the largest contributors to the American GDP (SBA, 2020). Surprisingly, small business owners lack the knowledge and experience to manage risks created by the changing business environment. The focus should be on helping these small businesses manage risks created by uncertainties to ensure economic sustainability. Chen et al. (2022) examined the relationship between risk management and business uncertainty. The authors recommended that entrepreneurs and managers should actively seek the most accurate information about future trends and patterns if their businesses are to survive. Chen et al. (2022) noted entrepreneurs must continuously improve their

enterprise management framework to reduce risks and encourage innovation. All these strategies result in improved competitive intelligence, market strategies, competitive position, and decision-making capabilities under risk and uncertainty. However, decision-making under risk and uncertainty differs, as discussed in the literature below.

### **Decision-Making Under Risk**

Risk occurs when an entrepreneur takes a given course of action dependent on known or estimated probabilities. Entrepreneurs need more control over the consequences or outcomes of the action they intend to take. Eliminating risk is arduous as one may reduce one risk and increase risks for other instances. An entrepreneur must evaluate all feasible alternatives and their outcomes. Further, an entrepreneur must explore and identify the optimal strategy that works with respect to work factors. Yang et al. (2018) indicated managing risk plays a significant role in building strong economies. Malewska (2018) revealed entrepreneurs need to classify risks if they intend to reduce risk. Malewska (2018) indicated decision-making under risk and uncertainty relies on incomplete information to realize unknown outcomes. Thus, decision-makers should invest in proper investigations to make better decisions under risk.

Decision-making under risk calls for entrepreneurs to evaluate different options. Sometimes, settling for a specific decision to eliminate risks may reveal other risks. Entrepreneurs must conclusively evaluate all feasible alternatives and their possible outcomes (Gul & Ak, 2018). Nevertheless, entrepreneurs must understand that risk and return are positively related; the higher the risk, the higher the returns (Malewska, 2018).

Gul and Ak (2018) recommended businesses calculate and quantify risks because it provides decision-makers with the most efficient decision. Investing in programs that help them quantify risks will help them make informed decisions.

### **Decision-Making Under Uncertainty**

The COVID-19 pandemic, global shifts such as technological transformations, evolving business models, and changing consensus on trade have created an uncertain business environment. These uncertainties have forced company executives to make slow and illogical or fast and superficial decisions (Monitor Deloitte, 2020). To make decisions under these uncertainties, company executives might wait and see, hedge their bets, or make flexible investments. Shoemaker and Day (2020) recommended companies explore multiple outcomes, emphasize organizational transformation, support research into new technology and markets, build trustworthy reputations, respond quickly to consumers, and identify predictable elements to inform their decisions. Sato and Altamirano-Cabrera (2019) proposed scenario analysis as the best strategy to predict a wide range of future possibilities. In scenario analysis, entrepreneurs or executives must identify a scenario of the highest priority within a firm and identify long-term risk management strategies to react to the situation before competitors do so.

Developing strategies to manage businesses successfully is complex because of factors such as culture, managerial behavior, and personal characteristics that significantly determine the orientation and strategies managers take while running their businesses. Sakikawa (2022) defined resilience as the ability of an organization to avoid,

absorb, learn, and rejuvenate from shock and transforming in a way that it can handle long-term changes, uncertainty, and stress. Fietz et al. (2021) noted national culture affects organizational resilience. The authors analyzed the North American Free Trade Agreement region to understand the influence of culture on uncertainty avoidance and a firm's resilience. Uncertainty avoidance refers to how different societies or societies tolerate and react to unpredictability or, in this case, business uncertainties. Fietz et al. (2021) noted entrepreneurs from national cultures with high uncertainty avoidance feel threatened by uncertain situations and tend to implement strict structures and rules to avoid unpredictability. Entrepreneurs from low uncertainty avoidance cultures are flexible, less formal, open to change, and willing to take risks.

Fietz et al. (2021) posited managers should be aware of cultural aspects to develop organizational resilience, which helps businesses anticipate uncertainties and recover from adverse situations. However, cultural differences do not limit the flexibility of these managers to adapt to the evolving business environment. Additionally, cultural uncertainty avoidance had minimal influence on approaches adopted by managers. Entrepreneurs should not discriminate but involve individuals from different cultural backgrounds in decision-making. This participatory management style makes it easier to improve success probabilities as a company draws information and knowledge from a vast pool of professionals (Wang et al., 2022). Unfortunately, the study does not include individual personalities and organizational culture while determining the influence of cultural uncertainty avoidance.

Uzoamaka et al. (2018) defined uncertainty as a situation that lacks credible outcome possibilities, is unpredictable, and the order of occurrence is unknown. Uncertainties affect business operations' implementation, planning, expansion, and evaluation processes. Himounet et al. (2021) noted uncertainty was the primary cause of the slow global recovery from 2007-2008 financial crisis in the U.S. Uzoamaka et al. (2018) indicated decisions made under uncertainty involve a degree of risk. For emerging markets, institutional changes and the interpretation of these changes affect decision-making during the initial business stages. Uncertainty cannot be clearly measured and managers have to rely on intuition that depends on partial ignorance and guesswork (Himounet et al., 2021). Such situations favor entrepreneurs or managers with high emotional intelligence. Uzoamaka et al. (2018) focused on the performance of manufacturing firms in Southeast Nigeria. The findings indicated that decision-making under uncertainty positively affected manufacturing firms' financial performance, shareholder returns, and product market performance in Southeast Nigeria. Uzoamaka et al. (2018) recommended that organizations identify empirically supported strategies to increase shareholder returns. By extension, managers should invest in market research to reduce the risk associated with uncertainty and improve market share performance.

### **Transition and Summary**

Section 1 included information about the problem that some entrepreneurs in the food service industry lack strategies for reducing risks caused by business uncertainties. This section also included the literature review involving fundamental forms of business

uncertainties, decision-making in terms of uncertainty and risk, and various conceptual frameworks small businesses can use to manage uncertainties. I used interview questions to determine strategies some entrepreneurs in the food service industry used to reduce risks created by uncertainties.

Section 2 contains information on the purpose of the study, my role as the researcher, importance of ethical research, and support for the chosen research design and method. This section also contains information about the data collection process and an overview of the study's reliability and credibility.

Section 3 includes study findings, recommendations, implications for social change and practice applications, personal reflections, and a concluding statement.

## Section 2: The Project

In this section, I included a restatement of the purpose statement and description of my role as the researcher, participants, research design and method, and data collection, analysis, and presentation. I used nine open-ended interview questions directed to entrepreneurs. I used data to establish risks created by business uncertainties and related themes. These themes helped me determine strategies that entrepreneurs can use to reduce risks created by business uncertainties.

### **Purpose Statement**

Through this qualitative multiple-case study, I explored strategies that entrepreneurs in the food service industry use to reduce risks caused by business uncertainties. The targeted population for this study was five food service entrepreneurs within the Northeast region of the U.S. who have successfully dealt with risks caused by business uncertainties.

Addressing business uncertainties can contribute to social change by helping food service entrepreneurs reduce associated risks. Individuals seeking to open businesses in the food service industry may use recommendations from this proposed study to improve their chances of success and thereby improve profit margins. Improved profit margins can contribute to positive social change by increasing job opportunities, improving local economies, and improving people's living standards within Northeast region of the U.S.

### **Role of the Researcher**

Researchers employ qualitative studies to explore feelings and thoughts of respondents to develop meaning and understanding of their lived-in experiences. Getting respondents to open up about their personal experiences is difficult as people tend to hesitate to reveal their experiences. Researchers must assure respondents that information is confidential (Quiles, 2021). This is a tenet of ethical researcher that researchers need to follow. Researchers are responsible for safeguarding information and study participants. The Institutional Review Board (IRB) and relevant bodies have clearly articulated processes researchers must review and follow before, during, and after the research process. As a researcher, I familiarized myself with research ethics. Ethics refers to moral principles researchers must adhere to at every time and place.

My role as a researcher as the primary research instrument was to ensure that my work did not violate any IRB guiding principles. I obtained informed consent, protected participants' confidentiality and anonymity, minimized risks of harm to participants, allowed respondents to withdraw from the research at their discretion, and avoided deceptive practices. These principles promote fairness, accountability, trust, and mutual respect and protect original ideas of researchers (Michler et al., 2021). By enforcing these principles, the IRB promotes professional behavior among researchers (Quiles, 2021). As the researcher, I ensured all respondents signed written consent forms. Additionally, I ensured all respondents fully understood applicable incentives, withdrawal procedures, and their role in the study.

I was also responsible for data collection, analysis, and representation. After getting approval, I ensured I used appropriate methods and tools for data collection and analysis. The rationale for using interviews is to reduce bias and provide rich information on the topic under study (Johnson et al., 2020). I prepared interview questions acted as a guide for interviews. These questions followed a logical order for ease of transition (Saunders et al., 2015). To avoid bias, I reported all findings irrespective of whether they aligned with my views. I also used an audit trail whereby colleagues and friends explored selection biases, examined judgments, ensured data saturation, located omissions, assessed explanations, and reviewed my interpretations.

Further, I sought participants' validation by getting their views on how they perceived the interview process and myself. I also used other individuals to help code data to ensure interpretation consistency (Saunders et al., 2015). Additionally, I made sure participants and I had no previous relationship. This sampling method ensured I did not pick respondents who shared similar perspectives with me, as this can promote personal bias (Johnson et al., 2020). As a researcher, I interacted with respondents within the confines of the research process. Such honesty and transparency reduces personal biases that affect credibility of research findings.

The 1979 Belmont report served as a guide that established ethical principles that all research studies involving human participants must follow. According to Anabo et al. (2019), three basic ethical principles for conducting research studies involving human participants are; respecting persons, distributing burdens and benefits (justice), and

having the interest of the participants in mind (principle of beneficence). Respect for persons involves protecting people with diminished autonomy and treating them as autonomous agents (Johnsson et al., 2020). Researchers must maximize benefits and reduce harm to human subjects via the principle of beneficence. Lastly, the justice principle dictates fairness and equality while selecting research subjects.

### **Participants**

According to Patino and Ferreira (2018), researchers seeking to design high-quality research protocols must establish exclusion and inclusion criteria. Inclusion criteria are characteristic that suitable participants for the study should possess. Exclusion criteria are characteristics of potential participants that could interfere with the study's success (Patino & Ferreira, 2018). I specified participants must own a business within the food service industry. Additionally, the business must have been operational for the past five years. As mentioned earlier, most businesses fail within the first five years. Interviewing entrepreneurs who have been operational for over five years ensured I got necessary and rich information about risks created by uncertainties these businesses have faced.

I intend to search for businesses that are over five years old with the help of a colleague and over the internet. I randomly picked five food service companies from the list and sought the audience of entrepreneurs who started those companies. I made personal visits to introduce myself and provided an overview of my study and informed consent process. I later followed up through calls and emails. I sent a copy of the consent

form and letter of acceptance to willing participants to sign and return via email. The consent form explained the interview process and ethical guidelines that ensured confidentiality of data as mandated by Walden's IRB. I created rapport with the participants and prioritized their comfort during the interview process. Lastly, I set 60 minutes as the maximum interview length.

### **Research Method and Design**

I used a qualitative multiple-case study design and interviewed entrepreneurs to get an overview of risks created by uncertainties they faced while in operation.

#### **Research Method**

Various reasons influenced my decision to use a qualitative approach for this study, such as my philosophical view, literature available on the topic, and research questions. My interest in this study was to explore strategies that entrepreneurs from food service industries use to address risks created by uncertainties by understanding experiences and views of successful entrepreneurs in this industry. According to Saunders et al. (2015), qualitative approaches are helpful when the researcher intends to understand and explore the meaning of a human or social problem. My philosophical viewpoint was anchored in social constructivism, whereby learning is viewed as an interactive process in which individuals gain and develop knowledge through interactions. I used a qualitative multiple-case study approach to get the thoughts, experiences, and feelings of entrepreneurs working under different environments and conditions (Mohajan, 2018). I also conducted semistructured face-to-face interviews held

at open and more neutral places (Saunders et al., 2015). Gill and Baillie (2018) noted qualitative researchers use interviews as the best data collection method. These authors also noted that interviews are easy to conduct and are good ways to seek opinions. Qualitative interviews helps researchers explore matters that are unique to interviewees and ensure readers understand phenomena as perceived and experienced. Researchers also use qualitative techniques to investigate normative behavior, attitudes, institutional perspectives, beliefs, and texts to expose knowledge in individuals' minds. .

