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Walden University 2022

#### Abstract

## Small Business Owners' Approach to Business Continuity Management

by

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MBA, University of Phoenix, 2018

MPS, Pennsylvania State University, 2017

BA, American Military University, 2013

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Walden University

August 2022

#### Abstract

United States (U.S.) small business owners represent an estimated 25% of businesses that do not reopen following a major disaster. Small business owners must prepare because small businesses represent 99.9% of U.S. businesses and experience detrimental effects resulting from disaster-related events. Grounded in Paunescu and Argatu's adapted business continuity framework, the purpose of this qualitative multiple case study was to explore strategies U.S. small business owners use to create disaster plans for business continuity. The participants were seven U.S. small business owners in the service sector. Data were collected by conducting semistructured interviews through in-person meetings, phone conversations, and documentation review. Yin's five-step approach was employed to analyze the data. Seven themes emerged: (a) impact from COVID-19, (b) BCP review, (c) type of disasters planned for, (d) use of the U.S. Federal Emergency Management Agency reference for BCP development, (e) succession planning, (f) exercise training, and (g) use of secondary locations. Two core recommendations are for small business owners to review their business continuity plans (BCP) periodically and whenever a vulnerability in their BCP has been identified. The implications for positive social change include the potential to reduce unemployment, related mental illnesses, and homelessness.

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#### Section 1: Foundation of the Study

The United States (U.S.) economy depends heavily on U.S. small businesses to provide resources and jobs for communities nationwide. There are approximately 27 million U.S. small businesses that account for 50% of gross domestic product (Bonsu & Kuofie, 2019). Keeping these statistics in mind, U.S. small business disruptions can have detrimental effects on the communities they serve and have the potential to create cascading effects on many parts of the economy. Some examples of the negative effects created by U.S. small business disruptions include supply chain disruptions, increases in unemployment rate, and community decay.

#### **Background of the Problem**

United States' small businesses make up the backbone of U.S. businesses. United States small businesses represent 99.9% of U.S. businesses (United States Small Business Administration, 2018) and experience detrimental effects resulting from disaster-related events (Donaghy, 2018). However, even though small businesses invest significant resources to ensure the success of their company (Davlasheridze & Geylani, 2017; Ertel, 2021), small businesses still have limited resources compared to their larger counterparts (Josephson et al., 2017), and an estimated 25% of United States' small businesses do not reopen following a major disaster (United States Small Business Administration, 2021). Considering that most U.S. businesses are small, it is important to the U.S. economy and the welfare of U.S. citizens that small businesses succeed.

United States' disasters come in many forms. Both natural and manmade U.S. disasters occur yearly; however, some common U.S. disasters include hurricanes,

flooding, wildfires, and tornados (Federal Emergency Management Agency, 2021). The COVID-19 pandemic declared in 2019, and powerful hurricanes seen from 2018 to 2021, have all shown how disasters can disrupt small business operations. Further to this end, researchers have concluded that one of the primary causes of disaster-related business failures is operational disruptions (Azadegan et al., 2020; Canhoto & Wei, 2021).

Understanding the importance and economic impact of U.S. small businesses led me to conduct this qualitative multiple case study to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity.

Increasing U.S. small business survival rate post-disasters takes preparation. Preparing with well thought out business continuity plans (BCP) can mitigate the detrimental impacts that disasters have on businesses (Namdar et al., 2021).

#### **Problem Statement**

Disasters have the potential to create havoc on small businesses nationwide. U.S. small business owners experience detrimental effects following disaster-related events (Craig et al., 2019). Adding to the detrimental effects, some small business owners fail to develop business continuity management (BCM) plans, resulting in 25% of companies never reopening following a disaster (United States Small Business Administration, 2020). The general business problem is U.S. small business owners who do not prepare for disaster-related events may experience business failure within three years. The specific business problem is that some U.S. small business owners lack practical disaster plans to ensure business continuity.

#### **Purpose Statement**

The purpose of this qualitative multiple case study is to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. The targeted population consisted of seven U.S. small business owners in the service industry who successfully remained in business following a disaster. The implications for positive social change include the potential to better understand and potentially reduce disaster-related U.S. small business failures, thus reducing the negative impacts communities experience from job losses.

#### **Nature of the Study**

Researchers choose among quantitative, qualitative, or mixed methods approaches to conduct studies. The quantitative method is used for data collection technique or data analysis procedures that produces or uses numerical data (Butler-Kisber, 2018). The quantitative method was not appropriate for this study because this study did not use statistical and numerical data analysis techniques (Taguchi, 2018); however, I conducted interviews and triangulated the data by investigating available documentation and physical artifacts to determine the effectiveness of the strategies.

Mix method approach to conducting studies combines two other study methods. Using the mixed method requires integrating both qualitative and quantitative research methods (Chicoine, 2018). Using the qualitative method requires developing and using questions to gain an understanding of how problems affect the reality of participants (Allen, 2017) and their solutions. The qualitative method is appropriate for this study because the phenomenon lacks complete exploration by the academic community (Ward

et al., 2018). Further justification for using a qualitative method results from interviews with open-ended questions to further explore the U.S. small business owners' BCM plans phenomenon. Using a qualitative method, I explored the implications for positive social change that have the potential to provide a better understanding and potentially reduce disaster-related U.S. small business failures, thus reducing the negative impacts communities experience from job losses. The mixed method was not appropriate for this study because it requires using both the quantitative and the qualitative methods (Taguchi, 2018).

The qualitative researcher can choose among various designs such as a phenomenological study, narrative study, or a case study to explore the research topic. Phenomenological researchers focus on exploring the personal meanings of participants' lived experiences. The phenomenological design was not appropriate for this study because it would not enable a thorough enough analysis for the study and is limited to lived experiences only (Taylan & Ozkan, 2021). My intent was to look beyond experience and include perspectives to gain a deeper understanding of the phenomenon. A narrative study involves compiling firsthand accounts of personal stories that may have contributed to decision-making processes within the current work environment. A narrative study design was not appropriate for this study because I was not interested in exploring participants' personal life stories to explain business decision-making processes. Using a multiple case study requires researchers to use multiple organizations and engage participants in interviews to gain and compare a range of experiences and perspectives (Heale & Twycross, 2018; Yin, 2018). Using a multiple case study was

expected to give me more analytic data from the use of more than two participants with results being more robust than using one participant (Yin, 2018). Additionally, the use of a multiple case study enabled me to explore the implications for positive social change that have the potential to provide a better understanding and potentially reduce disaster-related U.S. small business failures.

#### **Research Question**

What strategies do some U.S. small business owners use to create practical disaster plans to ensure business continuity?

#### **Interview Questions**

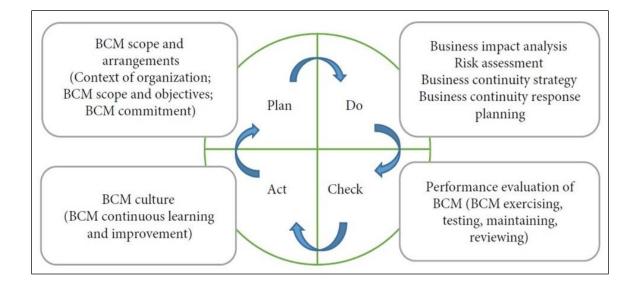
- 1. What reference have you used to develop your organization's business continuity management disaster plan?
- 2. What steps do you use in your business continuity management disaster plan?
- 3. What type(s) of disasters are included in your disaster plan?
- 4. How, if at all, do you conduct disaster-related event exercises that evaluate your business continuity management disaster plan?
- 5. How, and how frequently, do you update your business continuity management disaster plans?
- 6. How are employees made aware and trained to respond in accordance with your business continuity management disaster plan?
- 7. How have business continuity management disaster plans aided your business operations?

8. What additional information can you provide on creating business continuity plans?

### **Conceptual Framework**

A conceptual framework enables the researcher to display a relationship between variables. The adapted BCM framework International Organization for Standardization (ISO) 22301: 2019 provides the foundation for this study's conceptual framework (Paunescu & Argatu, 2020). Exhibited in Figure 1, Paunescu and Argatu (2020) developed an adapted BCM framework based upon the elements of ISO 22301: 2019. The tenets of this framework include applying the plan-do-check-act (PDCA) cycle to multiple aspects of ISO 22301: 2019. Additionally, Panescu and Argatu's BCM framework provides an approach to BCM that relates to this study by providing a framework to analyze small business owner's approach to effective BCM disaster plans. Using the steps outlined in this adapted BCM framework, I sought to explain business continuity through the tenets of the adapted BCM framework.

Figure 1



#### **Operational Definitions**

Adapted business continuity management framework: is the research model used in this study and follows the PDCA method of continuous improvement in addition building upon BCM literature and the ISO 22301 business continuity model (Paunescu & Argatu, 2020).

Business continuity management: helps organizations understand how to protect themselves against disruptive events, lessen the likelihood of disruptive events taking place, and prepare, respond, and recover from dangerous operational disruptions when they occur (Paunescu & Argatu, 2020).

Business continuity plan: is the documentation of prearranged guidelines or procedures that explain how an organization's operations will continue after a significant disruption (NIST, 2021).

*Disaster (major):* is a natural disaster (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), regardless of cause, any fire, flood, or explosion, in any part of the United States, that the President determines causes damage of sufficient severity and scale to warrant major disaster assistance (FEMA, 2019).

Plan-Do-Check-Act (PDCA): is an approach used for continuous improvement and builds upon ISO 22301 model of BCM (Paunescu & Argatu, 2020).

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

#### Assumptions

Researchers can find themselves faced with many assumptions when conducting a research study. An assumption is a believed to be true condition; however, the researcher lacks or has little direct evidence of its truth (Pyrczak & Bruce, 2017). I make two assumptions in this study. The first assumption is that interviewees answered the interview questions honestly, thus providing accurate data for this study. The second assumption is that COVID-19 influenced many of the interviewee's answers. The primary basis for my second assumption centers on COVID-19 having devastating impacts on small businesses worldwide, which started in early 2020 and continue as of the date of this study.

#### Limitations

Limitations can confine a researcher's ability to produce accurate study results. A limitation is a vulnerability that can restrict the legitimacy of research results (Pyrczak & Bruce, 2017). I have identified two limitations for this study. The first limitation is

interviewee bias, which can affect the validity of data obtained from interview answers. The first limitation can result in skewed study data and conclusions. A second limitation is the small sample size, which can prevent generalizations. The second limitation prevents analytic generalizations, which go beyond this study's setting (Yin, 2018).

#### **Delimitations**

Researchers must determine what restrictions will be applied to the research before the study begins. Delimitations are limitations set by the researcher (Theofanidis & Fountouki, 2018). Delimitations for this qualitative multiple case study are the amount of business owners interviewed, the industry that the business is positioned, and the location of the business. The amount of business owners that were interviewed for this study was seven. The industry used for this study is the service industry. The businesses and business owners interviewed are located throughout the United States.

#### **Significance of Study**

Researchers choose to study topics of significance that can create social change.

U.S. small business make up the majority of all U.S. businesses (Turner & Endres, 2017).

Considering the large majority of U.S. businesses are small, and approximately 25% of U.S. small businesses fail following a disaster situation (Ertel, 2021), understanding the root cause of disaster-related business failures is of importance. This study aims to provide data on what strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. Obtaining data pertaining to this topic can aid small businesses better mitigate disaster-related business disruptions.

#### **Contributions to Business Practice**

United States' small businesses make up the backbone of U.S. businesses. Small businesses represent 99.9% of United States businesses (United States Small Business Administration, 2018). Considering that most U.S. businesses are small, it is essential for small businesses to have practical disaster plans to ensure business continuity. Unlike large businesses, U.S. small businesses have limited resources and limited ability to plan for business interruptions (Josephson et al., 2017). Conducting a multiple case study on seven U.S. small businesses in the service industry enabled me to collect data from lessons learned, which in turn can drive U.S. small business performance improvements in planning for, and recovering from, disaster situations.

### **Implications for Social Change**

The results of this study could contribute positively to social change. The rippling effects of business closures result in communities' members becoming unemployed and lead to communities not having the goods and services they rely upon. Additionally, as a result of disaster unpreparedness, failed businesses can also lead to other rippling effects such as homelessness, hunger, and community decay. The findings and conclusions provided from conducting the study are expected to aid in effecting beneficial social change by providing a better prepared small business sector, thus aiding in the reduction of closed businesses following disasters.

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

The purpose of this qualitative multiple case study is to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business

continuity. Small businesses comprise approximately 99.9% of all United States businesses (Hawkins & Hoon, 2020; Palladino, 2019; Turner & Endres, 2017). However, even though small businesses invest significant resources to ensure the success of their company (Davlasheridze & Geylani, 2017; Ertel, 2021), an estimated 25% of United States' small businesses do not reopen following a major disaster (United States Small Business Administration, 2021). For this reason, I choose to conduct a study that seeks to identify what strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity.

The devastating effects of disasters on small businesses have exhibited their destruction yearly in the United States. These disastrous events come in many forms - both natural and manmade, however, some common U.S. disasters include hurricanes, flooding, wildfires, and tornados (Federal Emergency Management Agency, 2021). The COVID-19 pandemic declared in 2019, and hurricanes such as Harvey in 2017 and Michael in 2018 have all shown how disasters can disrupt small business operations, and if not practically planned for, can cause small business failure (Ertel, 2021; Gregory, 2020; Senkbeil et al., 2020; Sydnor et al., 2017). Researchers conclude that one of the leading causes of disaster-related business failures is a disruption to operations (Azadegan et al., 2020; Canhoto & Wei, 2021). In this literary review, I will focus on practical disaster plan development which can mitigate business disruptions (Fischer et al., 2019; Mathaisel & Yoost, 2017), and identify disaster-related causes that contribute to small business failure.

To organize this review, I will first synthesize articles about ISO 22301, which is an internationally accepted BCM standard that is used to develop practical disaster plans to ensure business continuity; review and synthesis of disaster-related business disruptions which can affect business continuity; review and synthesis of methods used in BCM to develop practical disaster plans to ensure business continuity; community impacts from small business disruptions; review and synthesis of differing points of view to approaching BCM; and a review and synthesis of the how conceptual framework applies to this study's business problem.

My strategy for the organization of this literary review consists of first presenting a platform to develop practical disaster plans with the use of ISO 22301. I will then identify disaster-related business disruptions which can be considered for inclusion into disaster plans. Third, I will put it all together by reviewing disaster plan strategies that can aid U.S. small business owners in creating practical disaster plans to ensure business continuity. The second part of this literary review will study community impacts resulting from small business disruptions; present differing points of view in addressing BCM; and lastly explain how this study's conceptual framework applies to this study's business problem that some U.S. small business owners lack practical disaster plans to ensure business continuity.

Review of literature is a vital part of academic research. Further, literary review also contributes to the advancement of knowledge from preexisting work (Xiao & Watson, 2019). The literature review for this study includes scholarly peer-reviewed articles related to business continuity, disaster planning, and how disasters affect

businesses and communities. I gathered this literary review by searching various academic databases and government websites. The databases I used were provided by Walden University and included Academic Search Complete, Business Source Complete, EBSCO Discovery Service, ProQuest Central, ProQuest Dissertation & Theses Global, SAGE Journals, and SAGE Research Methods Online.