Researchers using the quantitative method tend to generalize findings or explore relationships between variables. Quantitative methods incorporate closed-ended questions to collect and test relationship between variables. As a result, quantitative methods do not provide generalized data that thoroughly develop an understanding of strategies that entrepreneurs can use to reduce risks created by uncertainties (Gill & Baillie, 2018). Mixed methods use qualitative and quantitative approaches to answer research questions. Given the above argument, a quantitative approach was inappropriate; thus, using mixed methods was also inappropriate. The type of data needed to answer the research questions and identify strategies to reduce risks created by uncertainties was also another reason why a quantitative approach was inappropriate for addressing the research question (Saunders et al., 2015). The qualitative approach is suited for this study because the study focused on why and how a specific phenomenon existed. Researchers use qualitative studies to understand how participants view the world. Furthermore, I used the interview

responses to generate helpful information on the strategies entrepreneurs within the food service industry use to support sustainability and reduce risks created by uncertainties.

### **Research Design**

The research design refers to processes that link data to research questions (Mohajan, 2018). Qualitative research designs include phenomenology, case study, grounded theory, and ethnography (Saunders et al., 2015). For this study, I used the multiple-case study to inform entrepreneurs in the food service industry of the available strategies to reduce business risks: performance, competitive, and financial risks created by business uncertainties and their impact on social change. A gap in knowledge or our understanding requires that we seek explanation or clarification in a systematic manner (Mohajan, 2018). Researchers use multiple-case study designs when the study focuses on analyzing real-world issues and not the respondents' lived experiences. This method provides insight and raises awareness about the phenomenon under scrutiny, in this case, strategies for overcoming business uncertainties.

According to Neubauer et al. (2019), phenomenology focuses on the lived experiences of individuals and is a powerful approach for researchers who seek to explore and inquire about challenging problems. Neubauer et al. (2019) noted phenomenological research answers questions about what and how individuals experienced a phenomenon. Data obtained from phenomenological research is often large and disorganized because it involves large quantities of tape recordings and interview notes. Thus, researchers must categorize data from phenomenological research into key

issues and themes without bias (Qutoshi, 2018). However, a phenomenological design will only offer an understanding of the issue but will not address the strategies entrepreneurs can use to reduce risks created by business uncertainties. Therefore, I did not use phenomenological design for my study.

I could not use an ethnographic approach as this method involves engaging the participants' environment for years to clearly understand the themes, cultures, motivations, and challenges (Mohajan, 2018). With this approach, the researcher experiences the environment firsthand. For this research, I was not looking to understand the essence of entrepreneurs' experiences in guiding their businesses toward success. I was looking to explore strategies through which entrepreneurs in the food service industry can use to reduce risks created by uncertainty. Using a multiple-case study approach allowed me to involve interviews, observe, analyze documents, and engage participants to understand the study (Saunders et al., 2015). The multiple-case study design was the best-suited method for this study. The narrative research design is also ideal when forming cohesive stories from one or two individuals. This design was inappropriate for my doctoral study as I needed views for specific questions (Sim et al., 2018). The grounded theory approach seeks to explain the theory behind an event. For my study, I looked to know about a phenomenon rather than the theory behind an event. The approach was inappropriate for this research.

Data saturation is a methodological principle that indicates further data collection and analysis is unnecessary. Data becomes saturated when researchers explore numerous

data sources and repeatedly find similar instances without new information. A researcher must reach saturation to maintain the validity of the research conducted. For qualitative research, the depth of data is more important than sample size (Fusch et al., 2018). I asked probing questions and conducted follow-up interviews to achieve data saturation. A researcher should probe more about their interview questions (Fusch et al., 2018). I repeated these steps until I reached data saturation where there was no new information collected.

### **Population and Sampling**

Population refers to the totality or aggregate of members, objects, or subjects that conform to specific study or research guidelines (Gill & Baillie, 2018). I interviewed approximately 5 entrepreneurs in the food service industry currently running a business in the Northeast region of the United States. Chishimba (2018) noted using 5 participants and member checking in a research study helps achieve data saturation. Each interviewee had run their food service business for more than 5 years and had strategies that they had used to address risks created by uncertainties. To ensure that these individuals meet the criteria, I emailed and called them to verify if they had the experience to answer the interview questions. I then invited 5 of those participants that had met the qualifications.

Obtaining information from an entire population is an impossible task. Luckily, sampling enables researchers to collect a sample of the population that is representative of the rest. Sample sizes used in qualitative studies are smaller than those used in quantitative studies to support in-depth case-oriented analysis. Dworkin (2012, as cited in

Sim et al., 2018) noted many books and articles suggested and recommended sample sizes of between 4 and 30 as adequate for qualitative case studies. I interviewed 5 participants and achieved data saturation. Yin (2018) noted that careful sampling, small interview numbers, and strict data collection techniques could yield the answers to one's research question.

Researchers use purposeful sampling in qualitative studies to identify information-rich samples that provide an in-depth view of the phenomena under research (Shaheen et al., 2019). I used purposeful sampling to identify experienced and knowledgeable individuals running small restaurants within the food and service industry in the Northeast region of the United States. Researchers also use purposeful sampling to generate validity and credibility (Shaheen et al., 2019). For this research study, I got entrepreneurs who have successfully run their small food and service businesses in the past five years. This criteria helped me choose the most experienced entrepreneurs from a large pool (Saunders et al., 2015). I also needed participants who were available, willing to participate, and could clearly articulate their opinions and experiences. Using purposeful sampling was advantageous because I got information-rich responses from willing participants.

I sent the participants the consent forms, sample interview and research questions, and procedures for the study before the date of the actual interview. The respondents chose areas where they felt relaxed to engage in the exercise. I provided each participant with a means to contact Walden IRB staff to confirm the authenticity of the research.

Additionally, I informed the respondents that their participation was voluntary and that they could withdraw at any time from the interviews for any reason.

### **Ethical Research**

Ethical issues are at the forefront of social research, with the increasing concern about legislative changes and inquiry limits researchers must abide by (Bos, 2020). These issues challenge researchers on what constitutes the right ethical decisions. Humans research to contribute to knowledge that results in the progression of society (Shaheen et al., 2019). This knowledge is valuable when shared with scholars and other individuals. Researchers must also conduct research processes morally and soundly as ethical principles dictate (Bos, 2020). Ethical considerations ensure that research works to protect the welfare, rights, and dignity of research participants. Ethical research regulates research processes by ensuring that researchers maintain acceptable, moral, and legal behavior.

I used the Belmont Report to guide my research for this study. Belmont Report contains ethical guidelines that detail how to treat research participants justly and ethically. It also details the academic freedoms accorded to researchers (Bos, 2020). Ethical guidelines help researchers focus on upholding intellectual rights of other researchers (Johnsson et al., 2020). It also focuses on plagiarism, data falsification, sponsorship, beneficence, advocacy, and safety, writing and publishing rights, deception, confidentiality, informed consent, and vulnerable groups. I discussed these issues in

depth to ensure that the readers understood how each ethical guideline relates to my research study.

The Belmont Report has three basic ethical principles: respect for persons, beneficence, and justice. The respect for person principle indicates that participants are entitled to their choices and opinions (Anabo et al., 2019). According to this principle, not all participants can have self-determination and such individuals require protection (Johnsson et al., 2020). The accorded protection depends on the risk of harm and associated benefits (Anabo et al., 2019). The respect for person principle indicates that participation should be voluntary and that participants should have adequate information on the particulars of the research study to make an informed decision.

The beneficence principle ensures that researchers treat all participants ethically by making it an obligation. This principle emphasizes that researchers need to minimize or eliminate the risk of harm while maximizing benefits (Anabo et al., 2019). Researchers seek to add knowledge and associated long-term benefits that all members of society can enjoy. As such, society should help in the development and improvement of knowledge (Coleman, 2021). Such an obligation helps participants understand their importance in minimizing the risk of harm and maximizing benefits. Researchers must explain the principle of beneficence to all participants to ensure they provide the correct information.

The third principle is justice, which notes that researchers are ethically obligated to fairly distribute burdens and benefits associated with their studies (Anabo et al., 2019). According to the principle of justice, researchers must never exclude or exploit the

vulnerable without reason. The researcher must justify including vulnerable groups as warranted and not a matter of convenience (Bos, 2022). I followed these three principles and maintained the required ethical standards for my research study.

Voluntary and informed consent is an essential requisite for any research study. Voluntary meant I could not coerce the participants into participating in the research process. Before conducting any interviews, I issued several documents, including a confidentiality agreement, a letter of cooperation, and an invitation letter to all participants (Bos, 2022). The invitation letter explained the research process, purpose and use of research, the fact that participation did not include incentive, rewards, gifts or payment, and the privacy measures I had taken to protect the participants. Incentives encourage biased enrollment, undue inducement, and exploitation. Biased enrollment occurs when participants from lower socioeconomic status enroll at a higher rate than wealthy participants. Offering gifts or incentives undermines participants' autonomous decision-making because it encourages financially-motivated choices rather than their better judgment (Różyńska, 2022). Some researchers may also take advantage of participants by offering low wages compared to the economic benefits of the research. The incentives may also encourage a participant's tendency to frame situations which results in exaggerated findings.

I also provided informed consent forms to the participants explaining their participation is voluntary and they can withdraw from the interviews at any time without consequences or giving reason(s). The informed consent form had my contact

information for any concerns or questions participants might have had (Johnsson et al., 2020). Participants signed the form to acknowledge they understood the guidelines and had agreed to participate (Bos, 2022). I also ensured participants had sufficient information on the research procedure and allowed them to ask questions. Withholding information or misleading participants is an unacceptable form of deception. All these protocols ensured that I was in line with the Belmont report's principle of respect for persons.

Another primary responsibility of a researcher is to ensure confidentiality or anonymity. I protected data and information I collected from all participants during the interview process as dictated by the Walden University core values of integrity and quality. I stored interview notes, consent forms, transcripts, and interview recordings on my password-protected computer, which is only be accessible to me (Bos, 2022). I ensured I stored all hardcopy information in a locked area only accessible to me. Offering incentives depicts a lack of respect for the autonomy of persons (MacKay, 2022). I avoided such bias by ensuring participants understood that there were no incentives for their participation. Lastly, I ensured I did not use the participants' real names for any aspect of the research study or publications to protect participants' privacy. I used codes such as R1, R2, and R3 to refer to participants to protect their privacy. I ensured details that might identify the location of the restaurants remained private.

### **Data Collection Instruments**

For this study, I was the primary data collection instrument. I gathered firsthand experiences of entrepreneurs and got answers to specific questions as guided by the interview questions. Primary data refers to information collected from participants' firsthand experiences with a given phenomenon and is objective, reliable, and authentic (Ruslin et al., 2022). I served as this qualitative research study's primary data collection instrument. I conducted semistructured interviews in this multiple-case study to understand and determine strategies entrepreneurs can use to overcome risks created by business uncertainties. The qualitative data collected was in the form of sentences and words that captured participants' subjective perceptions, feelings, or emotions on a given topic (Taherdoost, 2021). These interviews were in the form of face-to-face conversations with participants. For those who were not comfortable with such an arrangement, I used the zoom online platform they deemed user-friendly. I conducted in-depth interviews with five entrepreneurs within the food service industry in the Northeast region of the U.S.

There are three major types of interviews: structured, unstructured, and semistructured (Taherdoost, 2021). Structured interviews are interviews that strictly follow given protocols to guide the researcher. These types of interviews are rigid; as such, the researcher is not allowed the freedom to explore or probe further. However, researchers can use a comprehensive list of interview questions that help them target specific experiences under research (Ruslin et al., 2022). Unstructured interviews have no

format as they follow a conversation-based format with no written interview questions. Researchers must establish rapport with interviewees to ensure they obtain beneficial information. Researchers using unstructured interviews must conduct several interviews to ensure they obtain necessary information (Taherdoost, 2021). Semistructured interviews follow a given interview protocol incorporating a written list of questions. I used semistructured interview questions to probe further for any additional information.

For my study, I used the semistructured interview technique to collect necessary information. This semistructured interview incorporated a conversational aspect that allowed me to probe further for any information I considered helpful for the study (Ruslin et al., 2022). I used a set of written interview questions to direct the conversation. I had compiled a list of nine interview questions related to the conceptual framework and research questions that I used to ask each of the five respondents (Appendix A). I used notes that I read to my respondents at the end of the interview to reduce errors in presentation (Johnson et al., 2020). The purpose of reviewing notes to the respondents was to ensure the notes reflected accurately answers they provided during the interview. Using this transcript review strategy helped me reduce my personal biases and data falsification.

Semistructured interviews are topic or thematic-centered or follow a narrative approach where a researcher must discuss or cover specific topics or themes (Ruslin et al., 2022). For this study, I ensured all my interview questions were open-ended and lasted a maximum of 60 minutes to ensure interviewees maintained interest in the

process. I allowed for the flexibility of interviews by conducting interviews at places convenient to the respondents to help interviewees feel safe and comfortable and contribute to collecting quality data (Taherdoost, 2021). Open-ended interviews allowed participants to talk freely, clarify, and even ask follow-up questions themselves. This process helped develop research-related themes.

Qualitative researchers must strengthen the reliability and validity of their interview protocols prior to conducting them. This process helps increase the quality of data I obtained from the interviews. Qualitative researchers must ensure the interview questions align with the primary research question (Taherdoost, 2021). I had my chair and colleagues review my interview and research questions for this study. The two groups found the questions necessary and would help the participants explain their experiences. I also developed open-ended interview questions that allowed me to converse with the interviewees and probe further for answers (Bushle et al., 2021). I also had my chair check the suitability and if participants could easily understand the interview questions. Through their feedback, I revised the vague and confusing questions and developed precise, simple, and understandable interview questions. Lastly, I conducted a field test to try out my recording devices and simulate consent, timing, recording, and rapport with my research study supervisor. These experiences prepared me for the actual interview. The experiences also helped me improve my interviewing skills, crucial to obtaining quality data. All these processes help me refine and develop reliable and valid interview protocols.

I made notes and recorded responses to enhance the reliability and validity of my findings. Record keeping was essential as it allowed participants and I to review the interview questions (Noble & Heale, 2019). It also provided an opportunity for future reference if the need arose. I stored the recordings and notes in a safe place only accessible to me to protect the privacy of the interview respondents (Taherdoost, 2021). I also sent all participants a summary of the interviews with my interpretations and requested them to member-check whether the interpretation represented their feelings, thoughts, emotions, and opinions.

I also used data triangulation from multiple literature review sources to validate the data collected. Data triangulation refers to using more than one method by qualitative researchers to establish and check the validity of their work (Noble & Heale, 2019). Researchers use data triangulation to capture the different dimensions of the phenomenon under research (Yin, 2018). As the primary researcher in this study, I used data triangulation to verify the research study by comparing the findings with data from small business websites, social media, and promotional brochures describing risk reduction strategies, thereby increasing its validity. I used triangulation by using multiple perspectives to construe the study's data set and achieve data saturation (Yin, 2018). I conducted a follow-up interview to discuss my interpretations of the answers with the participants. To achieve data triangulation, I reviewed multiple sources such as peer-reviewed scholarly journals, books, scholarly articles, face-to-face interviews, and observations to support the research design, findings, claims, and decisions herein. I used

the data collected to establish common and relevant themes related to business uncertainty strategies from the interview recordings and notes. The study findings aligned with the major tenets of Meijer's classification tool, UMT, and ERM theory, which indicated that the study was valid. I also documented the participants' reviews. All these processes helped me collect high quality data.

### **Data Collection Technique**

Qualitative researchers prefer to use data collection techniques that are less structured and more open-ended (Barrett & Twycross, 2018). One such technique is semistructured interviews. Interviews allow researchers to conduct in-depth analysis which brings forth new insights and evidence from participants on the phenomenon under study. The semistructured interviews are ideal for obtaining comprehensive knowledge from participants because communication is two-way (Yin, 2018). Researchers use semistructured interviews to learn the reasons behind interviewees' answers. Semistructured interviews give participants enough time and space to respond to sensitive issues. However, using semistructured interviews has challenges. Yin (2018) noted the possibility of a participant misunderstanding questions within a semistructured interview. Another disadvantage of using semistructured interviews is the interview may take longer than earlier scheduled. Even so, the benefits of semistructured interviews outweigh the disadvantages, and qualitative researchers should continue using them to obtain comprehensive knowledge of phenomena under research.

For my research study, I used semistructured face-to-face interviews to explore and determine strategies entrepreneurs use to address risks created by uncertainties. It is also essential for a researcher to establish a healthy working relationship with participants. A confident participant is a plus for the interview process. As such, I disclosed all information related to the research process as an assurance of goodwill to participants (Fusch et al., 2018). Individuals who are relaxed, comfortable, and at peace tend to give open-ended responses rather than one-word answers (Saunders et al., 2015). Creating rapport in interviews as a data collection technique helps the researcher avoid miscommunication and distortion during data collection. Additionally, using the semistructured open-ended interview questions helped me get a better and deeper understanding of strategies entrepreneurs used to reduce risks created by uncertainties.

I used member checking and data triangulation to check resonance of my interviews with respondents' experiences and accuracy of data (Fusch et al., 2018). For the data triangulation, I researched several scholarly and online sources to cross-check data and avoid bias if participants are unresponsive or emotional to the interview questions. I compared this information with participants' responses to determine a point of convergence of information. Member checking is one factor that determines data credibility (Gill & Baillie, 2018). Member checking involves sharing either a brief or whole summary of research findings with participants. I ensured participants reviewed my notes, recordings, and findings to ascertain what I had genuinely reflected in their opinions and truths they hold. Sharing the data enhanced the trustworthiness of the study

and also helped me clarify any ambiguous answers provided by participants. Member-checking and data triangulation enhanced the validity of my study.

A quality research report depends on asking the right questions. Inexperienced researchers may need help developing the right qualitative interview questions (Yin, 2018). Field testing allows researchers to practice interviewing and test soundness of the questions. Field tests help the researcher identify flaws or limitations within the interview protocol and allow enough time to make necessary modifications. Buschle et al. (2021) argued field test interviews do not require IRB approval because the researcher does not collect data during this stage. For this study, I conducted a field test with subject matter experts to ensure content validity. The process helped refine my interview protocol and mitigate research bias, which was critical to obtaining quality data.

A researcher uses interviews to control the order of questions and allow greater flexibility (Saunders et al., 2015). Additionally, interviews have better response rates when compared to mailing respondents. The researcher must ensure that personal biases do not affect the validity and credibility of the process. For this study, I followed the systematic interview protocol detailed in Appendix A. Interviews follow five main steps: introductions, small talks, information gathering, question-answer section, and conclusions. For my research study, I used the following interview protocol (See Appendix B). I prepared a notebook to note important details such as non-verbal cues. I then introduced myself and set the stage for the interview by creating some form of rapport with the respondents (Yeong et al., 2018). I also recorded and paraphrased the

answers from the respondents. These answers helped me probe further whenever necessary. Once I was through with the interview questions, I concluded and thanked the respondents for their time and knowledge. I also inquired about an appropriate time participants can be available for follow-ups or member checking.

### **Data Organization Techniques**

Data organization is classifying and categorizing data in a usable, orderly, and logical manner (Hartson & Pyla, 2019). All research works rely on a large amount of data that, if not properly arranged or stored, would confuse people with access to the research data. According to Hartson and Pyla (2019), data organization is an essential aspect of concept mapping, whereby the researcher builds an audit trail. It makes data interpretation and analysis easy and ensures high-quality findings (Hartson & Pyla, 2019). Additionally, data organization techniques help the researcher remain focused on the research task. Organizing all my interview research data helped me attain high-quality research findings.

I intended to determine strategies entrepreneurs can use to address risks created by business uncertainties. To explore these strategies, I used open-ended interview questions. I ensured data from these interviews was safe as I secured it into my password-protected laptop. I used the Microsoft Excel program because it is cheap, efficient, and saves time. Moreover, excel simplifies the organization, analysis, identification, and thematization processes. I coded data into themes to reduce data and create search aids for data that was in the form of hours of audio recordings and interview transcripts. The

Microsoft Excel software helped me reduce the large amounts of data into smaller packages arranged by themes relevant to the research topic.

I stored all raw data and documentation on my password-protected private computer that is only be accessible to me for five years. I used data for my research study to protect the interviewees' confidentiality. I then stored the data safely and securely on my password-protected laptop for five years. After five years, I will destroy the data.

### **Data Analysis**

Through this research, I established strategies entrepreneurs within the food service industry have used to reduce risks created by business uncertainty. I used thematic analysis to analyze the raw data I collected from interview notes and transcripts and compared with the literature and conceptual frameworks. Thematic analysis is a technique in which the researcher identifies patterns in data (Linneberg and Korsgaard, 2019). These patterns or themes answer the research questions posed. I read the interview transcripts extensively to familiarize myself with data. After familiarizing myself with data, I generated initial codes by identifying central concepts as dictated by associated conceptual frameworks and literature review (Kiger & Varpio, 2020). As the primary data collector, I analyzed meaning of whole paragraphs, sentences, phrases, and words related to the research questions and objectives to develop codes. For the next step, I used the codes to extract broader themes with significant meaning to the phenomenon under study. For this process, I sought help from others and used excel to review the themes. In the last step, I defined themes and developed a thematic map showing all possible

relationships. The developed themes helped me develop meaningful strategies to reduce risks created by uncertainties.

Linneberg and Korsgaard (2019) noted analyzing qualitative data is challenging as researchers must deliberately identify themes and codes that answer the research questions and objectives. The authors noted researchers must deliberately ensure the act of coding remains transparent. Researchers must structure data by considering its relevance, importance, and accessibility for subsequent data analysis (Kiger & Varpio, 2020). To achieve this objective, I broke my interview data into themes using the Excel software. The rationale for using Microsoft Excel was to provide structured and organized approach to analysis and save time. I derived and compared the themes from current and past literature reviews of the phenomenon under study. I established a clear pattern with the interviewees' responses to obtain some semblance of data undeniability (Linneberg & Korsgaard, 2019). I derived these patterns by focusing on themes correlated to the literature review, conceptual frameworks, any new studies, and analysis of data. After proper analysis, I revisited all the categorized data (codes and themes) to see if I could trigger other analytical ideas from recollections and selective impressions.

### **Reliability and Validity**

Researchers face numerous challenges that negatively influence data and results. If not fully addressed, these challenges affect the reliability and validity of a study. Researchers must meet specific data quality dimensions to make their studies fit for use. According to Yin (2018), any research study must have a clearly outlined and systematic

flow that depicts researcher's academic rigor, which is synonymous with high-quality research findings. I was thorough with my study to ensure it is credible, dependable, trustworthy, confirmable, and transferable.

### **Reliability**

The quality of qualitative studies depends on the validity and reliability of the method used (Saunders et al., 2015). There are numerous definitions of reliability, but for this study, I will refer to consistency and repeatability of the research findings (Coleman, 2021). I provided substantial details of each phase of my research study, design and data collection and analysis. I used well-ordered, scalable, and repeatable sound practices that can replicate the same results if used by other scholars or researchers, such as interview transcripts, field notes, accounting for research and personal biases, and meticulous record keeping (Coleman, 2021). To further establish the dependability of this research study, I conducted a field test before the actual interview. The field test helped me develop valid interview questions for the research topic. It also helped me avoid bias, ambiguity, and repetition and improve the authenticity of the interviews by adjusting the language and word choice ((Linneberg & Korsgaard, 2019). The field test also helped me correct mistakes I might have made when collecting, conceptualizing, and interpreting data.

Using member checking and triangulation increases the dependability of the interview process by confirming the accuracy of the field data. I provided each study participant with my interpretations, supporting data, recommendations, and findings.

Sharing this information allows the participants to affirm what I have is accurate as per their thoughts and experiences. It also shows that, as a researcher, I am prepared to exhibit the highest standards of honor and integrity (Saunders et al., 2015). To further strengthen the dependability of my research study, I maintained a meticulous record of all data collected and ensured data interpretation is transparent and consistent (Coleman, 2021). I also accounted for personal biases. To increase dependability of the study, I have included in detail the rationale for using a qualitative case study design and semistructured interviews. I also included the interview protocol which acts as a guideline for the interview. Ensuring the interview questions aligned with the research question further enhanced the dependability of the study.