Review of literature for this study includes 79 total references, which 84% of them are peer-reviewed articles. Of the 79 references used, 74 (94%) are from 2018 to 2021. Of the total referenced for this study, 3 (4%) are from books, 10 (13%) are from government websites, and 66 (84%) are from academic journals.

### **International Organization for Standardization 22301**

A conceptual framework enables the researcher to build a foundation for study and display a relationship between variables. The adapted BCM framework International Organization for Standardization (ISO) 22301: 2019 provides the foundation for this study's conceptual framework (Paunescu & Argatu, 2020), however, I will first explore ISO 22301 to give the reader an understanding of the adapted framework's foundation. According to Soufi et al. (2019), ISO 22301 seeks to aid business leaders in developing business continuity management systems. Business continuity management systems are a process that are conducted to identify disruptive events that can negatively impact business operations (Soufi et al., 2019). ISO 22301 is used in conjunction with a business impact analysis (BIA), and risk assessments (RA) when developing a business continuity management system (Soufi et al., 2019).

The International Organization for Standardization (2019) states that business continuity management systems (BCMS) emphasize the importance of understanding the organization's need in instituting business continuity guidelines and goals, managing and maintaining organizational methods and response structures that increase organizational survivability during disruptive events, and continuous monitoring and improvement to the organizational BCMS. Understanding an organization's need for a BCMS involves determining concerned parties and their relevance to the organization's BCMS, understanding legal and regulatory requirements which relate to the organization's products, services, resources and activities, and determining the scope of the BCMS so business leaders can place boundaries internally and externally (ISO, 2019).

Operating and maintaining organizational methods and response structures falls squarely on organizational leadership. Organizational leadership are responsible for ensuring business continuity initiatives are established and aligned with organizational strategies (Paunescu & Argatu, 2020). Leadership drives the strategic direction of organizational BCMS and must ensure the integration of these systems into the organization's operations (ISO, 2019). Further emphasizing the importance of organizational leadership is that business leaders must allocate funds for resources that are needed for an effective BCMS, promote continuous improvement of BCMS, and ensure the importance of BCMS is communicated throughout the organization (Paunescu & Argatu, 2020). Operating and maintaining organizational methods and response structures is critical to a successful BCMS and organizational leadership teams play a key role in ensuring BCMS accomplishes planned results (ISO, 2019).

Continuous monitoring and improvement to the organizational BCMS should be entrenched in the organization's culture. Further, continuous monitoring and improvement is needed for business leaders to achieve BCMS outcomes (ISO, 2019; Paunescu & Argatu, 2020). Continuous improvement to an organization's BCMS occurs when leadership takes into consideration the results provided by an evaluation, analysis, and outputs from organizational leadership review into the organization's to BCMS (ISO, 2019). Benefits to continuous monitoring and improvement of organizational BMCS were seen with businesses adopting improved measures to address the COVID-19 pandemic (Galbusera & Cardarilli, 2021). The improvements made to BMCS during the height of the COVID-19 pandemic highlighted how effectively managed BMCS's improved organizational reputation caused by damages, and how better involvement in supply chain partnerships helps to mitigate disruptions to business operations (Azadegan et al., 2020).

An organizational BCMS is composed of six components. BCMS components include policy, defined responsibilities, application and operation, assessment of system performance, leadership review, and constant enhancement (Paunescu & Argatu, 2020). An organization's BCM policy should align with organizational objectives, present an organizational business continuity framework for the workforce to follow, outline applicable requirement and how to satisfy them, and contains an emphasis on the responsibility of continuous improvement (ISO, 2019). Further, an organization's BCM policy should be communicated to the workforce and be readily available (Baldwin, 2019).

Business leaders must thoroughly understand the operations of their organization to effectively be able to develop a business continuity plan. ISO 22301 enables leaders to understand the context of their organization so they can identify, and document information needed to create effective business continuity plans (BCP) (Miletic, 2020). By applying this understanding to organizational BCMS roles and responsibilities, leaders can prioritize the development of BCMS functions (Reid, 2020). ISO 22301: 2019 further aids business leaders by offering a structured approach to BCM – the Plan-Do-Check-Act (PDCA) cycle (Paunescu & Argatu, 2020). The PDCA cycle is broken down into the following processes: establishing the plan (plan); implementing and operating the plan (do); monitoring and reviewing the plan (check); and maintaining and improving the plan (act) (ISO, 2019). Researchers have concluded that the use of PDCA is related to effective and low-cost approaches to planning for incidents (Haas & Ryan, 2018). Further, ISO 22301: 2019 clauses 4 through 10 cover the following in accordance with the PDCA cycle:

**Clause 4**: Introduces BCMS requirements for organizations.

**Clause 5**: Summarizes top management's required roles in BCMS, to include enunciation of leadership expectations to the organization.

Clause 6: Description of strategic objectives requirements and BCMS principles.

**Clause 7**: Supports BCMS operations related to competence and communication while controlling, maintaining, and retaining required documentation.

**Clause 8**: Defines needs, how to address needs, and develops procedures for organizational business continuity because of business operational disruptions.

**Clause 9**: Summarizes business continuity performance, BCMS alignment, and management review measurement requirements.

Clause 10: Recognizes and takes measures on BCMS noncompliance and continual improvement with the use of corrective action.

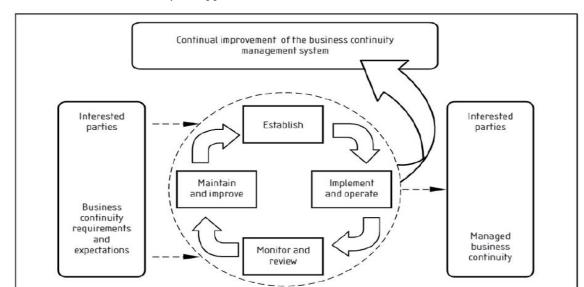
Further analysis of the PDCA cycle exhibited the following details for each step of the process. Paunsescu and Argatu's (2020) (plan) step of the PDCA cycle includes organizational business continuity management (BCM) range and plans; the (do) step of the cycle includes conducting a business impact analysis (BIA), risk assessment (RA), and developing a business continuity strategy and response plan. Paunsescu and Argatu's (2020) (check) step involves performing an assessment of BCM exercises, testing, sustaining and review; the last step (act) centers on BCM continuous learning and improvement.

#### **Alternative Theories**

Alternative theories to ISO 22301: 2019 include British Standard (BS) 25999-2: 2007, and United Arab Emirates' (UAE) National Standard for Business Continuity Management Systems AE/SCNS/NCEMA 7000:2021. To further emphasize the dominance and importance of ISO 22301: 2019, BS 25999 was phased out by ISO 22301, and the UAE's National Standard for Business Continuity Management Systems incorporates sections of ISO 22301 into its standard. In the following paragraphs, I will examine and compare BS 25999-2 and the UAE's National Standard for Business Continuity Management Systems to ISO 22301.

Before the creation of ISO 22301, one of the primarily used standards was British Standard 25999-2: 2007. British Standard 25999-2: 2007 specified requirements for managing and setting up BCMS. BS 25999-2 also provided the foundation for ISO 22301 (British Standards Institution, 2012). BS 25999-2 places emphasis on understanding needs and the necessity to establish business continuity policies and objectives; establishing and operating management controls for organizational business continuity risks; observing and assessing BCMS performance and effectiveness; and objective measurement for continual BCMS improvement (British Standards Institution, 2007). Like ISO 22301, BS 25999-2 has the following key components: (a) an established policy; (b) assigned responsibilities; (c) management processes developed; (d) documented evidence; and (e) business continuity processes related to the subject such as business impact analysis (BIA) and development of business continuity plans (British Standards Institution, 2007). Similar to ISO 22301, BS 25999-2 applies the PDCA cycle to BCMS processes as shown in Figure 2.

Figure 2



BS 25999-2: 2007 PDCA Cycle Applied to BCMS Processes (British Standards Institution, 2007)

BS 25999 implementation of the PDCA cycle mirrors many of ISO 22301's PDCA cycle with (plan) including establishing policy, objectives, targets, processes and procedures, and controls; (do) includes implementation and operation of policies and processes related to organizational business continuity; (check) monitors and reviews objective and policy performance, and permits remediation and enhancements of the BCMS; and (act) by maintaining and improving organizational BMCS (British Standards Institution, 2007).

In addition to the described similarities between ISO 22301 and BS 25999-2, the following are some noted new concepts when transitioning from BS 25999-2 to ISO 22301: (a) organizational context which describes the environment that the organization operates under; (b) interested groups was changed to *stakeholders*; (c) leadership which describes executive management requirements; (d) maximum acceptable outage (MAO) was replaced with a maximum tolerable period of disruption (MTPD) which is the time

limit that adverse impacts become unacceptable; (e) performance assessment which looks into BCMS and business continuity management effectiveness; (f) prioritized timeframes which cover timing of critical activities recovery; and (g) warning and communication that cover incident activities (British Standards Institution, 2012).

United Arab Emirates' (UAE) National Standard for Business Continuity

Management Systems AE/SCNS/NCEMA 7000: 2021 was developed to aid

organizations in implementing and maintaining effective management systems which
enable them to continue during operational disruptions (UAE, 2021). Further,

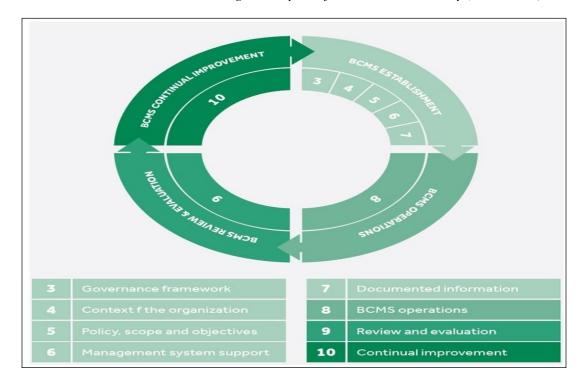
AE/SCNS/NCEMA 7000: 2021 (a) enables the UAE government and private sector to
reduce and protect against organizational disruptions; (b) prepare, respond, and (c)
recover from disruptions; and enable an enhancement of national security through
effective implementation of this BCMS (UAE, 2021). Unlike BS 25999-2 which served
as the foundation for ISO 22301: 2019, AE/SCNS/NCEMA 7000: 2021 uses ISO 22301:
2019 and ISO 31000: 2018(E) as references for its development (UAE, 2021).

Like ISO 22301, AE/SCNS/NCEMA 7000: 2021 incorporates clauses 3 to 10 from ISO 22301 as shown in Figure 3. Unlike ISO 22301 and BS 25999, there is no mention of the PDCA cycle in AE/SCNS/NCEMA 7000: 2021. AE/SCNS/NCEMA 7000: 2021 places emphasis on top management for being responsible for the organization's BCMS success. Also, like ISO 22301, AE/SCNS/NCEMA 7000: 2021 outlines that (a) top management will be responsible for identifying the context of the organization; developing policies, (b) scope and objectives for the BCMS; (c) provide management support for the implementation of the organizational BCMS; (d) maintain

documentation; employ BCM operations; (e) and review, evaluate and provide continuous improvement for the BCMS (UAE, 2021).

Figure 3

AE/SCNS/NCEMA 7000: 2021 Management System for Business Continuity (UAE, 2021)



Another difference between ISO 22301: 2019 and AE/SCNS/NCEMA 7000: 2021 is how AE/SCNS/NCEMA 7000: 2021 clearly differentiates between management system requirements and operational requirements of the BCMS. In this UAE standard, BCMS operations are focused on the most effective way to resume activities and reduce impacts from operational disruptions by understanding how different disruptions will affect the organization; identify events that would increase negative impacts; prioritize and evaluate high priority activities; identify high priority activity resources; and develop a plan to resume high priority activities (UAE, 2021).

#### **Disaster Related Business Disruptions**

Disasters can have devastating effects on U.S. small businesses. Many of the negative results from disaster-related situations have devastating effects on supply chains, organizational workforce, electricity, and funding. All of these negative effects are currently seen with the COVID-19 pandemic with an emphasis on supply chain disruptions, negative effects on the workforce, and businesses closing their doors resulting from a lack of funds. The following paragraphs will cover how disaster-related business disruptions U.S. small businesses.

Many organizations rely solely on their supply chain to produce the products and services they provide their customers. Supply chains experience many threats that can disrupt their operations, which have rippling effects on other sectors the supply chain services (Suresh et al., 2020). To help mitigate the widespread damage that occurs from a supply chain disruption, researchers conclude that both supply chain providers, and organizations who depend on supply chains develop a business continuity framework that focuses on this sector. This framework should address anticipation, preparation, robustness, and recovery as areas to consider increasing supply chain resiliency (Namdar et al., 2021). Looking at supply chain resiliency from the supplier's point of view, they should be able to adapt to positive and negative events resulting from disasters (Kaur & Singh, 2021). Further to this point, and aiding supply chain leaders in adapting to positive and negative results from disasters, supply chain leaders should develop a decision support methodology. This decision support methodology should use pre-ran scenarios to

produce procedures and approaches which aid in better decision-making when faced with a disaster-related business disruption (Schatter et al., 2019).

Business leaders must constantly assess the resiliency of their organization to disasters, but they must also ensure their supply chain providers are resilient as well. Looking at supply chain resiliency from the organization that depends on supply chain providers, researchers conclude that organizations should create a multistage hybrid model which focuses on supplier breakdown, selection, and distribution (Kaur & Singh, 2021). This forward-thinking, which enables the development of a preexisting business continuity plan, enables organizations to outperform others who have not precoordinated these activities (Giunipero et al., 2021). Breaking down supply chain providers into the sections described above, enables organizational leadership to reconfigure and address disruptive events to lessen the impact supply chain disruptions will have on their organization (Kaur & Singh, 2021). Ultimately, researchers have concluded that the value and role of BCM is not only effective business continuity plans, but also to provide a thorough management method for creating supply chain resiliency (Riglietti et al., 2021).

An organization's workforce is their most important asset. The protection of the organization's workforce, because of a disaster-related situation, should be thoroughly addressed in business continuity plans (Koonin, 2020). Further to this end and emphasizing the importance of having a plan to protect employees which are an organization's most important asset (Serrano & Kazda, 2020), researchers have concluded that business owners who prepare for disaster-related events are more resilient and have an increased chance of surviving a disastrous situation (Koonin, 2020). Part of

planning to protect employees is the training that they will need to be effective during a disaster situation. The outlining of roles and responsibilities should be available to the entire workforce so there is a clear understanding of what is expected of them. Not only must training on roles and responsibilities be given to the general workforce, but business continuity plan development training for organizational leadership is needed so that BCM plans can be effectively developed and implemented (Kato & Charoenrat, 2018).

Protection of the workforce via employee training on organizational BCPs should include an effective training delivery method. An effective training delivery method should include exercises and exams and checking of exercise and exam competencies (Muflihah & Subriadi, 2018). Researchers have concluded that conducting exercises, which provide employees hands-on experience to practice crisis management skills is an essential step in employee training (Kwok et al., 2019). In addition to training the workforce on organizational BCMS, training third parties that are internal and external to the organization on disruptive event responsibilities is important to implementing an effective BCMS (Muflihah & Subriadi, 2018). Further emphasizing the importance of training and how it can negatively impact an organization's disaster response, researchers conclude that poor training is directly related to disaster operational challenges and ineffective business continuity plans (Olu et al., 2018).