### **Validity**

Validity refers to the degree of accuracy, appropriateness, and generalizability of the methods used, and the results obtained (Saunders et al., 2015). There are three aspects of validity: measurement, external, and internal. According to Saunders et al. (2015), internal validity ensures a study is consistent in using various researchers to collect, evaluate, and analyze data. External validity refers to the consistency of the findings whereby the results are applicable outside of the test (Yin, 2018). That means that a different researcher can replicate the findings for the same results. The measurement validity assesses a research study's criterion, content, and construct. Researchers must ensure the study's content matches instructional objectives (Yin, 2018). In addition, to achieve construct validity, researchers must use different forms of converging evidence.

For a qualitative study, validity refers to data transferability, confirmability, and credibility (Fusch et al., 2018). Credibility refers to confidence in the trustworthiness and believability of research findings. One way of enhancing credibility is member checking which helps validate data gathered through the interview process (Yin, 2018). I used member checking to enhance the credibility of the interpretation and address findings from the participants' viewpoints. Transferability refers to the possibility that future researchers and readers can use the research findings for their studies (Kyngäs et al., 2020). To enhance transferability, I made sure I provided a thick description of the research design and methodology, interview protocol, interview questions, participants' data, conceptual frameworks, and findings. The thick description was crucial as it ensured readers understood my study, its purpose, application, and where to incorporate it in future studies (Yin, 2018). Thus, it will be easy for them to decide which parts of my research study can fit into their future studies.

Confirmability refers to a research study's accuracy, validity, and truth. According to Kyngäs et al. (2020), researchers can improve the confirmability of qualitative studies through triangulation, audit trails or diagrams, the admission of assumptions, limitations, and beliefs, and the in-depth methodological description. For this study, I stated any assumptions made and used the member-checking approach to ascertain my study's confirmability. I used the triangulation of multiple sources to establish the confirmability of my study. Having multiple sources that support my findings and research topic is a good measure of credibility and validity (Noble & Heale, 2019). Triangulation is an

important aspect that helps researchers develop a comprehensive understanding of the phenomena under study. I used two conceptual frameworks to help interpret data I collected during the interviews. The credibility of a research study increases if repeated observations suggest similar findings.

Data saturation occurs when a researcher can no longer find new data or themes while examining the data sources within the study. Researchers arrive at data saturation through the abundance and richness of the research information regardless of the sample size (Yin, 2018). To achieve data saturation, I took the steps listed below. I gathered relevant research articles to guide my interview process, data collection, and presentation. I collected rich and informative data to a point where further data collection does not yield new information (Saunders et al., 2015). I also probed further during the interviews to ensure that the respondents had no new information on my research topic. I repeated these steps until I reach data saturation. All these processes helped me achieve data saturation for the research study.

### **Transition and Summary**

Section 2 contains information on the purpose of the study, my role as the researcher, importance of conducting ethical research, and support for the chosen research design and method. This section also contains information about the data collection process and an overview of the study's reliability and credibility. I carried out semistructured interviews with five entrepreneurs within the Northeast region of the U.S. to determine strategies that entrepreneurs can use to address risks created by business

uncertainties. I made official communications and set dates for interviews. I also made time to inform all participants about the interview process and sought their consent. I also created secure electronic files to store data from interviews. Securing such data helped with data analysis and the member-checking approach, which was essential for establishing my study's validity, trustworthiness, and integrity.

Section 3 includes study findings, recommendations, implications for social change and practice applications, personal reflections, and concluding statements.

### Section 3: Application to Professional Practice and Implications for Change

This section contains a summary of findings, overview of the study, possible implications for social change, application of the study to professional practice, and recommendations for action and further research. I also provide a reflection and conclusion of the study.

Through this qualitative multiple-case study, I explored strategies entrepreneurs within the food service industry can use to reduce risks created by business uncertainties. Data analysis included interviews with entrepreneurs who have run their food service outlets for over five years. Findings revealed business uncertainties, associated risks, and strategies these entrepreneurs used to prevent businesses from failure and increase their longevity.

I gathered, reviewed, and analyzed interview data from five entrepreneurs. I explored literature from different scientific and academic sources to identify themes and codes associated with the research. I used Excel to code themes that were relevant to the study. All participants agreed that to understand strategies entrepreneurs can use, entrepreneurs had first to understand various forms of business uncertainties and associated risks. Findings adequately answered the research question. This section includes results and related literature.

#### **Presentation of Findings**

The overarching research question for this study involved strategies entrepreneurs in the food service industry use to reduce risks created by business

uncertainties and support sustainability. Data for the study was from interviews, observations, and existing documents such as risk registers, contingency plans, and business plans. The study will help other businesses in the food industry understand risks and uncertainties and assist entrepreneurs in terms of understanding strategies to support sustainability. Participants answered eight open-ended questions that were instrumental to gathering information from their perspectives.

Findings included strategies entrepreneurs in the food service industry use to reduce risks created by business uncertainties. I also reviewed risk registers, contingency plans, and business plans of five small businesses to identify the risks and strategies they have used. I also used transcript review, and each participant attested to the accuracy of transcripts. I interpreted data using the ERM framework to address operations, and strategic and financial risks. I also interpreted strategies using the UMT to address risks through information sharing and avoiding. I identified six key themes entrepreneurs in the food service industry use to reduce risks created by business uncertainties. Eight major themes emerged from data analysis: financial planning, diversification, quality control, environmental, technological, resource, political, and competitive uncertainties.

Through this research study, I added to the body of knowledge regarding strategies entrepreneurs can use to sustain their businesses for a long time. I reviewed recent literature and compared it to findings from interviews. Findings from interviews indicated that food and service businesses faced uncertainties such as COVID-19,

inadequate finances, changes in technology, evolving customer preferences, competition, changing government policies, and misappropriation of finances. These problems can be classified as financial, technological, resource, political, customer, and competitive uncertainties. Therefore, entrepreneurs need to address these issues to improve their productivity and survival rates.

### **Key Themes**

There was a consensus among participants regarding risks created by uncertainties that they faced while running their businesses. Participants largely mentioned challenges related to financial inadequacy, competition, government policy changes, mismanagement of funds, evolving customer preferences, and technological advancements.

### **Financial Management**

Financial uncertainty affects investment decisions as entrepreneurs tend to delay expanding or investing. Lestari (2021) noted making financial decisions during uncertainties is challenging for both the government and individuals. Financially literate individuals tend to make better decisions and strategies. These strategies help individuals and organizations reach more favorable financial outcomes. These findings are in line with findings from my interviews. The consensus among participants was that small businesses must have effective financial management strategies involving fair resource allocation, proper budgeting, and maintaining financial reserves for emergencies in order to survive. There was consensus regarding the need for entrepreneurs and employees to

prioritize and control finances to reduce failure rates among small businesses (Jayasekara, 2020). Small businesses must plan, organize, direct, and control all financial undertakings to overcome business uncertainties. R3 and R4 noted small businesses need to have effective financial systems and avoid high debts. R5 noted firms should have financial buffers for emergencies and financially literate individuals running operations. R1 stated businesses should make right financial decisions.

### **Community and Professional Networking**

Having networks can help overcome crises, especially when facing resource constraints. Having a support system helps entrepreneurs respond and even benefit from crisis-induced uncertainties (Brändle et al., 2022). Entrepreneurs in crisis primarily interact with individuals within their professional network to further their interests. Participants noted they tended to collaborate with peers and professionals within the industry as valuable sources of advice and support. Small business entrepreneurs should seek other entrepreneurs in their industry to get useful insights regarding best practices and risk management strategies (Lestari, 2021). R4 used more experienced industry leaders and experts as a barometer to help prepare for change, including regulation changes, and monitor regulations and government mandates. R4 stated, “There is also the aspect of collaborating and networking with other peers in the business. Again, I tried to stay informed to avoid legal issues and penalties that would have diverted my funds.”

### **Diversification of Products and Services**

Entrepreneurs desire to have sustained improvement and growth for their businesses. One way of achieving sustained growth is through product and service diversification. Diversification involves offering a new line of a service or product to expand or ensure business survival. Such diversification also improves business image and profitability. The food and service industry is dynamic, making it difficult for individual firms to maintain their competitive positions. Enobong et al. (2022) noted firms tend to diversify into unrelated and related businesses to improve their competitive position, sustainability, and market visibility in the long run. Participants indicated diversifying their products and service ranges helped their businesses improve their performance and gain competitive advantage. R5 stated “Diversify the products so that you are always in business at all times.” R3 stated “Again, I diversified my products to meet customers’ preferences.” Diversification of products and services helped participants adapt to risks created by uncertainties.

### **Leveraging Technology**

A lot of uncertainties existed during Covid-19 pandemic. According to Abdelwahed and Soomro (2023), COVID-19 pandemic caused different economic, societal, and environmental risk and uncertainties. These uncertainties affected policymakers creating further uncertainties on decision making capacities. The pandemic damaged various sectors especially business start-ups (Abdelwahed & Soomro, 2023). People were not sure what would happen to the world because of the restrictions set by

the governments around the world. Kumar and Ayedee (2021) posited small and medium enterprises to adopt technology such as e-commerce and social media platforms to solve problems during COVID-19 pandemic. The researchers also noted entrepreneurs had to consider perceived usefulness and ease of use of technology, and their willingness to facilitate the adoption of the technology they chose. These assertions aligned with participants' responses regarding embracing technology to stay competitive and manage the uncertainties. For example, R5 stated "One is leveraging technology for contactless payment, online ordering and adapting to changes in consumers preferences." R3 stated "A good example is going contactless since the onset of COVID." These interviewees noted that they adopted technologies such as online ordering systems, contactless payment methods, and leveraged online platforms for marketing and delivery services.

### **Employee Engagement and Training**

Businesses need to build internal capacity and competency to survive in today's dynamic business environment. Entrepreneurs must ensure employees are committed towards business objectives. Failure to motivate employees leads to high turnover rates that burden organizations with high costs of hiring and training new employees. Prioritizing employee engagement improves productivity, efficiency, and effectiveness (Muzeyin et al., 2022). R1 stated "It's really spending time with our employees, educating them on how to handle customer interactions." R3 also stated "I also try to keep the employees motivated and offer bonuses once in a while especially when the profit margins are high." Entrepreneurs should create work environments that spar high

level of interest and dedication. Muzeyin et al. (2022) argued businesses must develop good, rewarding work-related frameworks. Participants emphasized the importance of having motivated and skilled employees. Participants noted training programs were good examples of reward systems. Participants noted training programs should focus on improving communication, teamwork, problem-solving, and crisis management skills, all of which are essential for managing risks created by business uncertainties. Training programs create positive attitudes among employees essential to developing effective strategies for dealing with risk created by uncertainty.

### **Market Research and Customer Feedback**

Customer satisfaction is a great predictor of customer behavior and company profitability. Businesses engage in market research to identify research information such as market segmentation, customer habits, track customer satisfaction, evaluate pricing tactics, and develop new products (Bilro & Loureiro, 2022). Understanding customer behavior and satisfaction helps businesses uncover reasons and thought processes involved when making purchase decisions. Businesses use this information to predict consumer action. Market research coupled with listening to customer feedback helps businesses develop products and mechanisms that suit the target tastes and preferences (Bilro & Loureiro, 2022). Findings from interviews indicate entrepreneurs need to listen to customers. R1 stated “I mean here we really focus on the customer experience and making sure that the customer always has a great experience.” Feedback is essential for adapting to changing market conditions and evolving consumer preferences. Listening to

customers improves customer retention and satisfaction because they feel that businesspeople value their opinions. Entrepreneurs must also plan and conduct market research to understand customers' needs and tailor their marketing activities.

### **Government Policy Compliance**

Policy uncertainties cause disruptions that delay progress of all businesses. Lei and Luo (2022) noted political and policy uncertainties affect capital flows, economic recoveries, and business cycles. These policy uncertainties negatively impact on information asymmetry by decreasing accuracy of information forecast. Additionally, these uncertainties allow managers with opportunities to distort nonfinancial and financial information (Lei & Luo, 2022). Multiple laws and regulations govern businesses in the United States. Failure to comply with these government policies puts enterprises at risk. Participants noted entrepreneurs who wish to succeed must comply with government regulations and policies to avoid legal issues and penalties especially by collaborating with local authorities and following guidelines to reduce political uncertainties. R1 stated "You, know, the other uncertainties are you know largely just with dealing with regulation and government interference in everything that we do." R5 stated "I have to watch any changes in the policies that the government might intend to put across." Participants noted applying a defensive strategy such as relying on adaptability and flexibility is an acceptable response to policy uncertainties.

### **Open Communication**

Information flow is critical during times of uncertainty. Employees rely on their employers for trusted information. Leaders who foster open communication with their employees showcase their willingness to solve organizational problems and grow the company. Healthy and open communication revitalizes resilience, strengthens bonds, and accentuates positive relations among individuals within an organization (Kalogiannidis et al., 2023). It also improves the general well-being of individuals who make decisions, which is essential for navigating uncertainty. This information is consistent with participants' thoughts on entrepreneurs developing organizational culture promoting open communication with employees and customers. R5 stated "Again, fostering a culture of open communication cultivates an environment that allows us to adapt to changing market condition." Open communication fosters a culture of transparency and adaptability. The respondents also highlighted the importance of listening to grievances and maintaining strong working bonds with employees.

### **Acceptance of Uncertainty**

Startups are untested business initiatives that individuals take in the hope of making profits. Starting and maintaining these businesses is challenging because of risks and uncertainties. Therefore, entrepreneurs must accept risks and be willing to transform. These efforts require effort, time, money, and resilience that most people lack (Thanh et al., 2021). As a result, many start-ups fail within the first 5 years. Therefore, entrepreneurs need to accept risks and uncertainties associated with businesses to

transform business opportunities into viable and successful business. R3 stated “Sometimes, you just have to learn through trial and error.” R1 stated “I mean, it's really kind of trial by fire, you know, personal experience.” Accepting that challenges exist means entrepreneurs can prepare well. This literature is consistent with the findings of the interviews. An overarching theme was the need for entrepreneurs to embrace uncertainty and associated risks. Acceptance was seen as essential in developing the right attitudes and mindsets to navigate challenges effectively.

### **Adaptation and Learning from Mistakes**

A common theme from the interviewees was adapting and learning from previous mistakes. Every entrepreneur must have time to reflect on the decisions and steps they have made over the course of operating their business. This form of adaptive mindset allows individuals to develop work plans and respond with revised project approaches (Kalogiannidis et al., 2023). Adapting and learning from mistakes also helps entrepreneurs understand the degree of complexity of problems they are facing. For example, R1 stated “I mean, I just really drawn upon my experience in the industry, you know, knowing what works.” As a result, they can predict the best strategies to use for future uncertainties. Participants recognized the ability to adapt quickly to changing circumstances and learn from past mistakes as a hallmark of successful entrepreneurship. R3 stated “So yeah, some decisions make the situation worse but, in my experience, doing nothing is far worse than just trying to solve the problems in any manner I see fit.”

Participants shared experiences of adjusting their strategies in response to evolving situations.

### **Application to Professional Practice**

Findings from this study are relevant to small business entrepreneurs who seek to grow and expand their start-ups for the foreseeable future. Small businesses are a primary source of economic progress in the U. S. These small businesses face numerous risks that affect their competitive position. Findings from this study will help entrepreneurs identify risks and relationships with business market position. This knowledge will then inform decision making processes. Uncertainties make decision making complex and slow. This negativity makes entrepreneurs miss out on possibilities. Knowledge on uncertainties improves the chances of success for entrepreneurs.

Findings from this study also increases awareness on strategies for dealing with business uncertainties. Findings indicated entrepreneurs should prioritize financial literacy and planning, diversification of products and services, embracing technology and adapting to changes. Entrepreneurs who understand these strategies can prepare best on how to embrace technology by sharing information, training, and encouraging participation among the employees. All these elements improve employee support and trust which leads to greater efficiency (Lestari, 2021). Entrepreneurs who understand the importance of product and service diversification will encourage innovation and creativity within their organization. Knowledge on strategies for dealing with business uncertainty is critical to improving how entrepreneurs manage risk and stress. Findings

from this study could help managers manage their fears and stress levels. Managing these elements will help improve their confidence and resilience essential to running a successful business.

Findings from this study can encourage individuals to participate in professional networks, local business communities, and industry associations. Networking gives entrepreneurs access to new opportunities and contacts essential to the growth of a business. Entrepreneurs need to adapt, and industries change with time and maintaining positive relationship with other business professionals helps entrepreneurs stay informed on new developments, policies or innovations (Brändle et al., 2022). Networking with professionals provides entrepreneurs with support in times of crisis. It also ensures entrepreneurs stay informed on contingency plans to minimize risks and negative impacts. Entrepreneurs should contact their immediate environment.

### **Implication for Social Change**

Findings from this study may contribute to positive social change by increasing the literature on how entrepreneurs can handle risks created by business uncertainties. According to Mitic (2022), approximately half of the small business startups in the U.S. fail within the first five years. Researchers need to develop strategies to improve small businesses' success rate. Through this study's findings, I hope to improve entrepreneurial knowledge on uncertainties. I also provided strategies on how to handle risks created by uncertainty. Entrepreneurs may use these findings to make informed decisions on what strategies to use depending on the risk they are facing at the given time. Business

managers can also use these strategies to improve business growth, competitive advantage, and organizational performance. An improved understanding of risks resulting from uncertainties can help create an enabling environment to increase employee performance, communication, knowledge, and work ethics. By looking at the study's findings, I recommended entrepreneurs engage and communicate with their employees. Using this strategy within a business startup creates a sense of belonging among the employees. Consequently, it improves their morale to work towards the organization's goal.

### **Recommendation for Action**

Small business entrepreneurs should review findings of this study and consider implementing strategies to deal with risks created by uncertainties. Based on findings, I recommend the following actions:

1. Small business entrepreneurs should consider adding complimentary products and services to supplement revenue stream.
2. Entrepreneurs should conduct research on the best technology to incorporate into their business to reach a wide customer base. They should invest in contactless payment methods, online platforms, and do thorough market research. Market research provides businesses with updated information on consumer preferences and trends. This information also helps businesses adapt to changing consumer behaviors and improve customer engagement.

3. Small business entrepreneurs should invest in training employees on problem solving, teamwork, and communication. Entrepreneurs should encourage employees to view challenges as opportunities for growth and improvement. All these skills will help employees adapt to risks created by uncertainties.
4. Entrepreneurs should foster a culture of open communication within their businesses. Good communication allows employees to share ideas, voice concerns, and provide feedback. Entrepreneurs should also communicate with local authorities and industry associations to ensure they understand and comply with government regulations and policies.
5. Entrepreneurs should cultivate professional networks to help their employees and themselves learn, receive support, and gain insights.
6. Entrepreneurs should embrace risk-taking tendencies, learn from their mistakes, and adopt proactive approaches while dealing with risks created by uncertainties. Learning from mistakes helps entrepreneurs develop contingency plans to minimize future potential risks or emergencies.
7. Entrepreneurs should invest in financial experts. Alternatively, they may take up short courses on how to budget, plan, and manage risks.

My study will be available in the ProQuest database and accessible to researchers, students, and entrepreneurs. Most individuals are unaware of the consequences of uncertainties have on start-ups within the United States. An improved understanding of uncertainties and the associated risks will improve how entrepreneurs run the businesses.

Information on this topic can be presented at national and statewide conferences. I will also publish information on my research in academic journals.

### **Recommendations for Further Research**

In this qualitative multiple case study, I explored strategies small business entrepreneurs in the food service industry use to deal with risks created by uncertainties. I used semistructured interviews and reviewed documents such as risk registers, contingency plans, and business plans. I used a sample size of five entrepreneurs from the food service industry within the Northeast region of the United States who had successfully dealt with risks caused by business uncertainties. This study has a limited scope and further research is needed to determine if there are other strategies entrepreneurs can use. I recommend further research be conducted on the following areas:

1. Given that my study was within a specific location and with a small sample size, researchers need to conduct another multiple-case study that includes other states and regions within the United States. The study should also have a larger sample size.
2. Additional research should be conducted to investigate the relationship between organizational resilience and employee training programs especially how crisis management, problem-solving, and communication contribute to a business's ability to deal with uncertainties.

3. Additional research should be conducted to investigate the relationship between entrepreneur's mindset, risk-taking behavior, and business success rates.
4. A comparative study should be conducted on other industries to determine strategies other small business entrepreneurs use to overcome risks created by uncertainties. The study should investigate if the strategies can be transferred as best practices into other industries.

### **Reflections**

The dissertation writing process has been an eye opener for me. I have been the sole researcher and I do not regret choosing this topic. Working on this research has improved my language and skills as a researcher. I have built this study by following all writing protocols provided to me by my professors. I have learned how to develop reliable and valid data. I have learned the importance of following ethical codes while conducting research that involves human participants. I interacted with great participants who helped me develop the interview transcripts. I found these participants welcoming and knowledgeable in the subject matter. I realized that the participants had valuable insights that I had not thought of. Their willingness to share also made me realize the importance of communication within any industry. The interviews provided valuable narratives that offer practical knowledge from real-world experiences. However, the process has had its challenges. I have had mental blocks or periods where I had exhausted all my energy writing this research study. I have had to rewrite some of the sections or

scrap them off entirely with the guidance of my supervisor. Overall, I feel the process has improved my skills and made me knowledgeable in matters related to risks created by uncertainties. Additionally, I realized that running a successful business involves coordinating various entities and resources.

### **Conclusions**

Findings from interviews underscore the multifaceted nature of risks and uncertainties faced by entrepreneurs in the food service industry. Successful risk management strategies encompass financial prudence, technology adoption, employee engagement, open communication, and the ability to adapt to changing conditions. Additionally, entrepreneurs should possess a mindset that embraces uncertainty and seeks opportunities for growth. The study's findings reinforce the need for entrepreneurs to plan, adapt, and continuously learn to increase small business's survival and success rates.

## References

- Abdelwahed, A. N. & Soomro, A. B. (2023). The COVID-19 crises: The threats, uncertainties, and risks in entrepreneurial development. *Risks*, *11*(5), 89.  
<https://doi.org/10.3390/risks11050089>
- Adhikara, A., Maslichah, Diana, N., & Basjir, M. (2022). Organizational performance in environmental uncertainty on the Indonesian healthcare industry: A path analysis. *Academic Journal of Interdisciplinary Studies*, *11*(2), 365–377.  
<https://doi.org/10.36941/ajis-2022-0058>
- Alsaaty, M. F., & Makhoul, H.H. (2020). The rise and fall of small business enterprises. *Open Journal of Business and Management*, *8*(4), 1908–1916.  
<https://doi.org/10.4236/ojbm.2020.84116>
- Amore, D. M., & Corina, M. (2021). Political elections and corporate investment: International evidence. *Journal of International Business Studies*, *52*, 1775–1796.  
<https://doi.org/10.1057/s41267-021-00421-6>
- Anabo, I., Albizuri, E. I., & Villardón, L. (2019). Revisiting the Belmont report's ethical principles in internet-mediated research: Perspectives from disciplinary associations in the social sciences. *Ethics and Information Technology*, *21*(2), 137–149. <https://doi.org/10.1007/s10676-018-9495-z>
- Aprisma, R., & Sudaryati, E. (2020). Environmental uncertainty and firm performance: the moderating role of corporate governance. *Jurnal Akuntansi*, *24*(2), 187–203.  
<https://dx.doi.org/10.24912/ja.v24i2.690>