Power outages are a well-known event resulting from disasters. Further, strong winds caused by storms are identified as the leading cause of power failure (Tervo et al., 2021). Researchers conclude that losses of power cause economic losses when structures lose power (Mathew et al., 2021). Results of a research study on the effects of power

outages on businesses found that out of 37 regions researched, there was a 300% economic loss during power outages (Koks et al., 2019). Another study found that out of supply chain disruptions, loss of telecommunications, water outages, and damaged facilities, power outages were rated the highest on a disruptive index (Sarmiento et al., 2019).

Factoring in power outages into a BCMS can help with mitigating the event should it occur. One of the challenges with planning for power outages within an organization's BCMS is that predictive modeling has proven to be inaccurate (Kabir et al., 2019). Although technology has improved in predicting power outages during severe weather, further research is needed to develop outage forecasting models for changing weather conditions (Kabir et al., 2019). Keeping in mind the challenges in predicting power outages, organizations can still effectively prepare for losses of power. The U.S. Department of Energy recommends the following to reduce the impact businesses experience during power outages: decide if activation of backup power is needed, stay connected with your local fuel supplier if you are running generators, and reach out to state and federal organizations for assistance if needed (DOE, 2022).

Unlike their larger counterparts, small businesses do not have as many resources. However, small businesses devote substantial amounts of the resources they do have to ensure the success of their company (Davlasheridze & Geylani, 2017). One of the resources that small businesses have less of compared to their larger counterparts are financial resources. Financial resources aid small business owners n keeping their business open when disaster-related business interruptions occur (Josephson et al., 2017).

Though it is well known that small businesses lack access to large capital for disaster-related assistance, researchers conclude that disaster assistance in the form of loans proves to be a challenge for small business owners to acquire (Davlasheridze & Geylani, 2017). The U.S. Small Business Administration (SBA) is the leading U.S. agency for support for small businesses (Poliatykina et al., 2019), however, researchers conclude that SBA loans increase small business indebtedness, which resulted in them being worse off financially than they were pre-disaster (Hiramatsu & Marshall, 2018).

Further intensifying small businesses' challenge in acquiring financial assistance for disaster-related loans, many organizations do not have insurance. One of the many benefits of having insurance is that it will cover disaster-related losses - which is why many that do not have insurance will go out of business (Russo, 2019). Appropriate insurance coverage can offer small businesses aid in mitigating disaster risks and decrease short and long-term financial impacts resulting from disaster-related events (Clement et al., 2018). Researchers conclude that businesses should seek insurance policies that are diversified, which cover natural and human-made disasters to better protect themselves (Wu, 2020). Further, researchers also conclude that business insurance policy holders should have readily available information about their risks to aid them in mitigating insurance provider identified business risks (Clement et al., 2018).

### **Business Continuity Management System Development**

Business Continuity Management Systems (BCMS) aid organizations mitigate disaster-related business disruptions. BCMS processes are conducted to identify events that are disruptive to an organization and should have BCP developed (Soufi et al., 2019).

There are four steps included in developing a BCP: conduct a risk assessment (RA); conduct a business impact analysis (BIA); identify, record, and implement to recoup vital business processes and functions; and conduct BCP team training and evaluation (DHS, 2021a).

Risk assessments and business impact analysis are important aspects of creating a BCP. The risk assessment (RA) process identifies potential hazards and determines what impacts they can have, and a business impact analysis (BIA) determines potential impacts from interruptions of critical business processes (DHS, 2021c). Risk assessments play an important role in the development of BCMS policies and creates an effective impact on the organization's BCMS (Paunescu & Argatu, 2020). Researchers conclude that RA's also aid in contributing to an organization's strategic and operational decision making (Labus et al., 2020). The RA process requires organizational leadership to identify assets that are at risk from identified hazards, and what the potential impacts from those hazards look like (DHS, 2021c). In addition to the described RA process, organizational leadership must also look for vulnerabilities and weaknesses that can possibly place an asset more at risk (DHS, 2021c).

BIAs are just as important to a BCP as RA's. Business impact analysis are used at the management level as a tool for analyzing impacts on a business and is used by organizations to assess quantitative and qualitative losses resulting from a crisis (Budiyanto et al., 2021). Additionally, a BIA enables organizational leadership to identify critical functions that support key business products and services (Paunescu & Argatu, 2020). Organizational leadership should consider the following when conducting a BIA:

(a) loss and delay of sales and income; (b) increased expenses resulting from outsourcing, labor, and expediting costs; (c) contractual penalties and losses; (d) loss of customers; and (e) new business plans being delayed (DHS, 2021b). The U.S. Department of Homeland Security (2021b) provides businesses with a BIA worksheet (figure 4), which should be used by organizational personnel with detailed knowledge on the business' products and services. Further, a BIA should document impacts that can result from a business disruption (DHS, 2021b), and reviewed at planned intervals and when substantial changes to the business occur (ISO, 2019).

Figure 4

Business Impact Analysis Worksheet (DHS, 2022b)

Business Impact Analysis Works								
Department / Function / Process								
Operational & Financial Impacts								
Timing / Duration	Operation Impacts	Financial Impact						
iming: Identify point in time when interruption	Considerations (customize for your business)  Operational Impacts	Financial Impact						
vould have greater impact (e.g., season, end of	Lost sales and income	Quantify operational impacts in financial terms.						
nonth/quarter, etc.)	<ul> <li>Negative cash flow resulting from delayed sales or income</li> </ul>							
Duration: Identify the duration of the interruption or point in time when the operational and or	<ul> <li>Increased expenses (e.g., overtime labor, outsourcing, expediting costs, etc.)</li> </ul>							
nancial impact(s) will occur.	Regulatory fines							
< 1 hour	Contractual penalties or loss of contractual							
>1 hr. < 8 hours	bonuses							
> 8 hrs. <24 hours	Customer dissatisfaction or defection							
> 24 hrs. < 72 hrs.	· Delay executing business plan or strategic initiative							
> 72 hrs.	,							
• > 1 week								

Effectively recovering from a critical business function disruption requires identifying, documenting, and implementing BCMS plans. In addition to identifying and

documenting developed BCMS plans for the organization, business leaders should also identify, and document required resources based on BIA findings (DHS, 2021a). Once organizational leadership identities and documents all facets of their business continuity plan, the organizational BCMS should be implemented, with reviews of the BCP planned periodically for changes and improvements (ISO, 2019). Ultimately, identifying and documenting all aspects of a crisis response is important to the success of a BCMS, and aids the workforce in remembering crucial actions in their organizational BCMS (Powell, 2020).

There are several tools available to business leaders that enables them to evaluate organizational recovery strategies. Creating a BCP team and training, and evaluation of the BCMS plan enables business leaders to assess recovery strategies (DHS, 2021a). Creating a BCP team within the organization's management should bring differing perspectives, experiences, cultural backgrounds, and cognitive constructs (Aydemir & Ates, 2018). By ensuring this type of diversity in an organization's BCP team, it offers the organization's BCMS the most effective input. Training scenarios are developed to prepare BCP teams to effectively perform during a crisis (Laere & Lindblom, 2019). Team training should include exercises that explore, perform, and evaluate business continuity plans, and conducted in a safe and controllable environment that does not impact operations (Kwok et al., 2019). Through real-world crises and training exercises, organizations can evaluate the effectiveness of their business continuity management system (BCMS). Evaluating an organization's BCMS should include evaluating internal and external stakeholders, evaluate legal and regulatory requirements, and should be

conducted in planned intervals, when there is a significant change in the organization and after an incident (ISO, 2019).

## **Community Impact**

Disasters have negative impacts on small businesses and the overall community small businesses serve. Small business disruptions caused by disasters can affect the products and services communities rely on (Gregory, 2020), therefore negatively impacting community quality of life. Without the products and services that small businesses provide communities, residents will look to other businesses who can provide these services, which can also lead to long-term loss of customers (Demircioglu et al., 2021). Disasters are also known for interrupting lifeline infrastructures such as power, water supply, roads, and telecommunications which are damaging to business and community recovery (Lee, 2019). In many cases, as seen during the COVID-19 pandemic, business disruptions can lead to business failure. Business failure poses another negative impact on the community that results in higher unemployment.

Disaster-related business disruptions are often tied to community members losing their jobs. Researchers conclude that disasters lead to significantly higher unemployment rates (Zhu et al., 2021). Unemployment rate increases resulting from disaster-related business disruptions are exhibited with the COVID-19 pandemic, which produced the largest job loss in U.S. history (Mance, 2021). During the height of the COVID-19 disaster, businesses laid off 20% of their employees, and the hospitality and tourism industries saw a loss of 38 million jobs alone (Brar et al., 2021). In addition to the negative impacts highlighted regarding disaster-related job losses, unemployment also

affects communities by impacting the mental health of the unemployed (Bushe, 2019).

Considering small businesses represent 99.9% of United States businesses (United States Small Business Administration, 2018), small business failures from disaster-related events are detrimental to communities throughout the United States.

# **Conceptual Framework Application to the Business Problem**

The purpose of this qualitative multiple case study is to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. The adapted business continuity management (BCM) framework International Organization for Standardization (ISO) 22301: 2019 provides the foundation for this study's conceptual framework (Paunescu & Argatu, 2020). Paunescu and Argatu (2020) developed an adapted BCM framework based upon the elements of ISO 22301: 2019. The tenets of this framework include applying the plan-do-check-act (PDCA) cycle to multiple aspects of ISO 22301: 2019. Additionally, the conceptual framework used for this study provides an approach to BCM that relates to this study by providing a framework to analyze small business owner's approach to effective BCM disaster plans. Using the steps outlined in this adapted BCM framework, I seek to explain business continuity through the tenets of the adapted BCM framework.

For this study, the general business problem is U.S. small business owners who do not prepare for disaster-related events may experience business failure within three years. The specific business problem is that some U.S. small business owners lack practical disaster plans to ensure business continuity. Keeping these business problems in mind, the following sections will exhibit how Paunescu and Argatu's (2020) adapted BCM

framework applies to the business problem. In doing so, I will cover the concept of business continuity management and components; and organizational resilience and BCM efficiency. The analysis of these topics will exhibit a direct correlation to how it can aid U.S. small business owners prepare for disaster-related events and develop practical disaster plans to ensure business continuity.

# **Concept of Business Continuity Management**

Creating an effective BCP aids business leaders in mitigating disruptions to their delivery of products and services. The concept of BCMS is characterized as the ability of a business to maintain delivery of its products and services at predefined levels after a business disruption (Paunescu & Argatu, 2020). Effective development of BCP enables business leaders to efficiently respond to business interruptions (Margherita & Heikkila, 2021). This overarching concept of BCM aids business leaders in identifying threats and protecting their business operations, which shelters their organization from threats (Nienimaa et al., 2019; Ranf et al., 2021).

Another concept of BCM is that it is also considered a system for addressing risks. A BCM is also considered an instrument that contributes to an organization's improvement in flexibility against business threats (Torabi et al., 2016). As I have highlighted in this section, the BCM concept brings many advantages to an organization (Paunescu & Argatu, 2020). These advantages aid U.S. small business owners in effectively preparing for disaster-related events and developing practical disaster plans to ensure business continuity. Further to this point, BCM applies to the business problems

because it provides an effective and proven system and tools that are needed to successfully mitigate organizational threats.

# **Composing Elements of Business Continuity Management**

Business continuity management is a series of connected actions. A business continuity plan is developed to aid an organization endure unexpected damages and is broken down into elements (Paunescu & Argatu, 2020). The elements of BCM are defining the context of the organization to create a BCMS and BCM scope, goals, and responsibilities; conducting a risk assessment and business impact analysis; developing a BCP based upon the first two elements; and evaluation and continuous improvement (DHS, 2021a). The following section will analyze BCM elements and how they apply to the business problem.

Understanding the context of an organization enables business leaders to create a BCMS that is customized to their company. Defining the context of an organization to create a BCMS and BCM scope, goals and responsibilities is directly correlated with the scale of the organization, operational period, and workforce disaster experience (ISO, 2019; Kato & Charoenrat, 2018; Paunescu & Argatu, 2020). Factoring in scale of the organization, operational period, and workforce disaster experience enables business leaders to tailor their BCMS to best fit their organizational needs from BCP development to workforce training. Understanding the scope of the organization ensures that all operational facets are covered during the BIA and overall BCMS development. Factoring in the organization's operational period is important because cyclical operating processes can present different types of threats depending on what operational period the business

is in. After organizational leadership has identified their operational period, they should then establish operational process criteria, implement process controls in accordance with identified operational process criteria; and ensure that documentation is kept pertaining to the process (ISO, 2019).

Once organizational leadership has identified the context of the organization, scope, and operational period, they can move on to defining goals and responsibilities of the organization's BCMS. The primary goal of any BCMS is to maintain continuous operations for the business (Russo, 2019). Secondary goals are identified by business leaders and implemented into the BCMS, then roles and responsibilities for the workforce are identified. Roles and responsibilities of each BCMS associated team and the relationship between each team should be clearly stated by organizational leadership as this is a priority for the business continuity process (Reid, 2020). Creating roles and responsibilities highlights the importance of considering the experience of the workforce with disasters, and quality of training. Organizational leadership must keep in mind that their BCMS will have a wide range of roles and responsibilities and the workforce's understanding of the roles and responsibilities will vary widely (Schmid et al., 2021). For workforce personnel who are assigned a BCMS role and responsibilities, and are not familiar with what the role requires, quality organizational BCMS training should be provided.

A business impact analysis (BIA) and risk assessment (RA) are used in conjunction with ISO 22301. The combined use of a BIA and RA with ISO 22301 create the main step conducted in a business continuity management system (Soufi et al., 2019).

These two forms of assessing risks aid business leaders in identifying many possible hazards and scenarios that could unfold resulting from disasters and is an essential phase in creating a BCMS (DHS, 2021c; Paunescu & Argatu, 2020). Business impact analysis' (BIA) are used at the management level as a tool for analyzing impacts to a business and is used by organizations to assess losses resulting from a disaster-related business disruptions (Budiyanto et al., 2021; DHS, 2022b). Additionally, a BIA enables organizational leadership to identify critical functions and establish recovery objectives that support key business products and services (Ricks & Boswell, 2019).

One of the most impactful aspects of BCMS creation is a risk assessment. Risk assessments play an important role in the development of BCMS policies and creates an effective impact on the organization's BCMS (Paunescu & Argatu, 2020). Researchers conclude that RA's also aid in contributing to an organization's strategic and operational decision making (Labus et al., 2020). The RA process requires organizational leadership to identify assets that are at risk from identified hazards, and what the potential impacts from those hazards look like (DHS, 2021c; ISO, 2019). Possible hazards that business leaders should be looking for include natural hazards which can come in the form of weather, geographic, and biologic; human-caused hazards which include accidents and intentional acts; and technological hazards which include information technology (IT), utility disruptions, fire, hazardous spills, and supply chain disruptions (DHS, 2021c). Risk assessments, in addition to BIA's, are fundamental to business continuity management (Labus et al., 2020; Paunescu & Argatu, 2020; Soufi et al., 2019).