- Arranz, N., Arroyabe, F. M., Molina, A., Fernandez de Arroyabe, C. J. (2019). Incentives and inhibiting factors of eco-innovation in the Spanish firms. *Journal of Cleaner Production*, 220, 1–28. <https://doi.org/10.1016/j.jclepro.2019.02.126>
- Assibi, A.T. (2022). The role of enterprise risk management in business continuity and resiliency in the post-covid-19 period. *Open Access Library Journal*, 9(e8642), 1–19. <https://doi.org/10.4236/oalib.1108642>
- Benner, J. M., & Beunza, D. (2020). *The influence of securities analysts on innovation: An evolutionary approach*. [https://mackinstitute.wharton.upenn.edu/wp-content/uploads/2020/03/Benner-Mary-Beunza-Daniel\\_The-Influence-of-Securities-Analysts-on-Innovation.-An-Evolutionary-Approach.pdf](https://mackinstitute.wharton.upenn.edu/wp-content/uploads/2020/03/Benner-Mary-Beunza-Daniel_The-Influence-of-Securities-Analysts-on-Innovation.-An-Evolutionary-Approach.pdf)
- Bentley, W. J., Naziri, D., Prain, G., Kikulwe, E., Mayanja, S., Devaux, A., & Thiele, G. (2021). Managing complexity and uncertainty in agricultural innovation through adaptive project design and implementation. *Development in Practice*, 31(2), 198–213. <https://doi.org/10.1080/09614524.2020.1832047>
- Barrett, D., & Twycross, A. (2018). Data collection in qualitative research. *Evidence Based Nursing*, 21(3), 63–64. <https://ebn.bmj.com/content/ebnurs/21/3/63.full.pdf>
- Bilro, G. R., & Loureiro, C. M. S. (2023). A systematic review of customer behavior in business-to-business markets and agenda for future research. *Journal of Business & Industrial Marketing*, 38(13), 122–142. <https://doi.org/10.1108/JBIM-07-2022-0313>

- Bos, J. (2022). Research ethics step by step. *Research ethics for students in the social sciences*. (pp. 227–273). Springer, Cham. [https://doi.org/10.1007/978-3-030-48415-6\\_10](https://doi.org/10.1007/978-3-030-48415-6_10)
- Brändle, L., Signer, H., & Kuckertz, A. (2022). Socioeconomic status and entrepreneurial networking responses to the COVID-19 crisis. *Journal of Business Economics*, 93, 111–147. <https://link.springer.com/article/10.1007/s11573-022-01120-w>
- Brown, R., Kalafsky, V. R., Mawson, S., & Davies, L. (2020). Shocks, uncertainty, and regional resilience: The case of Brexit and Scottish SMEs. *Local Economy*, 35(7), 655–675. <https://doi.org/10.1177/0269094220979261>
- Buschle, C., Reiter, H., & Bethmann, A. (2021). The qualitative pretest interview for questionnaire development: outline of programme and practice. *Quality & Quantity*, 56(1), 823–842. <https://doi.org/10.1007/s11135-021-01156-0>
- Cedlöf, C., & Nordengren, E. (2021). *The effects of uncertainty on decision making processes regarding companies' carbon footprint* (Ifo Working Paper No. 226) [master's thesis, Lund University]. <https://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=9060510&fileOId=9060513>
- Chen, Z., He, N., & Zhang, C. (2022). Risk management and uncertainty. *Advances in Economics, Business and Management Research*, 656, 1–6. <https://www.atlantispress.com/article/125975500.pdf>

- Chishimba, C. W. (2018). *Strategies for motivating sales employees' performance within small businesses in the United States* (Doctoral dissertation, Walden University).  
<https://eds-b-ebshost-com.ezp.waldenulibrary.org/eds/detail/detail?vid=10&sid=0c1494c7-8965-40cd-bdcf-58d6cbc3a02f%40sessionmgr103&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d%3d#AN=wldu.dissertations.6825&db=ir00976a>
- Coleman, P. (2021). Validity and reliability within qualitative research in the caring sciences. *International Journal of Caring Sciences*, 14(3), 2041–2045.  
[http://www.internationaljournalofcaringsciences.org/docs/54\\_goleman\\_special\\_14\\_3.pdf](http://www.internationaljournalofcaringsciences.org/docs/54_goleman_special_14_3.pdf)
- Correa-Quezada, R., Álvarez-García, J., Cruz del Río-Rama, M., & Maldonado-Erazo, P. C. (2018). Role of creative industries as a regional growth factor. *Sustainability*, 10(1649), 1–14. <https://doi.org/10.3390/su10051649>
- Dagan, G. J., Rafi, R. M., Sia, B. Y., & Dilla, S. (2021). How business innovation affects a company to improve the organization, entrepreneurship, and business model. *Advances in Economics, Business and Management Research*, 198, 98–102.
- Dautovic, G. (2019). Examining what percentage of small businesses fail. *Fortunly*.  
<https://fortunly.com/blog/what-percentage-of-small-businesses-fail/#gref>
- Díez, J. F., Duval, R., Fan, J., Garrido, J., Kalemli-Özcan, S., Maggi, C., Martinez-Peria, S. & Pierri, N. (2021). *Insolvency prospects among small and medium enterprises*

*in advanced economies: assessment and policy options*. International Monetary Fund. <https://www.imf.org/-/media/Files/Publications/SDN/2021/English/SDNEA2021002.ashx>

Drekolias, T. (2020). *Perceived environmental uncertainty and network development: The case of Greek SMEs* [Unpublished doctoral dissertation]. Sheffield Hallam

Enobong, U. I., Ekpenyong-Effa, O. O., Obong, M. M., Hammed, K. M., & Isong, U. K. (2022). Innovation: A moderating factor for the effectiveness of diversification strategies on the sustainability of hospitality firms in Nigeria. *GeoJournal of Tourism and Geosites*, 42(2spl), 727–734. <https://doi.org/10.30892/gtg.422spl11-882>

Fahad, S. (2022). The impact if economic policy uncertainty on corporate social responsibility: A new evidence from food industry in China. *PLoS ONE*, 17(6), 1–15. <https://doi.org/10.1371/journal.pone.0269165>

Fietz, B., Hillmann, J., & Guenther, E. (2021). Cultural effects on organizational resilience: Evidence from the NAFTA region. *Schmalenbach Journal of Business Research*, 73, 5–46. <https://doi.org/10.1007/s41471-021-00106-8>

Foss, N., Klein, P., & Bjornskov, C. (2018). The context of entrepreneurial judgment: Organizations markets, and institutions. *Journal of Management Studies*, 56(6), 1197–1213. <https://onlinelibrary.wiley.com/doi/full/10.1111/joms.12428>

- Fountouki, A., & Theofandis, D. (2019). Limitations and delimitations in the research process. *Perioperative Nursing*, 7(3), 155–162.  
[https://www.spnj.gr/articlefiles/volume7\\_issue3/pn\\_sep\\_73\\_155\\_162b.pdf](https://www.spnj.gr/articlefiles/volume7_issue3/pn_sep_73_155_162b.pdf)
- Froese, F., Sutherland, D., Lee, J., & Liu, Y. (2019). Challenges for foreign companies in China: Implications for research and practice. *Asian Business & Management*, 18(1), 1–26.  
[https://www.researchgate.net/publication/335330192\\_Challenges\\_for\\_foreign\\_companies\\_in\\_China\\_implications\\_for\\_research\\_and\\_practice](https://www.researchgate.net/publication/335330192_Challenges_for_foreign_companies_in_China_implications_for_research_and_practice)
- Fusch, P., Fusch, E. G., & Ness, L. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19–32.  
<https://doi.org/10.5590/JOSC.2018.10.1.02>
- Gill, P. & Baillie, J. (2018). Interviews and focus group in qualitative research: an update for the digital age. *British Dental Journal*, 225, 668–672.
- Glowka, G., Kallmünzer, A., & Zehrer, A. (2021). Enterprise risk management in small and medium family enterprises: the role of family involvement and CEO tenure. *International Entrepreneurship and Management Journal*, 17, 1213–1231.  
<https://doi.org/10.1007/s11365-020-00682-x>
- Gul, M., & Ak, F. M. (2018). A comparative outline for quantifying risk ratings in occupational health and safety risk assessment. *Journal of Cleaner Production*, 196, 653–664. <https://doi.org/10.1016.j.jclepro.2018.06.106>

- Hartson, R., & Pyla, P. (2019). The wheel: UX processes, lifecycles, methods, and techniques. In R. Hartson & P. Pyla (2<sup>nd</sup> Eds.), *The UX book* (pp. 27–48).  
<https://doi.org/10.1016/B978-0-12-805342-3.00002-3>
- Hartwell, A. C. (2022). The limits of institutions and the reliance on heuristics during the COVID-19 pandemic. *Journal of Applied Social Science*, 16(2), 419–441.  
<https://doi.org/101177/19367244221077410>
- Himounet, N., Serranito, F., & Vauday, J. (2021). Uncertainty is bad for business. Really? *International Network for Economic Research*, 3, 1–73. <https://infer-research.eu/wp-content/uploads/2021/04/WP2021.03.pdf>
- Isabelle, D., Horak, K., McKinnon, S., & Palumbo, C. (2020). Is porter’s five forces framework still relevant? A study of the capital/labour intensity continuum via mining and IT industries. *Technology Innovation Management Review*, 10(6), 28–41.  
[https://timreview.ca/sites/default/files/article\\_PDF/TIMReview\\_2020\\_June%20-%203.pdf](https://timreview.ca/sites/default/files/article_PDF/TIMReview_2020_June%20-%203.pdf)
- Jabnoun, N., Khalifah, A., & Yusuf, A. (2020.). *Environmental uncertainty, strategic orientation, and quality management: A contingency model*. Retrieved from [http://asq.org/pub/qmj/past/vol10\\_issue4/jabnoun.html](http://asq.org/pub/qmj/past/vol10_issue4/jabnoun.html)
- Jankensgard, H. (2019). A theory of enterprise risk management. *Corporate Governance International Journal of Business in Society*, 19(1), 1–29.

[https://www.researchgate.net/publication/331690391\\_A\\_theory\\_of\\_enterprise\\_risk\\_management](https://www.researchgate.net/publication/331690391_A_theory_of_enterprise_risk_management)

Jayantha, C. (2018). COSO enterprise risk management (ERM) framework and a study of ERM in Indian context. *Evolution of Enterprise Risk Management*, 730–738.

[https://www.researchgate.net/publication/328686591\\_COSO\\_Enterprise\\_Risk\\_Management\\_ERM\\_Framework\\_and\\_a\\_Study\\_of\\_ERM\\_in\\_Indian\\_Context](https://www.researchgate.net/publication/328686591_COSO_Enterprise_Risk_Management_ERM_Framework_and_a_Study_of_ERM_in_Indian_Context)

Jayasekara, E., Narada damitha, F., & Ranjani, R. (2020). A systematic literature review on business failure of small and medium enterprises (SME). *Journal of Management*, 15(1), 1–13.

[https://www.researchgate.net/publication/338923862\\_Business\\_failure\\_of\\_small\\_and\\_medium\\_enterprises\\_-\\_A\\_Review](https://www.researchgate.net/publication/338923862_Business_failure_of_small_and_medium_enterprises_-_A_Review)

Johnson, L. J., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*, 84(1), 7120. <https://doi.org/10.5688/ajpe7120>

Johnsson, M. (2022). *How to create high-performing innovation teams*. Berlin, Boston: De Gruyter. <https://doi.org/10.1515/9783110731934>

Kabeyi, B. J. M. (2019). Organizational strategic planning and implementation and evaluation with analysis of challenges and benefits for profit and nonprofit organizations. *International Journal of Applied Research and Studies*, 5(6), 27–32. <https://doi.org/10.22271/allresearch.2019.v5.i6a.5870>

- Kalogiannidis, S., Syndoukas, D., Papaevangelou, O., & Chatzitheodoridis, F. (2023). Relationship between business communication and business sustainability in times of uncertainty. A case study of Greece. *International Journal of Professional Business Review*, 8(5), 1–27.  
<https://doi.org/10.26668/businessreview/2023.v8i5.1477>
- Kapoor, R., & Klueter, T. (2021). Unbundling and managing uncertainty surrounding emerging technologies. *Strategy Science*, 6(1), 62–74.  
<https://doi.org/10.1287/stsc.2020.0118>
- Kiger, E. M., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846–854.  
<https://doi.org/10.1080/0142159X.2020.1755030>
- Koç, E., Delibas, B. M., & Anadol, Y. (2022). Environmental uncertainties and competitive advantage: a sequential mediation model of supply chain integration and supply chain agility. *Sustainability*, 14(8928), 1–18.  
<https://doi.org/su1414892>
- Klimas, P., Czakon, W., Kraus, S. Kailer, N., & Maalaoui, A. (2020). Entrepreneurial failure: a synthesis and conceptual framework of its effects. *European Management Review*, 18(1), 167–182. <https://doi.org/10.1111/emre.12426>
- Kumar, A., & Ayedee, N. (2021). Technology adoption: A solution for SMES to overcome problems during COVID-19. *Academy of Marketing Studies Journal*, 25(1), 1–16. <https://www.abacademies.org/articles/Technology-adoption-a->

solution-for-smes-to-overcome-problems-during-covid19-1528-2678-25-1-337.pdf

Kyngäs, H., Kääriäinen, M., & Elo, S. (2020). The Trustworthiness of Content Analysis.