Developing a BCP based upon defining the context of the organization to create a BCMS and BCM scope, goals, responsibilities, and conducting a risk assessment and business impact analysis aids business leaders in developing a sequence of linked activities. Further, these sequences of linked activities enable the business to withstand unexpected damages (Paunescu & Argatu, 2020). This sequence of linked activities further enables the organization to document BCP processes and procedures for specific events so the organization can effectively respond to business disruptions (Akbari & Gurning, 2020; Margherita & Heikkila, 2021). The U.S. Department of Homeland Security (2021a) recommends the following steps when developing a BCP: develop a framework for the plan; coordinate recovery teams; create relocation plans; develop business continuity recovery processes; and evaluations and continuous improvement.

There are many BCP frameworks being used by organizations in addition to the DHS (2021a) outlined plan. Some BCP frameworks have been around for decades, and others have been modified to work better with evolving threats and technology. An example of a current BCP framework is Hao's (2020) framework developed to address pandemics such as COVID-19. Hao's (2020) framework considers COVID-19's six pandemic phases, four principles developed to aid the hospitality industry focus actions on several disaster-related phases, and effective strategies that worked during the COVID-19 pandemic, or that should have been used during the pandemic. Another example of a current BCP framework is Azadegan et al. (2020), which uses a combination of Simons' Levers of Control framework and BCM concepts. This BCP framework combines BCM concepts and Simons' Levers of Control framework enables

business leaders to improve organizational reputation caused by damages by including supply chain provider input. Further, results from Azadegan et al. (2020) study confirmed that the combination of BCM and supply chain involvement is complementary to organizational disaster response. The last example I will provide is Sahebjamnia et al. (2018) integrated business continuity and disaster recovery planning framework. This BCP framework was developed to address the increasing number of natural and manmade disasters affecting organizations. Further, this framework implements internal and external resources, a minimum resumption of disrupted operations and restoration time, and inclusion of ISO 22301 and BS 25999-2 (Sahebjamnia et al., 2018).

Coordinating recovery teams includes internal and external stakeholders. BCP planners should coordinate with organizational response teams to have an effective response strategy and ensure proper funding and workforce BCP education (Phillips and Tanner, 2019). When forming and coordinating recovery teams, business leaders ensure a diverse group of experts, which offers varying levels of experience and knowledge that might not be available without a diverse group (Namdar et al., 2021). Training for recovery teams is essential to effective disaster recovery (DHS, 2021e; Kato & Charoenrat, 2018). Further, training on roles and responsibilities must be given to the recovery team so that BCM plans can be effectively implemented (DHS, 2021e; Kato & Charoenrat, 2018; Paunescu & Argatu, 2020).

Relocation plans enable organizations to have secondary and tertiary sites identified in cases of primary site evacuations. Creating relocation plans enable organizations to execute an orderly recovery (Hanwacker, 2018), and also enables

organizations to continue operations at a new location when their primary location is inoperable (Kabene & Baadel, 2021). Choosing a good secondary location to mitigate against business disruptions caused by damage to a company's primary location can officer cost and operational advantages (Herbane, 2019). Leadership seeking secondary locations during BCP development should consider other owned sites performing similar functions as a first option, if the site is not impacted by the same event and has the resources and capacity to handle such a move (DHS, 2021a). Further, the U.S. Department of Homeland Security (2021a) states that if resources and capacity are not capable of supporting additional functions, business leaders should plan to provide additional staff and resources to address any inadequacies. Business leaders must also consider rebuilding if there is a total loss and there are no other own facilities to relocate operations (Gregory, 2020).

Organizational recovery plans are detailed plans that organizational leadership use to ensure a timely recovery in disaster situations. Developing business continuity recovery processes should prioritize recovery time objectives (UAE, 2021). Response processes should be flexible considering it is impossible to predict all potential scenarios (Russo, 2019). Research about businesses practicing developing recovery plans concluded that 48% of businesses have a recovery plan, and 40% of businesses have a partially developed one (Paunescu, 2017). Keeping these research results in mind, the U.S. Department of Homeland Security provides business leaders with a business continuity resource requirements worksheet (figure 5), which aids organizations in completing BCMS recovery processes. The Department of Homeland Security (2022a)

business continuity requirements worksheet enables business leaders to identify resource requirements following a disaster and estimate the days and weeks resources will be needed. Other resource considerations that business leaders should consider when developing recovery procedures are employees, facilities, technology, inventory and consumables, third-party services, and utilities (DHS, 2021a; UAE, 2021).

Figure 5

Business Continuity Resource Requirements (DHS, 2022a)

	Resource Details	NormalQuantity	Quantity Needed Following Disaster			
Resource Category			24 hours	72 hours	1 week	Later (specify)
Managers						
Staff	Primary site, relocation site and recovery site					
Office space						
Office equipment	Furniture, phone, fax, copiers					
Office technology	Desktops and laptops (with software), printers with connectivity; wireless devices (with email access)					
Vital records, data, information	Location, backups, and media type					
Production Facilities	Owned, leased, or reciprocal agreement					
Production machinery & Equipment	Especially custom equipment with long replacement time					
Dies, patterns, molds, etc. for machinery & equipment						
Raw Materials	Single or sole source suppliers and possible alternates					

There are many aspects to developing a BCP. Once all sections of the BCP are assembled and validated, developers must seek management approval. Once approved, the organizational BCMS must incorporate exercises and testing, and continuous improvement (Cocco & Thomas-Boaz, 2019; ISO, 2019; Paunescu & Argatu, 2020). Conducting exercises to test the readiness of key BCMS team members and the general

workforce aid business leaders in making better decisions when encountering a business disruption caused by a disaster (DHS, 2021d; Schatter et al., 2019; UAE, 2021). Some benefits of exercises and testing include the following: clarify roles and responsibilities via training; strengthen knowledge of procedures and equipment; improve organizational coordination, communication, and individual performance; evaluation of plans and policies; identify gaps and weaknesses; ensure local laws, regulations, and code compliance; and recognition for the organization's business continuity program (DHS, 2021d).

Business leaders have several methods available to them for testing BCP's. One of the tools available to business leaders to test their BCP's include exercises, which can range from tabletop exercises to live exercises that use real assets (Rackham & Kelly, 2018; UAE, 2021). Business continuity plans are validated after being tested, which is why quality trainings that are incorporated into exercises are essential to the organization's BCMS success (Allicon, 2020; Paunescu & Argatu, 2020). Researchers conclude that only 25% of businesses reviewed conduct BCP exercises and testing in their entirety, 30% partially, and 44% do not conduct exercises and testing at all (Paunescu, 2017). Exercises such as tabletops enable participants to navigate various scenarios, which increases their understanding of how the organization's BCMS helps the team in response and recovery activities (DHS, 2021d; Roush et al., 2021). Live exercises with the use of training scenarios facilitate organizations in finding gaps and vulnerabilities in their BCP's, which also enables continuous improvement (DHS, 2021d; ISO, 2019).

The use of continuous improvement aids business leaders in advancing their BCMS. Researchers describe continuous improvement as a recurring activity that seeks to reduce losses throughout the organization and enhance performance (Al-Akel et al., 2018; ISO, 2019; Paunescu & Argatu, 2020). Continuous improvement occurs in the *act* phase of the plan-do-check-act (PCDA) cycle and is embedded in an organization's culture to improve BCMS performance (Fani & Subriadi, 2019). Opportunities for BCMS improvements follow exercises or actual incidents and conducted to assess the incident response (ISO, 2019). Gaps identified during continuous improvement activities should be recorded and resolved with a correction action program (DHS, 2021f).

A program that identifies improvements that can be made to a BCMS is called a corrective action program. Corrective action programs incorporate improvements identified during incidents and exercises (Paunescu, 2017). Corrective action programs address and documents deficiencies in the organization's BCMS (UAE, 2021). When documenting corrective actions, the following should be recorded: (a) deficiency description, (b) correct action to take, (c) deficiency resources needed, (d) deficiency correction justification, (e) assigning of the corrective action to a person or department, (f) due date for assigned person or department to correct the deficiency, and (g) status of the correction until it is completed (DHS, 2021g). Business leaders must ensure that they prioritize identified gaps for corrective action because some gaps for corrective action will be more vital than others (ISO, 2019; Reid, 2020). To aid business leaders in prioritizing corrective actions, DHS, 2021g created categories that aid organizations in gap prioritization which include: (a) health and safety hazards, (b) governing compliance,

(c) property and operational hazards, (d) national standards compliance, and (e) abiding by industry best practices.

# **Organizational Resilience**

Business continuity management systems (BCMS) provide organizations a framework to build business resilience. BCMS' also enable effective response capabilities for internal and external threats to organizational operations (ISO, 2019; Paunescu & Argatu, 2020). An effective BCMS can also provide operational resilience from unforeseen events (Groenendaal & Helsloot, 2020). One key factor that business leaders must consider when improving their organizational resilience is the location of their assets. Location of company assets is directly associated with organizational resilience (Herbane, 2020; ISO, 2019). Location of company assets are affected by natural and man-made events such as storms and crime, which is why business leaders must take into consideration where current and future assets will be located. Further, mitigating the high-risk threats associated with location of assets can be mitigated with the use of ISO 22301 which aids business leaders in identifying points of failure (Miletic, 2020).

There are many key factors that business leaders must consider when facing a disaster-related business disruption. One key factor that business leaders must consider when improving their organizational resiliency is their ability to keep critical functions operational when facing disaster-related business disruptions (Schatter et al., 2019). Improving the organization's ability to sustain critical functions after a disaster-related event centers on the organization's ability to reorganize and supported itself after a

disaster (Paunescu & Argatu, 2020). Researchers have identified 13 indicators of an organization's ability to keep critical functions operational during disaster-related events, which are classified into the two categories of planned and adaptive: (a) leadership, (b) situational awareness; (c) innovation and creativity, (d) proactive posture, (e) stress training; (f) planning strategies, (g) unity of purpose, (h) breaking silos, (i) leveraging knowledge, (j) internal resources, (k) effective partnerships, (l) decision making, and (m) staff engagement (Hatton & Brown, 2021). Planned indicators refer to elements and processes set in place prior to a disaster (Hatton & Brown, 2021; ISO, 2019). Adaptive indicators refer to company capabilities that will enable an effective response to business disruptions (Hatton & Brown, 2021).

# **Business Continuity Management Efficiency**

Business continuity management efficiency is an important aspect of developing and maintaining an effective BCMS. Business continuity management efficiency is dependent on organizational leadership's understanding of the business' continuity capabilities, establishing a business continuity implementation strategy, and how they build their organization's resiliency (Wong, 2019). To make a BCMS more efficient, researchers have concluded that for unpredictable events, business leaders should develop a strategy for projected improvisation (ISO, 2019). Further aiding business leaders with mitigating unpredictable events is their need to take preparatory steps to improve improvisation by BCMS stakeholders during disaster-related business disruptions (Grenendaal & Helsloot, 2020). Predictable events are best mitigated with an adaptive business continuity plan (Lindstedt, 2020).

Researchers have developed an adaptive business continuity approach designed to make BCMS more efficient and add value to an organization. The adaptive business continuity approach adds value to an organization eleven times faster than traditional business continuity approaches (Lindstedt, 2020). For this efficient approach to BCMS, researchers have broken down the process into six phases: (a) management of the policy and program, (b) inserting, (c) assessment, (d) design, (e) application, and (f) authentication. Policy and program management require executive management action, support, and commitment to the program (ISO, 2019; Paunescu & Argatu, 2020). Inserting, which is phase two, is designed to ensure that the BCMS becomes a part of the organizational culture (Lindstedt, 2020). Phase three assessment, involves an assessment via a business impact analysis (BIA) and risk assessment (RA) (ISO, 2019). Phases four and five, which are design and application, center on the organization's recovery and continuity tactics, which focus on business continuity planning and documentation. Lastly, phase six, which focuses on validation of the business continuity lifecycle and exercises which should be designed to reflect the organization's size, complexity, and that the plans are up to date and effective (Paunescu & Argatu, 2020).

#### **Transition**

In section 1, I presented the background to the study, the business problem, and the purpose statement. I then proceeded to highlight the nature of the study and presented the study's research question, and interview questions that I elicited participant feedback via their knowledge and experiences. The next part of the study exhibited the conceptual framework, followed by operational definitions to aid the reader with business continuity

and disaster-related terminology. I then proceeded to highlight the significance of the study which centered on enabling me to collect data from small business owners via lessons learned. In turn, obtained data from this study's interviews can aid U.S. small business performance improvements in planning for, and recovering from, disaster situations. A review of professional and academic literature followed. My review of professional and academic literature took an in-depth analysis of the following: (a) International Organization for Standardization 22301, (b) alternative theories, (c) disaster-related business disruptions, (d) business continuity management system development, (e) community impact, (f) conceptual framework application to the business problem, (g) concept of business continuity management, (h) composing elements of business continuity management, (i) organizational resilience, and (j) business continuity management efficiency. The literature review solidifies the importance of U.S. small business owners developing and implementing a BCP to aid them in mitigating disaster-related business disruptions.

Section 2 reintroduces the study's purpose statement. Section 2 continues with examining the role of the researcher, participants, research method, research design, population and sampling, ethical research, data collection and organization techniques, data analysis, reliability and validity, and an overview of section 3. Section 3 contains an introduction, presentation of the findings, application to professional practice, implications for social change, recommendations for action, recommendations for further research, reflections, and a conclusion.

## Section 2: The Project

Understanding the importance of U.S. small business resilience enables business leaders to create an effective BCM system for their organization. Keeping in mind the importance of small business resilience, this study aims to draw data that can improve the resilience of U.S. small businesses that encounter disaster situations. In this project section, I will discuss the method and design of this study to provide a detailed explanation of how the study was conducted.

## **Purpose Statement**

The purpose of this qualitative multiple case study is to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. The targeted population will consist of seven U.S. small businesses in the service industry who have successfully remained in business following a disaster. The implications for positive social change include the potential to better understand and potentially reduce disaster-related U.S. small business failures, thus reducing the negative impacts communities experience from job losses.

# Role of the Researcher

The first priority for the researcher is to protect the integrity of the study. The researcher's role is also focused on being an observer and outsider rather than a participant (Johnson et al., 2019); however, they are charged with protecting the integrity of the study. Further, in a qualitative study, the researcher's initial steps, to the conclusion of the study, are critical to the study's results (Henderson, 2018; Johansson & Wallo, 2019). Keeping these two aspects in mind, the researcher's role in the study's data

collection process must ensure that data collection techniques and analysis procedures align, and that the researcher starts with the research question in mind (Bush & Amechi, 2019). Additionally, the researcher in a qualitative study is considered the research instrument, which directly affects data collection and analysis and exhibits the strength of the qualitative research method (Geddis-Regan et al., 2021).

My relationship with this topic and research area includes over 20 years of experience in security and investigations. During my time in this sector, some of which was in the U.S. Marine Corps, I have implemented many facets of risk management. In 2020, with the COVID-19 outbreak, business continuity came to the forefront in my career, with many organizations realizing they did not have a BCP, or their BCP was ineffective, causing many businesses to adopt new BCP measures for COVID-19 (Galbusera & Cardarilli, 2021). My role related to ethics and the Belmont Report protocol is to ensure that I am using a moral framework when using humans for research (Redman & Caplan, 2021). The Belmont Report provided a reference for me to better understand ethical research guidelines and clarified what and why I must have an informed consent form signed by all participants. Some key aspects I took from the Belmont Report include the report's four principles for basic ethical research: (a) autonomy, (b) beneficence, (c) justice, and (e) non-maleficence (Lantos, 2020). Using the findings from the Belmont Report, I can ensure my research is conducted ethically.

Researchers should be aware of the types of researcher bias that can affect their study results. Researchers have identified four types of researcher bias in qualitative research: (a) questions, (b) sampling, (c) conceptual, and (d) anticipated outcome biases

(Wadams & Park, 2018). I mitigated bias and avoided viewing data through a personal lens by exercising researcher reflexivity, which is my acknowledgment of my personal biases, and enabled my research study to maintain data collection and analysis credibility and trustworthiness (Buetow, 2019). Additionally, my research study was peer-reviewed, which provided a critique of my study methods and a validation of drawn conclusions (Johnson et al., 2020). Continued awareness of my personal biases, combined with having my research peer-reviewed, enabled me to mitigate personal bias and viewing data through a personal lens or perspective.

Researchers should have a predeveloped interview protocol to aid them in receiving accurate results. The rationale for using an interview protocol is that a reliable protocol is essential to obtaining quality interview data (Yeong et al., 2018). Further, qualitative research studies use interview protocol as a procedural guideline so the researcher can implement a standardized, consistent, and quality data collection process (Baaten et al., 2020). I developed and used an interview protocol (Appendix A) with eight open-ended questions for all interviews. I designed the eight open ended questions to aid me in obtaining a better understanding of the participant's experiences and knowledge of the topic (Weller et al., 2018).

### **Participants**

Participants play a key role in helping researchers collect data for research studies. Keeping this in mind, one of the researcher's objectives is to use the study's purpose to select eligible participants (DeJonckheere & Vaughn, 2019). Participant interviews can provide essential data points for research studies; however, researchers

should be cognizant of response bias in the form of careless and malingering answers from participants (Palaniappan & Kum, 2019). Eligibility criteria for the participants in this qualitative multiple case study center on several conditions. Participants are (a) are U.S. small business owners, (b) are in the service industry, and (c) have successfully remained in business following a disaster. The participants' experience with disasters range from COVID-19 to other forms of natural disasters such as hurricanes. Keeping in mind the participant criteria mentioned above, the screening process for research study participants helps to ensure that participants are eligible, however, the screening process is not considered a panacea (Jones et al., 2021).

The strategies I used for gaining access to study participants included LinkedIn contacts and referrals from coworkers who know small business owners who meet this research study's participant criteria. To mitigate possible researcher bias, I ensured that no close family or friends were chosen as participants for this study. Researchers conducting studies collect data from participants via in-person visits, phone calls, and other forms of digital correspondence (Amundsen et al., 2017). For this research study, I used phone calls and in-person meetings for an introduction to the research study and myself, and for the interview questions.

A good working relationship between the researcher and participants is important for study results. Keeping this in mind, researchers conclude that researcher-participant relationships shape the course of research studies and the study's findings (Saleh, 2021). Strategies used for establishing a working relationship with participants for this research study include acknowledging that being a fellow human with the participant can

sometimes overrule the researcher's role in ethical dilemmas (Kvande et al., 2021). Part of any successful relationship is trust, which helps make participants more comfortable and improves the probability of participants giving truthful answers (Moser & Korstjens, 2018). Building further on trust for researcher-participant working relationships is developing and improving social skills as these skills are essential to developing trusting relationships (Johansson & Wallo, 2019). Using the strategies mentioned above, I ensured that all communications were clear for the participants by asking if they needed any clarification on questions asked or what was explained pertaining to the nature of this research study. In doing so, I was able to create a good rapport with the research participants.

The research question for this study was the following: What strategies do some U.S. small business owners use to create practical disaster plans to ensure business continuity? Researchers conclude that the best strategy in recruiting participants is to seek participants with characteristics that can provide the strongest data (Moser & Korstjens, 2018). I ensured the participants' characteristics aligned with this overarching research question by seeking participants who were U.S. small business owners in the service industry who have successfully remained in business following a disaster.

### **Research Method & Design**

#### **Research Method**

Researchers choose amongst quantitative, qualitative, or mixed methods approaches to conduct studies. The quantitative method is used for data collection technique or data analysis procedures that produces or uses numerical data (Butler-

Kisber, 2018). The quantitative method was not appropriate for this study because this study did not use statistical and numerical data analysis techniques (Taguchi, 2018); however, I conducted interviews and triangulated the data by investigating available documentation and physical artifacts to determine the effectiveness of the strategies.

There are several research methods available to researchers to use with their studies. Using mixed methods requires integrating both qualitative and quantitative research methods (Chicoine, 2018). Using the qualitative method requires developing and using questions to gain an understanding of how problems affect the reality of participants (Allen, 2017) and their solutions. The qualitative method was appropriate for this study because the phenomenon lacks complete exploration by the academic community (Ward et al., 2018). Further justification for using a qualitative method results from interviews with open-ended questions to further explore the U.S. small business owners' BCM plans phenomenon. Using a qualitative method, I explored the implications for positive social change that have the potential to provide a better understanding and potentially reduce disaster-related U.S. small business failures, thus reducing the negative impacts communities experience from job losses. The mixed method was not required for this study because it entails using both the quantitative and the qualitative methods (Taguchi, 2018).

# **Research Design**

I have various designs to consider using for my study. The qualitative researcher can choose among various designs such as a phenomenological study, narrative study, or a case study to explore the research topic. Phenomenological researchers focus on

exploring the personal meanings of participants' lived experiences. The phenomenological design was not appropriate for this study because it would not enable a thorough enough analysis for the study and is limited to lived experiences only (Taylan & Ozkan, 2021). My intent was to look beyond experience and include perspectives to gain a deeper understanding of the phenomenon. A narrative study involves compiling firsthand accounts of personal stories that may have contributed to decision-making processes within the current work environment. A narrative study design was not appropriate for this study because I was not interested in exploring participants' personal life stories to explain business decision-making processes.

Using a multiple case study requires researchers to use multiple organizations and engage participants in interviews. This approach to multiple case studies enables researchers to gain and compare a range of experiences and perspectives (Heale & Twycross, 2018). Using a multiple case study was expected to give me more analytic data from the use of more than two participants, with results being more robust than using one participant (Yin, 2018). Additionally, the use of a multiple case study enabled me to explore the implications for positive social change that have the potential to provide a better understanding and potentially reduce disaster-related U.S. small business failures. Data saturation is the most employed concept in qualitative research to determine sample size and when data collection might conclude (Fofana et al., 2020; Guest et al., 2020). Researchers have concluded that data saturation occurs when additional data does produce any new emergent ideas (Saunders et al., 2018). I ensured data saturation by

continuing to collect data from multiple sources via interviews until no further ideas or information was obtained.

## **Population and Sampling**

I drew the population for this study from seven U.S. small business owners in the service industry who have survived a disaster. In addition to the listed criteria for the participants, the population also had experienced a disaster-related business disruption and successfully managed through the event. There are several sampling methods I choose from for this study. Some of the sampling methods that were available to me are (a) purposive, (b) quota, and (c) snowball sampling (Bhardwaj, 2019). Purposive sampling, which was appropriate for this research study, and also referred to as deliberate and judgmental sampling, draws the population based on the purpose of the study (Bhardwaj, 2019; Campbell et al., 2020). Snowball sampling, which was also not appropriate for this study, is also known as chain and sequential sampling, and its use involves one participant identifying another to be interviewed for the research study (Khalil et al., 2022). I chose quota sampling for this research study, which selects participants based on specific characteristics (Rada & Martínez, 2020). The characteristics of the population for this study will be the following: (a) U.S. small business owners, (b) in the service industry, and (c) have successfully remained in business following a disaster.

Four or more participants are essential to qualitative research. This number of participants is essential because having multiple sources of data collection ensures rigorous research quality, which is an important aspect in conducting case studies (Yin,

2018). Considering the characteristics mentioned above that provided the criteria I used to select participants, I interviewed seven U.S. small business owners via phone conversation and face-to-face meetings, using the interview protocol in Appendix A. I also ensured data saturation by continuing to collect data from multiple sources via interviews until no further ideas or information was obtained.

### **Ethical Research**

Conducting research ethically must be done with any form of reliable research study. Research ethics are considered a precondition for vigorous science in any field and essential to every step in the research process (Stolt et al., 2022). Part of conducting ethical research is providing an informed consent form to the research study participants. The informed consent offers an avenue for the researcher to distribute information, build trust, and obtain consent from the research study participants (Nusbaum et al., 2017). Additionally, informed consent is fundamental to research ethics and must be obtained before registering study participants in any research involving humans (Stolt et al., 2022). After I received Walden University's IRB approval, I emailed the informed consent to study participants with an explanation of the nature of this study and how they will be involved, the purpose of the informed consent, and the timeframe for their involvement in this research study. The Walden University IRB approval number for this study is 06-21-22-0524266. Upon completion of the informed consent, participants emailed the form back to me.

The Belmont Report was a seminal report that aids researchers today in conducting studies ethically. The Belmont Report emphasizes the need for researchers to

minimize risk and maximize benefits to study participants, and to also inform participants that they can withdraw from the study at any time (Langer et al., 2021). Participants were told that they could withdraw from the research study at any time on the informed consent form and via phone conversations and in-person meetings. I ensured the procedure for participant withdrawal was simple by providing and informing the participants to fill out a withdrawal form and to email or mail it back to me if they did not wish to continue participating in the study. If a participant wanted to withdraw from the study, I removed all data provided by the participant and stored it in a locked container for five years, which provides a level of confidentiality and anonymity (Schultz & Hendrickse, 2018).

Confidentiality is a key part of any research study. Researchers are expected to ensure data remains confidential to prevent any harm to and protection of study participants (Surmiak, 2018). All data for this study are protected via locked container or password for five years to protect the names, organizations, and other confidential information provided for this study. No incentives were given to the participants for participating in this study. The outlined protection of confidential information procedures I took ensured that study ethical commitments, moral standards, and concerns were addressed (Farmer & Lundy, 2017).

#### **Data Collection Instruments**

Researchers conclude that qualitative research requires high richness, and indepth quality data. Keeping this in mind, qualitative research also requires the right research instrument to fulfill these requirements (Dube & Mutambara, 2020). For this

research study, I was the primary data collection instrument as study researchers are considered the primary collection instrument in qualitative research (Muzari et al., 2022). To aid me in data collection, I conducted semi-structured interviews. Semi-structured interviews enabled me to keep the interview focused while still giving me the flexibility to explore other ideas that may arise during the course of the interviews (Adeoye-Olatunde & Olenik, 2021; Brown & Danaher, 2017).

The interviews for this study were completed using the interview protocol exhibited in Appendix A. The interviews consisted of eight open-ended questions which were designed to aid me in obtaining a better understanding of the participant's experiences and knowledge on the topic (Weller et al., 2018). A reliable interview protocol is essential to obtaining quality interview data (Yeong et al., 2018), and acts as a procedural guideline so the researcher can implement a standardized, consistent, and quality data collection process (Baaten et al., 2020). Further, the interview data collection process consisted of face-to-face interviews, audio recordings, note taking, and a strict adherence to the interview protocol to ensure consistency in questions asked and equal treatment to all participants. Considering the current state of COVID-19, it had the potential to impact my face-to-face interview plan. My alternate plan for conducting interviews was to hold them via Zoom or Google Meets.

I enhanced the reliability and validity of this study's data collection process with the use of member checking. Member checking is the process of requesting feedback from study participants about the accuracy of my interpretation of their answers given during this study's interviews (Motulsky, 2021; Naidu & Prose, 2018). Member checking

was used during the scheduled follow-up interviews with the participants being supplied a succinct synthesis for each individual question they answered. Using the supplied succinct synthesis for each question the participants answered, I confirmed the validity of my interpretations. Further aiding me in confirming my interpretations of answers given, I echoed, paraphrased, and sought further clarification for ambiguous answers - thus enabling participants the opportunity to confirm or correct my interpretations (Coleman, 2021). Based on the feedback I received from the follow-up interviews, I updated participant data to improve the reliability and validity of this study.

## **Data Collection Technique**

Upon receiving IRB approval, I started data collection for this study. My primary technique for data collection was semi-structured interviews, which are designed to collect in-depth data when conducting a qualitative research study (DeJonckheere & Vaughn, 2019). Semi-structured interviews require the researcher to develop a set of interview questions via an interview protocol based on the study before conducting an interview (Mantei & Kervin, 2021). I used the interview protocol (see Appendix A), which asked eight open-ended questions to better aid me in understanding the business problem and to contribute to answering the research question. Researchers conclude that the use of open-ended interview questions aid researchers in understanding their study's business problem (Weller et al., 2018). Further, at the conclusion of this study's follow-up interview, I sought to collect enough information on the strategies that some U.S. small business owners use to create practical disaster plans to ensure business continuity to conclude this study.

The process I used for my data collection technique consisted of face-to-face interviews, audio recordings, and note taking. I also reviewed any BCPs - if provided, to offer better insight into the business problem (Cardno, 2019). Additionally, I proceeded with a strict adherence to the interview protocol to ensure consistency in questions asked and equal treatment to all participants. The reason I requested a review of participants' BCP is because the use of different research methods aids the study's credibility (Moon, 2019). Considering the current state of COVID-19, it has the potential to impact my face-to-face interview plan. My alternate plan for conducting interviews will be to hold them via Zoom or Google Meets.

The following are the steps that were taken during the interview process to collect data: (a) all participants will be informed about the nature of the study and what their contribution would be via phone call or email, (b) each participant will read and agreed to the informed consent, (c) I set up the interview location the participant preferred, (d) once face-to-face or via phone, I reexplained the nature of the study and the participants' contributions, and reconfirmed with the participants that they could withdraw from the study at any time, (e) interviews were concluded with me thanking the participant and confirming our follow-up interview schedule, (f) I reviewed all audio, notes, and BCP's, synthesized the information, and typed my interpretation on a follow-up documentation, (g) I conducted follow-up interviews and used member checking to confirm my interpretation of the participants' initial answers (Varpio et al., 2017), (h) I concluded the follow-up interviews by thanking them for their participation and informing them of how their information will be kept confidential and stored for five years in a secure location.

Researchers deciding on which data collection technique to use should consider the advantages and disadvantages of each. Of the many types of data collection techniques available, researchers have identified several different advantages and disadvantages (Cvetek et al., 2021). Researchers identified five advantages of semistructured interviews which include: (a) complexity, (b) subjectivity, (c) pace, (d) flexibility, and (e) clarity (Low, 2013; Sibiya & Barnard, 2020). Researchers also describe advantages associated with documentation analysis as cost-efficient with no cost to the researcher, manageable, and simple (Cardno, 2019). The listed advantages of the use of semi-structured interviews and documentation analysis enable me to implement effective data collection techniques. Researchers have also identified some disadvantages associated with semi-structured interviews, which include: (a) complexity, (b) sample, (c) availability, (d) analyzing, and (e) commitment (Adams, 2010; Sibiya & Barnard, 2020). Further disadvantages were found by researchers pertaining to documentation analysis, which included: (a) inadequate detail, (b) inability to access documents, and (c) and difficulty authenticating (Cardno, 2019). I mitigated the described disadvantages by combining semi-structured interviews and documentation analyzation to collect thorough in-depth data for this research study.