In: Kyngäs, H., Mikkonen, K., Kääriäinen, M. (eds) *The Application of Content Analysis in Nursing Science Research*. Springer, Cham.

[https://doi.org/10.1007/978-3-030-30199-6\\_5](https://doi.org/10.1007/978-3-030-30199-6_5)

Lattacher, W., & Wdowiak, A. M. (2022). Entrepreneurial learning from failure. A

systematic review. *International Journal of Entrepreneurial Behavior &*

*Research*, 26(5), 1093–1131. <https://doi.org/10.1108/IJEBR-02-2019-0085>

Lau, A. (2020). New technologies used in COVID-19 for business survival: Insights from

the hotel sector in China. *Information Technology & Tourism*, 22, 497–504.

<https://doi.org/10.1007/s40558-020-00193-z>

Lei, G. L., & Luo, Y. (2022). Political/policy uncertainty, corporate disclosure, and

information asymmetry. *Accounting Perspectives*, 22(1), 1–158.

<https://doi.org/10.1111/1911-3838.12317>

Lestari, D. (2021). Financial decision under uncertainty: Lessons from Indonesian

millennial. *Webology*, 18(special issue 04), 1223–1240.

<https://doi.org/10.14704/WEB/V18SI04/WEB18194>

Linn, T. & Maenhout, B. (2019). The impact of environmental uncertainty on the

performance of the rice supply chain in the Ayeyarwaddy region, Myanmar.

*Agriculture and Food Economics*, 7(11), 1–29. <https://doi.org/10.1186/s40100-019-0128-6>

- Linneberg, M., & Korsgaard, S. (2019). Coding qualitative data: a synthesis guiding the novice. *Qualitative Research Journal*, 1–27.  
[https://www.researchgate.net/publication/332957319\\_Coding\\_qualitative\\_data\\_a\\_synthesis\\_guiding\\_the\\_novice](https://www.researchgate.net/publication/332957319_Coding_qualitative_data_a_synthesis_guiding_the_novice)
- Lu, W., Song, X., Hou, C., & Zhu, J. (2022). The effect of slack resources on innovation performance and the environmental adaptability of public hospitals: The empirical evidence from Beijing of China. *Frontier in Public Health*.  
<https://www.frontiersin.org/articles/10.3389/fpubh.2022.904984/full>
- Luthfa, S. (2019). A study of how uncertainty emerges in the uncertainty-embedded innovation process. *Journal of Innovation Management*, 7(1), 46–79.  
[https://doi.org/10.24840/2183-0606\\_007.001\\_0005](https://doi.org/10.24840/2183-0606_007.001_0005)
- Mackay, D. (2022, February 28). The ethics of payments to research participants. *International Initiative for Impact Evaluation*.  
<https://www.3ieimpact.org/blogs/ethics-payments-research-participants>
- Magnani, G., & Zucchella, A. (2018). Uncertainty in entrepreneurship and management studies: A systematic literature review. *International journal of business and management*, 13(1), 98–133. doi:10.5539/ijbm.v13n3p98
- Malewska, K. (2018, May 24). *Intuition and entrepreneurship in business practice*. *International conference on management, leadership, and governance*. Bangkok

University.

[https://www.researchgate.net/publication/331071463\\_Intuition\\_and\\_Entrepreneurship\\_in\\_Business\\_Practice](https://www.researchgate.net/publication/331071463_Intuition_and_Entrepreneurship_in_Business_Practice)

- Manas, N., Zakuan, M. N., & Setapa, M. (2021, October 27). *The practices of enterprise risk management (ERM) in small and medium enterprises (SMES) – A literature review*. E-Proceeding 8<sup>th</sup> International Conference on Public Policy and Social Science, Malaysia. <https://ir.uitm.edu.my/id/eprint/55188/1/55188.pdf>
- Mansfield, M. (2019). Startup Statistics-The numbers you need to know. *Small Business Trends*. <https://smallbiztrends.com/2019/03/startup-statistics-small-business.html>
- Mandula, M. (2018). *Impact of small business to the overall US economy*. Retrieved from <https://www.ucfunding.com/impact-of-small-business-to-the-overall-us-economy/>
- Medne, A., Lapina, I., & Zeps, A. (2022). Challenges of uncertainty in sustainable strategy development: Reconsidering the key performance indicators. *Sustainability*, *14*(761), 1–17. <https://doi.org/10.3390/su14020761>
- Mensah, E.K., Asamoah, L.A., & Jafari-Sadeghi, V. (2021). Entrepreneurial opportunity decisions under uncertainty: Recognizing the complementing role of personality traits and cognitive skills. *Journal of Entrepreneurship, Management, and Innovation*, *17*(1), 25–55. <https://doi.org/10.7341/20211711>
- Michler, D. J., Masters, A. W., & Josephson, A. (2021). Research ethics beyond the IRB: Selection bias and the direction of innovation in applied economics. *Applied*

*Economic Perspectives and Policy*, 43(12), 1–18.

<https://doi.org/10.1002/aapp.13132>

Mitic, I. (2022, January 18). *Small business failure statistics to know in 2022 – A realistic picture*. Fortunly. <https://fortunly.com/statistics/small-business-failure-statistics/#gref>

Mohajan, H. (2018). Qualitative research methodology in sciences and related subjects.

*Journal of Economic Development, Environment and People*, 7(1), 23–48.

[https://mpira.ub.uni-muenchen.de/85654/1/MPRA\\_paper\\_85654.pdf](https://mpira.ub.uni-muenchen.de/85654/1/MPRA_paper_85654.pdf)

Monitor Deloitte (2020). *COVID-19: Confronting uncertainty through and beyond the crisis*. <https://www2.deloitte.com/content/dam/Deloitte/ca/Documents/about-deloitte/ca-en-about-covid-19-confronting-uncertainty-through-beyond-crisis.pdf>

Monteiro de Carvalho, M. (2021). Risk and uncertainty in projects management:

Literature review and conceptual framework RECEBIDO. *Production*

*Management Operations and Systems*, 12(2), 93–120.

<https://doi.org/10.15675/gepros.v12i2.1637>

Montes, G. C., & Nogueira, F. S. L. (2022). Effects of economic policy uncertainty and political uncertainty on business confidence and investment. *Journal of Economic Studies*, 49(4), 577–602. <https://doi.org/10.1108/JES-12-2020-0582>

Muzeyin, J. R., Ahmed, H. M. S., Awoke, Y., Ferejo, M. N., Abebaw, T., Beyene, T. Y., & Amde, S. J. (2022). Exploring determinants of employee engagement in the

emerging market. *Corporate & Business Strategy Review*, 3(2), 238–247.

<https://doi.org/10.22495/cbsrv3i2siart5>

Neubauer, B., Witkop, C., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8, 90–97.

<https://link.springer.com/article/10.1007/s40037-019-0509-2>

Nisani, D., Qadan, M., & Shelef, A. (2022). Risk and uncertainty at the outbreak of the COVID-19 pandemic. *Sustainability*, 14(8527), 1–12.

<https://doi.org/10.3390/su14148527>

Noble, H. & Heale, R. (2019). Triangulation in research, with examples. *Evidence Based Nursing*, 22(3), 67–68.

[https://www.researchgate.net/publication/333794057\\_Triangulation\\_in\\_research\\_with\\_examples](https://www.researchgate.net/publication/333794057_Triangulation_in_research_with_examples)

Nocco, W. B., & Stulz, M. R. (2022). Enterprise risk management: Theory and practice. *Journal of Applied Corporate Finance*, 34(1), 81–94.

<https://doi.org/10.1111/jacf.12490>

Office of Inspector General (2022). *Enterprise risk management framework*.

[https://www.stateoig.gov/system/files/oig-erm-22-02\\_state\\_oig\\_erm\\_framework\\_508.pdf](https://www.stateoig.gov/system/files/oig-erm-22-02_state_oig_erm_framework_508.pdf)

Ozdemir, O., Han, W., & Dalbor, C. M. (2021). Economic policy uncertainty and hotel occupancy: The mediating effect of consumer sentiment. *Journal of Hospitality and Tourism Insights*. <https://doi.org/10.1108/JHTI-08-2020-0149>

- Patino, C. & Ferreira, J. (2018). Inclusion and exclusion criteria in research studies: definitions and why they matter. *Journal Brasileiro de Pneumologia*, 44(2), 84. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044655/>
- Pecina, E., Sprčić, M. D., Lacković, D. I. (2022). Qualitative analysis of enterprise risk management systems in the largest European electric power companies. *Energies*, 15(5328), 1–19. <https://doi.org/10.3390/en15155328>
- Pires, R., & Alves, G. M. (2022). The impact of environmental uncertainty on accounting information relevance and performance: A contingency approach. *Economies*, 10(211), 1–15. <https://doi.org/10.3390/economies10090211>
- Polinkevych, O., Khovrak, I., Trynchuk, V., Klapkiv, Y., Volynets, I. (2021). Business risk management in times of crises and pandemics. *Montenegrin Journal of Economics*, 17(3), 99–109. <https://doi.org/10.14254/1800-5845/2021.17-3.8>
- Pomerol, J. (2018). Business uncertainty, corporate decision, and startups. *Journal of decision systems*, 27(1), 32–37. [doi.org/10.1080/12460125.2018.1460162](https://doi.org/10.1080/12460125.2018.1460162)
- Quiles, L. O. (2021). Ethical principles and challenges for qualitative researchers. *Computer supported qualitative research* (pp. 1–10). [https://doi.org/10.1007/978-3-030-70187-1\\_1](https://doi.org/10.1007/978-3-030-70187-1_1)
- Qutoshi, S. (2018). Phenomenology: A philosophy and method of inquiry. *Journal of Education and Educational Development*, 5(1), 215–222. <https://files.eric.ed.gov/fulltext/EJ1180603.pdf>

- Rashid, Y. Rashid, A., Warraich, A. M., Sabir, S. S., & Waseem, A. (2019). Case study method: A step-by-step guide for business researchers. *International Journal of Qualitative Methods*, 18, 1–13. <https://doi.org/10.1177/1609406919862424>
- Riaz, Umar (April 2020). *Covid-19: What hotel companies should do now and beyond*. Retrieved from [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_us/topics/covid-19/ey-covid-19-hospitality.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_us/topics/covid-19/ey-covid-19-hospitality.pdf)
- Różyńska, J. (2022). The ethical anatomy of payment for research participants. *Medicine, Health Care and Philosophy*, 25(1), 449–464. <https://doi.org/10.1007/s11019-022-10092-1>
- Ruslin, I., Mashuri, S., Rasak, S. M., Alhabsyi, F., & Syam, H. (2022). Semi-structured interview: A methodological reflection on the development of a qualitative research instrument in educational studies. *IOSR Journal of Research & Method in Education*, 12(1), 22–29. <https://www.iosrjournals.org/iosr-jrme/papers/Vol-12%20Issue-1/Ser-5/E1201052229.pdf>
- Sakikawa, T. (2022). Organizational resilience and organizational culture. *Journal of Strategic Management Studies*, 13(2), 89–101. [https://doi.org/10.24760/iasme.13.2\\_89](https://doi.org/10.24760/iasme.13.2_89)
- Salisu, Y., Julienti, L., & Bakar, L. (2019). Employee commitment to change, innovation strategy and the performance of small and medium enterprises. *International Journal of Business and Technopreneurship*, 9(2), 123–140. [https://www.researchgate.net/publication/334284499\\_Employee\\_Commitment\\_to](https://www.researchgate.net/publication/334284499_Employee_Commitment_to)

\_Change\_Innovation\_Strategy\_and\_the\_Performance\_of\_Small\_and\_Medium\_Enterprises

Sato, I., & Altamirano-Cabrera, J. (2019). *Uncertainty, scenario analysis, and long-term strategies: State of play and a way forward*. World Resources Institute.