A pilot study can assist researchers with building and testing strategies to implement during their research study. Additionally, pilot studies help build and test strategies by addressing design and methods uncertainties (Pearson et al., 2020). Researchers use pilot studies to ensure participants, interview settings, and methods are suitable for the study, however, a pilot study makes achieving data saturation difficult

because of the number of participants and does not ensure that the main study will be a success (Majid et al., 2017). Considering the listed disadvantages of performing a pilot study, I did not conduct one for this research study.

I used member checking to confirm my interpretation of the participants' interview answers. Member checking was used during the scheduled follow-up interviews with the participants being supplied a succinct synthesis for each individual question they answered. Using the supplied succinct synthesis for each question the participants answered, I sought to confirm the validity of my interpretations. Further aiding me in confirming my interpretations of answers given, I echoed, paraphrased, and sought further clarification for ambiguous answers - thus enabling participants the opportunity to confirm or correct my interpretations (Coleman, 2021). Based on the feedback received from the follow-up interviews, I updated participant data to improve the reliability and validity of this study.

# **Data Organization Techniques**

Research study organization enables the researcher to keep better track of data, therefore increasing accuracy of the study's results and enabling readers to better understand the study. Researchers that are able to maintain the organization of their study's data with qualitative research increases the reliability of the study (Yin, 2018). The data organization technique I used for this research study was NVivo, which is a qualitative data management software (Helou et al., 2021). After conducting the semi-structured interviews, I compiled and organized all data into a database, which aids in qualitative data management (Rance et al., 2021), and also enables the researcher to

disassemble and reassemble data (Yin, 2018). Once all data were entered into NVivo, I broke down the data into categories and placed each category in subfolders for better organization.

Some of the data that was collected during this research study is considered confidential. Keeping this aspect in mind, anonymity is important to help protect the identities of this study's participants and companies (Surmiak, 2018). The strategy I used to securely store participant data aided me in maintaining participant privacy (Kokina et al., 2017). Physical data will be stored in a locked file cabinet, and digital data will be password protected. Additionally, I referred to the participants as P1 through P7, and the companies as SCA through SCG to mask identities. Walden University requires all raw data from this research study to be securely stored for five years then destroyed. After five years, I will shred any physical documented data, and delete all digital data.

### **Data Analysis**

Researchers conclude that one way of promoting social change, diminish bias, and improve data saturation is with the use of multiple sources of data. This use of multiple sources of data is better known as triangulation (Fusch et al., 2018). There are four different types of triangulations which include: (a) data, (b) investigator, (c) theory, and (d) methodological (Yin, 2018). Data triangulation requires the researcher to collect data from multiple sources that can corroborate the finding (Yin, 2018). Investigator triangulation strengthens reliability and validity of case study research by reducing researcher bias (Alfrey et al., 2022). Theory triangulation uses different theories to evaluate and understand data (Wolthuis et al., 2021). Lastly, methodological triangulation

is considered to be a central model of triangulation types and involves applying multiple data sources to investigate and obtain a thorough understanding of the phenomena (Santha, 2019; Yin, 2018). For this qualitative case study, I used methodological triangulation combined with semi-structured interviews, BCP documentation, and follow-up interviews for member checking.

To ensure the accuracy of obtained data and study results, researchers must know the steps involved in analyzing qualitative data. Analysis of qualitative data has five steps: (a) compiling, (b) disassembling, (c) reassembling, (d) interpreting, and (e) concluding (Castleberry & Nolen, 2018). For this study's first step in analyzing data, I collected and assembled data from my semi-structured interviews, via audio recordings, notes taken, and a review of provided organizational BCP documents. For the second step in the data analysis process, I disassembled the compiled data placing the data into different themes by participant. The third step involved me reassembling the data and placing the data into categorial and sub-categorial folders in NVivo to identify themes, integrate, and synthesize study data. In step four, interpreting, I wrote my understanding of the data received on to the follow-up interview protocol so effective member checking could be initiated. Lastly, after compiling, disassembling, reassembling, and interpreting, I concluded with editing any changes identified during member checking. I linked the identified themes to this study's research question and conceptual framework. Additionally, I ensured I reviewed recently published literature on business continuity and this study's conceptual framework to identify any new correlations that could be included in this study. At the conclusion of my data analysis, I sought to be able to

identify deviations and associations between this study's conceptual framework and the strategies that some U.S. small business owners use to create practical disaster plans to ensure business continuity.

# **Reliability and Validity**

# Reliability

Reliability of qualitative research relies heavily on qualitative research evaluation via several steps. The idea of trustworthiness of inquiry combined with the rigorousness of qualitative research evaluation via dependability, credibility, transferability, and confirmability is widely accepted by most scholars (McGinley et al., 2021).

Dependability is considered a strategy used to ensure a study is replicable, transparent, and sufficient to use for future studies (Maher et al., 2018). To ensure dependability for this qualitative research study, I used an interview protocol (see Appendix A), and member checking. One factor that can affect a study's dependability is researcher bias. Researchers have concluded that personal beliefs and experiences can affect study outcomes from the introduction of bias, which can influence the choice of topic and interpretation of interviewee data (Lear et al., 2018).

Keeping in mind the inherent nature of researcher and participant biases, I employed an interview protocol seen in Appendix A. Additionally, I also employed member checking to prevent a systematic error that could affect the results of this study (Popovic & Huecker, 2021). Member checking is the process of requesting feedback from study participants about the accuracy of my interpretation of their answers given during this study's interviews (Motulsky, 2021; Naidu & Prose, 2018). Member checking

was used during the scheduled follow-up interviews with the participants being supplied a succinct synthesis for each individual question they answered. In addition to deploying strategies to ensure dependability, these strategies were combined with my analysis of audio recordings and organizational documents, which also contributed to ensuring transparency and avoiding biases throughout the study.

## Validity

As with reliability, validity is an important aspect of qualitative research studies. Validity in qualitative research centers on credibility, transferability, and confirmability (Cypress, 2017). Credibility can be improved in qualitative research with the use of what is called *use-of-self*. Use-of-self enables the researcher to engage emotional, physical, and physiological factors in diverse situations (Shufutinsky & Long, 2017). Use-of-self should be employed in qualitative research to increase transparency, trustworthiness, rigor in the study's process and the presented and described data (Shufutinsky, 2020). While utilizing the use-of-self technique, I also employed member checking, reviewing of audio recordings and organizational business continuity plan documentation, and methodological triangulation combined with semi-structured interviews to ensure this study's credibility.

Qualitative research studies must be transferable. Transferability, in the context of qualitative research, is the extent to which findings are relevant and have connotations in other settings (Baumgart et al., 2021). I ensured transferability for this research study by providing detailed descriptions of the study's research questions, context, design, findings, and interpretations, which enables other researchers to design similar research

studies to be used in different settings (Saunders et al., 2015). Confirmability using quotes or similar data improves confirmability in qualitative research findings (Yadav, 2021). Additionally, accurate reflections of participant views without the inclusion of researcher bias are also forms of confirmability (Hays et al., 2016). Using some of the strategies I used to maintain credibility, I ensured confirmability by removing any researcher bias with the use of an interview protocol (see Appendix A), member checking, audio recordings and documentation review, and methodological triangulation (McGinley et al., 2021). Lastly, data saturation. Data saturation occurs when additional data does not produce any new emergent ideas (Saunders et al., 2018). I ensured data saturation by continuing to collect data from multiple sources via interviews and documentation until no further ideas or information was obtained.

# **Transition and Summary**

In section 2, I reintroduced the (a) purpose statement, (b) role of the researcher, (c) participants, (d) research method and design, (e) population and sampling, (f) ethical research, (g) data collection, (h) data collection technique, (i) data organization technique, (j) data analysis, and (k) reliability and validity. As such, section 2 provides guidelines for how this study was completed via a qualitative multiple case study with the use of semi-structured interviews, which are designed to collect in-depth data when conducting a qualitative research study (DeJonckheere & Vaughn, 2019). Section 3 begins with (a) brief reintroduction of the study's purpose statement; (b) a presentation of the findings; (c) application to professional practice; (d) implications for social change;

(e) recommendations or action; (f) recommendations for further research; (g) reflections; and (h) a conclusion.

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

The purpose of this qualitative multiple case study is to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. The U.S. Small Business Administration (2021) concluded that 25% of small businesses fail following a disaster-related business disruption. Considering 99.9% of U.S. businesses are small (United States Small Business Administration, 2018), a large portion of the U.S. economy relies on small businesses to succeed. This study's findings were drawn from a combination of semi-structured interviews with owners of U.S. small businesses in the service industry, organizational documentation provided by the participants, and evidence from published literature on BCM. I conducted this study's data analysis through the lens of the adapted BCM framework (Paunescu & Argatu, 2020), which serves as the conceptual framework for this study. Viewing through the lens of this study's conceptual framework, I identified the following BCM disaster plan related themes: (a) impact of COVID-19, (b) BCP review, (c) type of disasters planned for, (d) use of the U.S. Federal Emergency Management Agency (FEMA) reference for BCP development, (e) succession planning, (f) exercise training, and (g) use of secondary locations. These findings illustrate many of the contributing causes to small business failures resulting from disaster-related business disruptions.

#### **Presentation of the Findings**

The overarching research question for this study is the following: What strategies do some U.S. small business owners use to create practical disaster plans to ensure

business continuity? The seven themes identified during this study are found in Table 1. The following sections will analyze and discuss the findings drawn from seven research study participants, in relation to identified study themes.

**Table 1**Business Continuity Management Disaster Plan Related Themes

Theme Topic	Number of Participants Influenced	%
BCP impacted by COVID-19	7	100
BCP review (periodic)	6	86
Natural disasters included in BCP	5	71
Succession planning	5	71
FEMA for BCP development	4	57
Exercise training	3	43
Secondary location	3	43

## Theme 1: COVID-19

COVID-19 affected all seven participants in this study. Of the participants interviewed, 100% of them had to update or add pandemic BCM disaster plan protocols to successfully mitigate the COVID-19 related business disruptions they encountered. Out of the seven participants, only Participant 4 (P4), owner of Service Company D (SCD), had pandemic related BCP procedures documented. The other six participants adjusted their BCP to reflect pandemic related threats, and U.S. federal and state government COVID-19 guidelines for businesses. The following will describe the

responses of Participant 1 (P1), owner of Service Company A (SCA), Participant 2 (P2), owner of Service Company B (SCB), Participant 3 (P3), owner of Service Company C (SCC), Participant 4 (P4), owner of Service Company D (SCD), Participant 5 (P5), owner of Service Company E (SCE), Participant 6 (P6), owner of Service Company F (SCF), and Participant 7 (P7), owner of Service Company G (SCG).

P1: "When the pandemic started, I did not have a disaster recovery plan because I did not think I needed it. COVID-19 pushed me to change business operations to more virtual based. I also noticed that clients were more open to paying for my 3rd party vendors' COVID-19 training."

P2: "No specific plan for the COVID-19 outbreak was created, but we did have plans that cover far reaching disastrous events. We also change verbiage within our contracts that help us reduce the effects of the pandemic."

P3: "We did not have any plans for COVID-19 before to the pandemic. COVID-19 hurt us bad. We had to use the Paycheck Protection Program (PPP) loan to keep going."

P4: "The company had procedure in place for a COVID-19 like event. It became evident that clients needed COVID-19 training, and a lot of them reached out to us for training. I was able to help them write disaster plans for COVID-19."

P5: "COVID-19 has been tough. If there is an outbreak, the client is notified, and we will either reschedule or cancel, but I usually refund their money and cancel the event. We have an act of God clause in our contracts that allow us to cancel. We also adjust our contracts depending on how bad COVID-19 is."

P6: "The company was not prepared for COVID-19. We did not have any plans written to help us during this time, but we are now looking to develop some."

P7: "Our business model relies on in-person interaction, so COVID-19 badly hurt our business. We were not prepared for the outbreak, and we are thinking of more ways to prevent the disruptions we experienced from the virus."

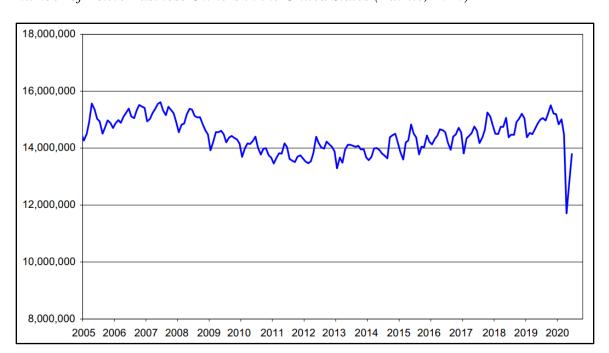
As exhibited by the participants' responses, COVID-19 impacted them all, with some having to close temporarily, change their business model, and one having to use the PPP loan, which is an U.S. Small Business Administration-backed loan designed to aid organizations in keeping their workforce employed during COVID-19 (United States Small Business Administration, 2022). This theme presents confirmation that businesses implemented improved measures to address the COVID-19 pandemic (Galbusera & Cardarilli, 2021). This theme also confirms that improvements made to BMCS during the height of the COVID-19 pandemic highlighted how effectively managed BMCSs improve organizations and help to mitigate disruptions to business operations (Azadegan et al., 2020).

The findings exhibited in Theme 1 tie back to this study's conceptual framework by showing that the Do phase in the PDCA cycle was incomplete. When this phase is completed, a risk assessment and business impact analysis are accomplished (Paunescu & Argatu, 2020), thus enabling the business owners to plan better to mitigate the impacts of COVID-19. Further, the addition of pandemic related threats added in the Do phase would enable the organizations to embed this threat into the rest of the PDCA cycle.

The detrimental effects of COVID-19 felt by U.S. small business owners are seen with the dramatic decrease in U.S. active business owners. From January 2005 to June 2020, as exhibited in Figure 6, researchers conclude that COVID-19 contributed to the largest loss of active business owners on record (Fairlie, 2020). Considering the above mentioned, the participants in this study represent the flexibility and resilience some U.S. small business owners have, and also highlight some of the strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity.

Figure 6

Number of Active Business Owners in the United States (Fairlie, 2020)



## **Theme 2: BCP Review**

Reviewing organizational BCPs is a vital task for businesses to complete to successfully mitigate disaster-related business disruptions. Because of the changing nature of disastrous events, small business owners must review their BCPs periodically and whenever a vulnerability in their BCP is identified (DHS, 2021h). The following will describe the participants' responses.

P1: "I think you should review plans every six months to a year. We have started doing ours annually since I am a small business."

P2: "Our reviews vary because we operate in several areas of the country.

Depending on the area, reviews can be quarterly, semi-annually, or annually. I have found that keeping in constant contact with your clients can help me identify new vulnerabilities."

P3: "I would say at least once a year we update our plan."

P4: "We review and update BCPs annually."

P5: "I update our plans as needed. I do not have a defined period of time, just when there is an event that is cause for concern."

P6: "We look at our plans several times a year because of the different geographical areas my company is located in. Depending if there is a server event, determines how often we review the plans. If no event, we review our plans once a year."

P7: "I review emergency planning every year. I did not do it this often before COVID-19 gave me a reason to."

As exhibited by this study's findings, most of the participants understand the importance of reviewing organizational BCPs. Continuous improvement to an organization's BCPs occurs when leadership takes into consideration the results provided by an evaluation, analysis, and outputs from organizational leadership review into the organization's BCMS (ISO, 2019). Additionally, most of the findings show alignment with ISO (2019) recommendations that BCPs should be reviewed at planned intervals and when substantial changes to the business occur. As shown in Table 1, 86% of the participants in this study review their BCP periodically, with one participant stating that they review their BCP as needed.

The findings exhibited in Theme 2 tie back to this study's conceptual framework by showing that participants of this study exercise the Check and Act phases and PDCA cycle. These two phases in the PDCA cycle include maintaining, reviewing, and improvement (Paunescu & Argatu, 2020). Maintaining and improvement are a byproduct of periodic BCP reviews by the organization.

Reviewing of an organization's BCM disaster plan is an important step in maintaining an effective BCMS. Business leaders must periodically review BCPs to determine the effectiveness, suitability, and adequacy of their plan (ISO, 2019; UAE, 2021). The findings in this study exhibit that the participants understand the importance of reviewing their BCPs. Additionally, these findings also highlight some of the strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity.

#### Theme 3: Natural Disasters

Preparing for natural disasters is an essential step in developing a BCM disaster plan. Researchers conclude that small businesses that have BCPs in place before a natural disaster occurs, experience better outcomes (Miranda & Swanstrom, 2020). Identifying natural disasters that can affect a business' operations takes research and planning. The following will describe the participants' responses.

P1: "Flood for one is a disaster. When we operated in Nashville, TN we had a flood, which is why I know how destructive they can be. I also have earthquakes and I look at fault lines anywhere I do business. Also, tornados and tsunamis. I look at global warming, and what that means. One minute it can be sunny, and the next it can be a server storm in certain parts of the country, so we have to constantly consider new threats."

P2: "We plan for disasters as needed. I know this is a vulnerability, and we plan to create some for natural disasters."

P3: "I have plans for tornados and flooding. These are the two that we see most often where we do business. We should probably include more"

P4: "The company has plans for power outages, floods, earthquakes, tornadoes and other server storms. The company is prepared and adds additional disasters when we see recognize them."

P5: "Our contracts and plans cover acts of God, so we are prepared for any type of weather-related issue. We also adjust for any government related declared

emergencies. We do not have anything written explicitly for certain types of disasters though."

P6: "I put every natural disaster I could think of for the areas we have a footprint in. COVID-19 was not a factor until it caught us all off guard. Some of the disasters we plan for are server thunderstorms which cause other issues like wind and hail, hurricanes, earthquakes, and tornadoes. We have grown so fast; I have not had the time to go back and put more emergency events into our plans, but I will do that soon."

P7: "All the normal hazardous events for this area like tornadoes, flooding, and power outages which can be caused by many different things, but usually a server storm.

I am still working on improving this part of our plan."

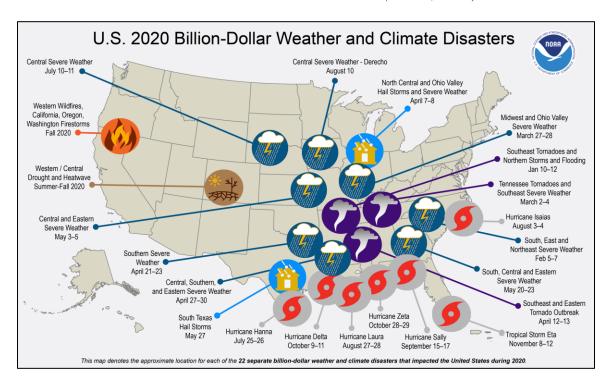
All participants in this study acknowledged that they should integrate more natural disasters, to include COVID-19, into their BCM disaster plan. Considering the findings exhibited in Figure 7, and the areas the participants operate within the United States, there are several disaster types that they are not considering – wildfires and hailstorms for example. Losses from both wildfires and hailstorms are increasing (Chung et al., 2020; Gupta et al., 2022), which creates a matter of precedence for business leaders to consider when developing their BCPs.

The findings exhibited in Theme 3 tie back to this study's conceptual framework by again showing how important risk assessments and business impact analysis are. Risk assessments and business impact analysis are completed in the Do phase of the PDCA cycle (Paunescu & Argatu, 2020). To be better prepared to mitigate all disasters, business owners should have a more comprehensive view when planning for disasters that can

affect their business operations. By conducting a better comprehensive plan for disaster types, business leaders can help reduce the estimated 25% of United States' small businesses that do not reopen following a major disaster (United States Small Business Administration, 2021). Further, these findings also highlight some of the strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity.

Figure 7

U.S. 2020 Billion-Dollar Weather and Climate Disasters (NOAA, 2021)



**Theme 4: Succession Planning** 

Succession planning was emphasized by 71% of the participants in this study.

Researchers conclude that for small businesses to survive long-term, a succession plan

must be developed (Garcia et al., 2021). The following will describe the participants' responses.

P1: "What if something happens to me? It has helped me to say if I am not here, whether it is a family member, spouse, or whoever, who is my successor. That chain of thought is what has helped me with my succession because as a small business owner, you think you live forever, but it helped me with finding out who's going to succeed once something happens."

P2: "If something were to happen to me, who will take over my business, or can it be transferred to someone? A lot of things are done on a digital platform so that it can be accessed by someone else in case something happens to me."

P3: "If, you know, something really bad happens to me, I make sure the company has identified and communicated to someone that they will be my successor."

P4: "If something were to happen to me, I ensure I have a successor."

P7: "I want to make sure the company can be passed on to my kids, or at least a family member. So, I have a plan for a successor in the case something happens to me."

P5 and P6 did not mention a succession plan included in their business continuity management disaster plan. As the findings show above, five of the participants' responses to this study emphasized the importance they place on having a successor. Each of the five participants noted that having a succession plan is key to continuing operations if something happens to them, which confirms researchers' conclusions that a successful succession plan includes a formal process that aids the transfer of management control from one person to another (Lu et al., 2022).

The findings exhibited in Theme 4, tie back to this study's conceptual framework by again showing succession planning should have been identified as an essential aspect of the PDCA cycle – namely the Plan and Do phase of the cycle. In the Plan phase of PDCA, business leaders must effectively consider the context of the organization and BCMS scope. During this initial phase of PDCA, the organization should determine interested parties needed for the BCMS (ISO, 2019), which can also help in identifying a successor. During the Do phase of the PDCA cycle, organizations should develop a response plan (Paunescu & Argatu, 2020), thus, also signaling a need to identify a successor when all threats are considered.

The creation of a succession plan is an important step for any organization.

Considering who will take over the company or leadership positions throughout an organization's BCMS, can make a difference in the company effectively mitigating a disaster-related business disruption. Further, researchers conclude that developing a succession plan is becoming more critical to an organization's success (Chang & Besel, 2021). The participants in this study represent how some U.S. small business owners are critically thinking so that successors are identified. The findings also exhibit some of the strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity by including succession planning into their BCMS.

## **Theme 5: BCP References**

Having an effective framework when developing a business continuity plan is essential to business leaders. The lack of an effective framework to use when developing a BCP can lead to the loss of resources following a disruption (Soufi et al., 2019). There

are many publicly available sources for business leaders to use when developing a BCP, however, which was mentioned by some of the participants in this study. The following will describe the participants' responses.

P1: "I used Google to search disaster recovery techniques and it brought me to documentation provided by the government. FEMA on down, its all on the internet and that is how I developed my business continuity strategy."

P2: "There is not much to go off, so I do not have a specific reference I used to develop our BCP's. I created our BCP's based off what I know."

P3: "I do not use anything as far as references go. This works unless, you know, something bad happens to me. I made what we will do from previous experiences."

P4: "There are a lot of references out there that cover all different kinds of disasters. I get information from FEMA and ASIS websites. They have references about BCP development."

P5: "I actually do not use references at all. I just kind of write things down as I need them. I do not have a specific reference that I used from anyone."

P6: "FEMA and DHS are the references I use currently to write my BCP's."

P7: "We used FEMA and their site Ready to develop most of our continuity plans.

The rest of our plans were created from past experiences."

As shown above, the identified trend amongst the participants of this study identified the U.S. Federal Emergency Management Agency (FEMA) as the primary source used. The percentage of participants who used FEMA as the foundation of their BCP framework was 57%. Of the 4 participants who use FEMA as a guide for their BCP

development, P1, P4, P6, and P7 all stated that their initial point of reference was the multiple FEMA BCP guides available publicly online. P2, P3 and P5 all stated that they did not use a specific reference to develop their business continuity management disaster plan. Of note, the U.S. Federal Emergency Management Agency offers many resources, free of charge, on disaster preparation and recovery (Martinet, 2021).

The findings exhibited in Theme 5, tie back to this study's conceptual framework by again showing that some of the participants did not effectively complete business continuity response planning located in the Do phase in the PDCA cycle (Paunescu & Argatu, 2020). Organizations that create BCPs without a solid foundation can risk missing many steps and vulnerabilities, which are needed for successful disaster plan development. Researchers conclude that practical disaster plan development can mitigate business disruptions (Fischer et al., 2019). This practical, or real-world approach to developing BCPs, is why FEMA is such a good resource to use as a starting point, as they have practical experience with disasters throughout the U.S. The participants' responses exhibit some of the strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity by using FEMA as the foundation of their BCP development.

# **Theme 6: Exercise Training**

Exercising business continuity management disaster plans is key to confirming actions are effective and identifying vulnerabilities in BCPs. Organizations should implement and maintain exercises and testing to validate the effectiveness of their BCPs

(ISO, 2019). Three (43%) of the participant in this study stated that they conduct exercise training for their BCPs. The following will describe the participants' responses.

P1: "I use contracted employees. So, for that reason, we do not do exercise training. It's a gap, but I do not do it because of costs."

P2: "We look at it (BCP), and also make some changes if needed after we practice. Anyone driving my team, they make sure they understand it (BCP)."

P3: "For the most part, we do not do training for disasters."

P4: "I developed tabletop exercises and also provide exercise training for customers as well."

P5: "I do not train employees on disaster. I do make sure they follow government guidelines for COVID-19 though."

P6: "I learned the hard way that training for crisis events is important. All employees have access to BCP procedures, and we train them on appropriate crises for their area of operation."

P7: "We do not practice for disasters. That would cost money that we do not have."

Exercise training and testing can affect the outcome of a disaster-related business disruption. Researchers conclude that conducting exercises to simulate downtime advances confidence and knowledge of BCPs (Roush et al., 2021). Exercises enable business leaders to identify ineffective processes and identity unknown vulnerabilities to their plans. Further, exercise training tests the effectiveness of BCPs by ensuring that all portions of the plan do not have addressable vulnerabilities (Paunescu & Argatu, 2020).

The findings exhibited in Theme 6, tie back to this study's conceptual framework by again showing that over half of the participants did not perform the Check phase in the PDCA cycle. The Check phase of the PDCA cycle includes the performance and assessment of the organization's BCMS strategy and response (Paunescu & Argatu, 2020). By including this phase in the PDCA cycle, business leaders will be better prepared to mitigate disaster-related business disruptions by having a prepared workforce and effective processes in place for disaster situations. Researchers conclude that an effective training delivery method should include evaluated exercises (Muflihah & Subriadi, 2018), which some of the participants in this study exhibited. The strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity via exercises was exhibited by 43% of the participants in this study.

# **Theme 7: Secondary Locations**

Identifying and maintaining a secondary location, when business operations are no longer possible in an organization's primary location, is an essential step in ensuring business continuity. Assuming both locations are not impacted by the same event, secondary locations should have the resources and capacity to assume the functions of the primary site (DHS, 2021a). Three (43%) of the participant in this study stated that having a secondary location for business operations in the event of a disaster is included in their BCP. The following will describe the participants' responses.

P3: "Having different places where you can do business if something happens is a good idea. There may be one or two different places that are safe, for example, other than your main location."

P4: "What happens if my office goes out? We will need to be relocated. I basically start from there and find at least one backup location or more."

P7: "It would be very hard to move the company to a new location. I do have a location chosen, but we will only relocate there if operations are down for a long time."

Participants P1, P2, P5 and P6 did not mention secondary location planning.

Organizations must consider their location(s) when developing their BCMS (ISO, 2019).

Secondary sites should be reduced to essential operations with less important ones being temporarily stopped (Nnenna, 2019). Additionally, secondary locations enable the business to continue running when the primary is no longer feasible.

The findings exhibited in Theme 7, tie back to this study's conceptual framework by again showing the importance of the Do phase of the PDCA cycle. Conducting a thorough risk assessment and business impact analysis, which are aspects of the Do phase of the PDCA cycle (Paunescu & Argatu, 2020), can help business leaders identify the need for alternate locations. Further, risk assessments and business impact analysis should be completed at planned intervals and when significate changes to an organization occurs (ISO, 2019). To this end, some of the participants in this study consider these aspects, which is why they have alternative locations identified. Additionally, the strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity via secondary locations was exhibited by 43% of the participants in this study.

The presentation of the themes above confirms the findings from other peerreviewed studies. Recent examples of this confirmation focus on the topic of small

business preparation for disasters by Fasth et al. (2022), Tan and Lee (2022), and Zhang and Williams (2022). Fasth et al. (2022) acknowledge that crisis management research is influenced by large organizations and few studies research small businesses. This lack of research reduces the availability of useful resources that small business owners can use to prepare for disaster-related business disruptions. As described by the participants in this study, 57% of them use external resources - in this case FEMA, which positively impact a company's decisive rapid response to disaster situations (Fasth et al., 2022). Considering all the participants in this study remain in business following a disasterrelated business disruption, their choice of using FEMA external resources as a foundation to their BCP, aided them in preparing for a disaster. Further, each study participant had some form of business continuity management disaster plan, which exhibits an effort by the business owners that they want to be prepared for disaster situations, by having mitigating procedures in place. My study's participant views coincide with Fasth's et al. (2022) and ISO (2019) recommendations, which stated that organizations need formal procedures in place to successfully make it through a disasterrelated business disruption.

As previously mentioned, small businesses do not have the same number of resources that their larger counterparts, which can be linked to a lack in small business research. Concurring with Fasth's et al. (2022) study, that there is a lack of research on small business continuity management, Tan and Lee (2022) also add that small businesses need to add risk management awareness and implementation to effectively prepare and mitigate disaster-related business disruptions. Of the participants in my

study, 100% of them have some form of awareness of risk management, and as a result, 100% of the participants have some form of BCP procedures in place. This proactive behavior by the seven research study participants aided them in coming out of a disaster-related business disruption successfully. Additionally, COVID-19 has created new challenges for small businesses as described by 100% of my study's participants, and as a result, small businesses will have to continue to evolve to adapt to this changing virus (Fairlie, 2020; Tan & Lee, 2022).

Participants in this study all owned a company in the service industry - an industry whose operations were badly impacted by COVID-19. Zhang and Williams (2022) concluded that COVID-19 contributed to service industry business leaders' uncertainty, and the unknown direction of the pandemic affected service industry business leaders' reactions to how to approach COVID-19. All the participants in my study were impacted by COVID-19, and as a result, had to maintain flexible operations to successfully address uncertainty caused by a disaster (Paunescu & Argatu, 2020; Zhang & Williams, 2022).