[https://www.researchgate.net/publication/336170574\\_UNCERTAINTY\\_SCENARIO\\_ANALYSIS\\_AND\\_LONG-TERM\\_STRATEGIES\\_STATE\\_OF\\_PLAY\\_AND\\_A\\_WAY\\_FORWARD](https://www.researchgate.net/publication/336170574_UNCERTAINTY_SCENARIO_ANALYSIS_AND_LONG-TERM_STRATEGIES_STATE_OF_PLAY_AND_A_WAY_FORWARD)

Saunders, K., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7th ed.). Essex, England: Pearson Education Limited.

SBA Office of Advocacy (2018). *2018 small business profile*. Retrieved from

<https://www.sba.gov/sites/default/files/advocacy/2018-Small-Business-Profiles-US.pdf>

SBA Office of Advocacy (2020). *2020 small business profile*. Retrieved from

<https://cdn.advocacy.sba.gov/wp-content/uploads/2020/06/04144224/2020-Small-Business-Economic-Profile-US.pdf>

Sim, J., Saunders, B., Waterfield, J. & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori? *International Journal of Social Research Methodology*. DOI: 10.1080/13645579.2018.1454643

Shabani, R., Torp, O., Klakegg, J., & Johansen, A. (2023). Knowledge about the origins of uncertainties from the pre-project phase of road projects. *Infrastructures*, 8(1).

<https://doi.org/10.3390/infrastructures8010001>

Shaheen, M., Pradhan, S., & Ranajee, R. (2019). Sampling in qualitative research.

*Qualitative techniques for workplace data analysis* (25–51). DOI:10.4018/978-1-5225-5366-3.ch002

Sharma, P., Leung, T., Kingshott, R., Davcik, N., & Cardinali, S. (2020) Managing uncertainty during a global pandemic: An international business perspective.

*Journal of Business Research*, 116, 188-192.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7247500/>

Sharma, L. H. & Sarkar, C. (2019). Ethnography research: An overview. *International Journal of Advance and Innovative Research*, 6(2), 1–5.

[https://www.researchgate.net/publication/333701617\\_ETHNOGRAPHY\\_RESEARCH\\_AN\\_OVERVIEW](https://www.researchgate.net/publication/333701617_ETHNOGRAPHY_RESEARCH_AN_OVERVIEW)

Shivam, N. (n.d.). Uncertainty, risk, and probability analysis. *Economics discussion*.

Retrieved from

<http://www.economicdiscussion.net/business/uncertainty/uncertainty-risk-and-probability-analysis/21795>

Shoemaker, J. P., & Day, S. G. (2018). Strategic actions in the face of uncertainty.

*Revista Brasileira de Marketing*, 17(5), 700–729.

<https://www.redalyc.org/journal/4717/471759753006/html/>

Small Business & Entrepreneurship Council (2022). *Facts & data on small business and entrepreneurship*. SBE Council. <https://sbecouncil.org/about-us/facts-and-data/>

- Sniazhko, A. S. (2019). Uncertainty in decision-making: A review of the international business literature. *Cogent Business & Management*, 6(1), 1–32.  
<https://doi.org/10.1080/23311975.2019.1650692>
- Taherdoost, H. (2021). Data collection methods and tools for research: A step-by-step guide to choose data collection technique for academic and business research projects. *International Journal of Academic Research in Management*, 10(1), 10–38. <https://hal.archives-ouvertes.fr/hal-03741847/document>
- Thanh L. T., Mohiuddin, M., & Quang, N. H. (2022) Impact of uncertainty and start-up opportunities on technopreneurial start-up success in emerging countries, *Transnational Corporations Review*, 14(3), 312–322.  
<https://doi.org/10.1080/19186444.2021.1952053>
- The White House (2022). *The small business boom under the Biden-Harris administration*. <https://www.whitehouse.gov/wp-content/uploads/2022/04/President-Biden-Small-Biz-Boom-full-report-2022.04.28.pdf>
- Titus, S. (n.d.) *Key reasons why small businesses fail*. Retrieved from [https://www.summitbusinesssolutions.ws/docs/reasons\\_biz\\_fail.pdf](https://www.summitbusinesssolutions.ws/docs/reasons_biz_fail.pdf)
- Tomy, S. & Pardede, E. (2018). From uncertainties to successful startups: A data analytic approach to predict success in technological entrepreneurship. *Sustainability*, 10, 1–24.

- Tweiqat, A., & Al—Adaileh, J. M. (2020). Human resource flexibility and sustainability: The moderating role of environmental uncertainty. *Global Business and Economics Review*, 23(3), 280. <https://doi.org/10.1504/GBER.2020.110022>
- United Nations (2020). *Recover better. Economic and social challenges and opportunities*. Department of Economic and Social Affairs. [https://www.un.org/development/desa/en/wp-content/uploads/2020/07/RECOVER\\_BETTER\\_0722-1.pdf](https://www.un.org/development/desa/en/wp-content/uploads/2020/07/RECOVER_BETTER_0722-1.pdf)
- United Nations Conference on Trade and Development (2022). *The COVID-19 pandemic impact on micro, small and medium sized enterprises: Market access challenges and competition policy*. [https://unctad.org/system/files/official-document/ditcclp2021d3\\_en.pdf](https://unctad.org/system/files/official-document/ditcclp2021d3_en.pdf)
- Uzoamaka, O., Onwuchekwa, O., & Obinna, E. (2018). Decision making under uncertainty and organizational performance: An impact assessment among manufacturing firms in Southeast, Nigeria. *International Journal of Academic Research in Economics & Management Sciences*, 7(3), 139–148. DOI: 10.6007/IJAREMS/v7-i3/4454
- van der Bles, A. M., van der Linden, S., Freeman, A., Mitchell, J., Galvao, A., Zaval, L., & Spiegelhalter, D. (2019). Communicating uncertainty about facts, numbers, and science. *Royal Society Open Science*, 6, 1–42. <https://doi.org/10.1098/rsos.181870>

- Wang, Q., Li, Z., & Hou, H. (2022). Participative leadership: A literature review and prospects for future research. *Frontiers in Psychology, 13*, 1–12.  
<https://doi.org/10.3389/fpsyg.2022.924357>
- Wang, X., & Zhou, F. (2021). Managing the uncertainties inherent in prohibitive voice: How leadership interacts with employee political skill. *Frontiers in Psychology, 12*(702964), 1–13. <https://doi.org/10.3389/fpsyg.2021.702964>
- Welter, C., Scrimshire, A., Tolonen, D., & Obrimah, E. (2021). The road to entrepreneurial success: business plans, lean startup, or both? *New England Journal of Entrepreneurship, 24*(1), 21–42. <https://doi.org/10.1108/NEJE-08-2020-0031>
- Wirahadi, A., & Pasaribu, M. (2021). Business model innovation: The role of enterprise risk management and strategic agility. *Advances in Economics, Business and Management Research, 647*, 283–289. <https://www.atlantispress.com/article/125971233.pdf>
- Xiao, C., Petkova, B., Molleman, E., & van der Vaart, T. (2019). Technology uncertainty in supply chains and supplier involvement: The role of resource dependence. *Supply Chain Management: An International Journal, 24*(6), 697–709.  
<https://doi.org/10.1108/SCM-10-2017-0334>
- Yang, S., Ishtiaq, M., & Anwar, M. (2018). Enterprise risk management practices and firm performance, the mediating role of competitive advantage and the

- moderating role of financial literacy. *Journal of Risk and Financial Management*, 11(35), 1–17. <https://doi.org/10.3390/jrfm11030035>
- Yang, Q., Herbert, N., Yang, S., Alber, J., Ophir, Y., Cappella, N. J. (2021). The role of information avoidance in managing uncertainty from conflicting recommendations about electronic cigarettes. *Communication Monographs*, 88(3), 263–285. <https://doi.org/10.1080/03637751.2020.1809685>
- Yeong, M., Ismail, R., Ismail, N., & Hamzah, M. (2018). Interview protocol refinement: Fine-tuning qualitative research interview questions for multi-racial populations in Malaysia. *The Qualitative Report*, 23(11), 2700–2713. <https://core.ac.uk/download/pdf/215367007.pdf>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- Yue, Q., & Gao, S. (2021). Environmental uncertainty, equity nature and inefficient investment—Based on the study of energy enterprises. *IOP Conference Series: Earth and environmental science* (pp. 1–9). IOP publishing. <https://iopscience.iop.org/article/10.1088/1755-1315/647/1/012187/pdf>
- Yustian, R. O. (2021). Uncertainty of business environment affecting business success due to Covid-19 pandemic. *Management Science Letters*, 11(1), 1549–1556. <https://doi.org/10.5267/j.msl.2020.12.018>
- Zandvoort, M., Brugge, R., Vlist, M., & Brink, A. (2018). Dealing with uncertainty in collaborative planning: developing adaptive strategies for the Ijsselmer. *Journal of*

*Environmental Planning and Management*, 62(2), 248–265

<https://www.tandfonline.com/doi/full/10.1080/09640568.2017.1409196>

Zayadin, R., Zucchella, A., Anand, A., Jones, P., & Ameen, N. (2022). Entrepreneurs' decision in perceived environmental uncertainty. *British Journal of Management*, 0(1), 1–18. <https://doi.org/10.1111/1467-8551.12612>

Zhang, S. & Burg, E. (2019). Advancing entrepreneurship as design Science: Developing additional design principles for effectuation. *Small Business Economics*.

<https://link.springer.com/article/10.1007/s11187-019-00217-x#citeas>

## **Appendix A: Interview Questions and Interview Protocol**

The open-ended interview question I will use to help answer the study's research question are attached below.

### **Interview Questions**

1. What are the risks created by uncertainties that you have faced since the start of your business?
2. How did you handle the risks?
3. What are some of the strategies you have used to deal with risk created by business uncertainties within your food service business?
4. How have your strategies reduced risks created by business uncertainties?
5. What skills do you have as an entrepreneur that have helped you manage risks arising from business uncertainties?
6. What training do you offer to prepare your employees for managing risks resulting from unforeseen circumstances?
7. What were the key challenges to implementing your strategies for reducing risks created by business uncertainties?
8. How did you address the key challenges to implementing your strategies for reducing risks created by business uncertainties?
9. What additional information would you like to share pertaining to the strategies you have developed and implemented for managing risks created by uncertainties that we have not discussed?

### **Interview Protocol**

- i.** I will introduce myself to the participants.
- ii.** I will provide the participant with a copy of the informed consent.
- iii.** I will explain the content of the consent form to the participant and answer any questions they might have regarding the form.
- iv.** I will obtain a verbal agreement to record the interview.
- v.** I will ask the respondent to state the verbal agreement as I record it.
- vi.** I will give the respondent a pseudonym, introduce them, and record the time and date.
- vii.** I will begin the interview and follow through with the 9 interview questions.
- viii.** I will probe further if needed.
- ix.** I will thank the participants for their time and discuss member-checking.
- x.** I will answer any other question that the respondent might have regarding the interview or member-checking process.
- xi.** End the interview protocol and stop recording.

## Appendix B: Sample Interview Protocol

<b>Interview Protocol</b>	
<b>What you will do</b>	<b>What you will say—script</b>
<p>Introduce the interview and set the stage—often over a meal or coffee</p> <hr/> <ul style="list-style-type: none"> <li>✓ Watch for non-verbal cues.</li> <li>✓ Paraphrase as needed.</li> <li>✓ Ask follow-up probing questions to get more in depth.</li> </ul>	<ol style="list-style-type: none"> <li>1. What are the risks created by uncertainties that you have faced since the start of your business?</li> <li>2. How did you handle the risks?</li> <li>3. What strategies have you used to deal with risk created by business uncertainties within your food service business?</li> <li>4. How have your strategies reduced risks created by business uncertainties?</li> <li>5. What skills do you have as an entrepreneur that have helped you manage risks arising from business uncertainties?</li> <li>6. What training do you offer to prepare your employees for managing risks resulting from unforeseen circumstances?</li> <li>7. What were the key challenges to implementing your strategies for reducing risks created by business uncertainties?</li> <li>8. How did you address the key challenges to implementing your strategies for reducing risks created by business uncertainties?</li> <li>9. What additional information would you like to share about the strategies you have developed and implemented for managing risks created by uncertainties that we have not discussed?</li> </ol>

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Wrap up interview thanking  
participant

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Schedule follow-up member  
checking interview

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