The conceptual framework for this study, as shown in Figure 1, ties into this study's findings because each participant used some form of the Plan-Do-Check-Act (PDCA) cycle combined with the steps needed to develop an effective BCP. The flowing will discuss each step in this study's conceptual framework and how it relates to the study's findings.

Plan: All (100%) participants in this study had some form of a plan for business continuity in the event of a disaster-related business disruption. These plans were tailored by the participants to fit their organization's mission and objectives.

Do: For the 57% of this research study's participants who used FEMA as a foundation for their BCP, they all used a form of business impact analysis (BIA) to determine threats and to see what impact threats will have on their operations. The other three participants who did not use FEMA as a foundation to create their BCP did still conduct a form of BIA to determine what threats their organization needs to prepare for.

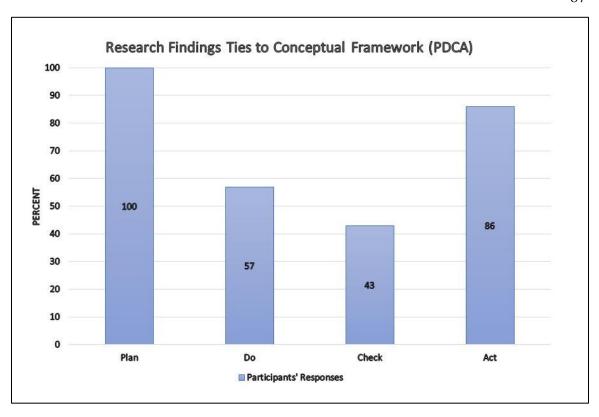
Check: 43% of the participants performed exercise training and testing for their BCP procedures. The remaining four participants who did not conduct this step of the PDCA cycle either mentioned that they plan to, or do not have the funds to do so.

Act: Continuous learning and improvement enable business leaders to keep their BCMS up to date with the latest tools, techniques, and threats. This step in the PCDA cycle was completed by 86% of this research study's participants.

The conceptual framework for this study enabled me to identify many aspects of effectively developing a business continuity management disaster plan in combination with a quality control feature called PCDA. Figure 8 provides a visual display of this research study's findings in relation to the study's conceptual framework – the Adapted BCM Framework by Paunescu and Argatu, 2020.

Figure 8

Research Findings Ties to Conceptual Framework: Adapted BCM (PDCA)



The findings of this research study tie into the following effective business practices: resources, planning, and communication. Unlike large businesses, U.S. small businesses have limited resources, and because of this limitation, small businesses have limited ability to plan for disaster-related business disruptions (Josephson et al., 2017). The identified limitations preventing all the participants of this study from doing all steps of this research study's conceptual framework (PDCA), was the result of either not knowing what resources were available to them for no cost, or not having the funds to obtain resources needed to complete all steps. Researchers conclude that one of the top unique challenges for small businesses is resource constraints (Hall, 2021).

Communication is an essential aspect of effective business practices, and particularly when developing and maintaining a BCMS. Effective communication is

essential for any company's business practice because it acts as an instrument for developing positive outcomes (Winton et al., 2021). Further, researchers conclude that business leaders can continually improve the effectiveness of their BCMS by improving communications (Paunescu & Argatu, 2020). BCMS communications start at the first step in this study's conceptual framework (Plan), then continue throughout the follow-on steps (Do, Check, Act). Communication in the context of this study's conceptual framework, is continuous. As exhibited by the participant's responses to this study, internal communication lagged in training, which can contribute to negative BCP outcomes.

# **Application to Professional Practice**

Small businesses are a critical piece of the U.S. economy. Bearing in mind that 99.9% of U.S. businesses are small (United States Small Business Administration, 2018), and that 25% of them fail following a major disaster (United States Small Business Administration, 2021), it is essential for small businesses to have practical disaster plans to ensure business continuity. This study's findings can aid the small business arena by better preparing business leaders for disaster-related business disruptions. The focal applicability of this study's findings with respect to professional practices in business is the need for improved availability of resources. Small businesses have limited resources compared to their larger counterparts (Josephson et al., 2017), and this limitation was exhibited in this study's findings. The following will show how improved availability of resources can improve each of this study's identified themes and applied to professional practices.

All seven themes identified in this study can be improved with funding and education. To this end, funding and education are two issues that can improve the rate which small businesses fail following a disaster. Funding and education can improve Theme 1 by educating small business owners on how to prepare and recover from COVID-19 type of disasters. This approach has the potential to reduce the server drop in active businesses shown in Figure 6 in 2020 resulting from COVID-19. Additionally, researchers conclude that improvements made to BMCS during the height of the COVID-19 pandemic highlighted how effectively managed BMCS improve organizational success during this time (Azadegan et al., 2020). These describe applications to professional practices can improve businesses' survivability during COVID-19 type crises.

Theme 2, periodic BCP reviews can be improved with educational resources. Even though 86% of the participants in this study reviews their BCP at least annually, better information sharing about this process can be communicated to the small business arena. This can be accomplished with better public campaigns by the government agencies who provide free education and training on BCMS tools and techniques. These describe applications to professional practices can improve businesses survivability by identifying unknown and new threats by periodically reviewing BCPs.

Theme 3 focused on what natural disasters the participants included in their BCPs. Education can also be applied to this theme as some of the participants were not aware of all natural disaster threats in their areas of operation. Better information sharing and public relations between the public and private sectors can increase natural disaster

awareness and preparation. These describe applications to professional practices can improve businesses' survivability by identifying unknown threats to business operations.

Theme 4, succession planning, was planned for by five of the participants in this study. Considering that for small businesses to survive long-term, a succession plan must be developed (Garcia et al., 2021), small business leaders must be aware of this threat. Though, 71% of the participants in this study planned for successors, it still leaves room for improvement. Simple education centering on succession planning can open the eyes of many business owners because the thought of having a successor is not top of mind when developing a BCP – as exhibited by some of this study's participants. Applying this approach to improving succession planning in professional practices is expected to aid business survivability.

Theme 5, FEMA used for BCP development. This theme exhibited that 43% of the participants were not aware of the various BCMS resources available free of charge online. Improving business leader awareness of these free and effective resources can improve how prepared businesses are during disaster situations. Government agencies improving their public campaigns about the availability of these resources can aid small businesses obtain the education needed to mitigate disaster situations. Application of the above recommendations can be applied to professional practice and is expected to improve awareness about these free resources - thus improving how prepared businesses are for disasters.

Theme 6, exercise training, which was completed by three (43%) of the participants, can be improved with additional funding. This theme centers on how

conducting effective training costs money in the form of workforce time and training equipment. An effective way how to solve this issue can be accomplished by all levels of government providing options for low-interest loans and grants to small businesses for disaster preparation and recovery. An example of implementing this sort of funding availability, is exhibited by the U.S. Small Business Administration's loan availability to small businesses, which has no other requirements for qualifications other than the business having less than 500 employees (Li, 2021). Researchers also conclude that workforce education is vital and should be continuously emphasized by organizational management (Kowo et al., 2021). Another example of why this study's findings are applicable to professional practices in business was exhibited by finding that 43% of the participants conducted the Check phase of the PDCA cycle. The Check phase in the PDCA cycle includes training and education, which less than half of the participants stated they conducted. Application to professional practice of the above recommendations can improve small business preparation and recovery from disaster situations.

Theme 7, use of a secondary location, was planned for by 43% of the participants. This form of disaster preparation requires funds, and in many cases, small businesses do not have the additional funds to secure an alternate location(s). This theme, as with Theme 6, can be improved by all levels of government providing options for low-interest loans and grants to small businesses for disaster preparation and recovery. Applying the recommendation above to professional practice can improve small business survivability by having an alternate location to use when the primary is infeasible.

## **Implications for Social Change**

Findings from this study can contribute to positive social change. The rippling effects of small business closures result in communities' members becoming unemployed and lead to communities not having the goods and services they rely upon. An example of this was seen during the height of the COVID-19 pandemic, with two-thirds of the unemployment increase being attributed to small businesses (Belitski et al., 2021). As seen by this study's findings, all the participants had some form of disaster plan developed, however, as shown in Figure 8, several of the phases in the PDCA cycle were not completed. Improvements to the quality of small business BCPs can enhance small businesses' resilience to business failure resulting from disaster-related business disruptions. The following will show how improvement to the identified themes can impact positive social change.

Theme 1 exhibited that 100% of the participants in this study were impacted by COVID-19 and did not plan effectively for the outbreak. Improvement to this theme can reduce the effects of active businesses lost exhibited in Figure 6, thus increasing the survival rate of small businesses. Improvement of this identified theme can reduce unemployment, which increases when businesses fail. This study's findings can also help mitigate other rippling effects which are central elements of unemployment, such as homelessness and hunger (Zandomingo et al., 2020).

Theme 2, periodic BCP review can better prepare organizations for disasterrelated business disruptions. Better preparations occur by aiding business leaders in identifying new threats and vulnerabilities within their BCMS. Improvements to this theme can help communities by enabling businesses to maintain the products and services communities rely on. Further, keeping business open, also reduces unemployment and the detrimental elements that accompany unemployment.

Theme 3 included the types of disasters the participants planned for. Findings from this theme exhibited that 71% of the participants planned for natural disasters. However, two of the participants did not plan for any disasters, and some of the participants who did plan, did not include all known disasters for their areas of operations. Improvement to this theme can have positive social change by making businesses more resilient to natural disasters by having a plan in place for disasters that affect their business operations.

Theme 4, succession planning was developed by five of this study's participants. Improvement to this theme lends to preventing business failure caused by a lack of leadership and strategic direction. Enhancing the percentage of business owners who include succession planning into their BCPs will increase business resilience, thus also helping communities maintain the products and services they rely on.

Theme 5, FEMA used for BCP development, was used by four participants in this study, thus showing a need for improvement. Improvement to this theme has cascading effects since it provides a foundation for BCMS. Failure to build a BCP on an effective foundation can later act as a vulnerability to an organization. Improvement to this theme is expected to reduce business failures and unemployment within communities.

Theme 6, exercise training, was used by only three (43%) participants in this study. Even with a well written BCP, if it is not tested, many vulnerabilities will not be

identified. Improvements to this theme will help organizations identify ineffective processes and procedures developed during the first two phases of the PDCA cycle. Positive impacts to social change provided by improving this theme include less business failures, reduced unemployment caused by disasters, and continued availably of community goods and services.

Lastly, Theme 7, planning a secondary location was mentioned by three of this study's participants. Identifying an alternate location to conduct business when the primary one is infeasible is essential. The importance of having a secondary location was exhibited by many organizations that had to close their doors during the height of the COVID-19 pandemic. Improvements to this theme can impact positive social change by enabling businesses to continue running, thus not affecting the availability of community goods and services, and unemployment rates.

## **Recommendations for Action**

Developing an effective BCMS enables small business owners to be better prepared for disaster-related business disruptions. The findings of this study identified the following business continuity management disaster plan related themes: (a) impact from COVID-19, (b) business continuity plan (BCP) review, (c) type of disasters planned for, (d) use of the U.S. Federal Emergency Management Agency (FEMA) reference for BCP development, (e) succession planning, (f) exercise training, and (g) use of secondary locations. Recommendations for action for each of this study's themes will be discussed, along with who needs to pay attention to this study's results, and how these results can be disseminated.

Mitigating the impacts of COVID-19 and other future public health emergencies should be a top priority for business owners. Recommendations for action based upon this study's findings include developing a disaster plan that enables the business to take some or all their business operations virtual if possible and developing policies and procedures that promptly identify and isolate sick workers. The advantages of being able to transition business operations from a physical location to a virtual setting was implemented by millions of people during the height of COVID-19, as businesses and governments' way of preventing the spread and maintaining business continuity (Bennett & McWhorter, 2021). Businesses that perform this transition during public health emergencies empower their business to continue receiving payments for their services, thus reducing the possibility of business failure. Developing policies and procedures that promptly identify and isolate sick workers will help businesses reduce the possibility of further sickness spread throughout the workforce. Additionally, implementing effective policies and procedures to address sickness outbreaks can help reduce related workplace experiences such as absenteeism and supply chain disruptions (OSHA, 2020).

Developing an effective BCP requires the key elements of knowledge and experience. Unfortunately, many small businesses do not possess both elements. As this study's findings exhibit, all the participants had some form of disaster plan developed, however, as shown in Figure 8, several of the other steps in the PDCA cycle were not completed and reviewed. To aid with developing quality BCPs that can effectively help small businesses mitigate disaster-related business disruptions, improvement in BCMS knowledge sharing must be implemented. A recommended way of improving BCMS

knowledge sharing can be approached with better public campaigns by the government agencies that provide free education and training on BCMS tools and techniques. Some participants from this study were not aware that these resources are available publicly, free of charge. Government agencies improving their public campaigns about the availability of these resources can aid small businesses obtain the education needed to mitigate disaster situations.

Understanding the threats to an organization enables business leaders to plan for mitigating steps to address threats. Some of the participants in this study did not plan for all known threats that could disrupt their business operations. As a result, the lack of identifying all known threats created a vulnerability in the survivability of their organizations. A recommendation for action includes state and local governments providing business continuity informational brochures to new small businesses when they register to conduct business. By implementing this recommendation, states and local governments would effectively be able to ensure all new business owners are aware of known threats (natural and manmade) to their business.

Having the right references available to use as a foundation for BCMS development is essential. Out of the seven participants, four of them (57%) used FEMA as a reference point. FEMA provides foundational BCMS development information and a BCP suite software free of charge. Based on this study's findings, there are still some small business owners who are not aware of this free resource. A recommendation for action is better public campaigns by the government agencies that provide free education and training on BCMS tools and techniques.

Succession planning was practiced by 71% of the participants in this study. Researchers conclude that for small businesses to survive long-term, a succession plan must be developed (Garcia et al., 2021), however, there are still some small business owners who do not plan for the BCMS aspect. A recommendation for action to improve succession plan implementation is to expand small business availability and exposure to BCP related informational resources, via government agencies improving their public campaigns about BCP resources availability.

Exercising business continuity management disaster plans is key to confirming actions are effective and identifying vulnerabilities in BCPs. Organizations should implement and maintain exercises and testing to validate the effectiveness of their BCPs (ISO, 2019). Three (43%) of the participant in this study stated that they conduct exercise training for their BCPs, with funding being one of the top reasons why the other four participants did not conduct BCP exercises. A recommendation for action is for all levels of government to provide options for low-interest loans and grants to small businesses for disaster preparation.

Three (43%) of the participant in this study stated that having a secondary location for business operations in the event of a disaster is included in their BCP. Finding a secondary location for when business operations are no longer possible in a company's primary location, is an essential step in ensuring business continuity.

Assuming both locations are not impacted by the same event, secondary locations should have the resources and capacity to assume the functions of the primary site (DHS, 2021a). A recommendation for action would be for small businesses to have a plan to

transition to virtual operations if possible. Another recommendation for action is for government agencies to improve their public campaigns for BCP resources availability, which can aid in communicating the importance of having a secondary business location.

The seven small business owners who participated in this study confirm that more work is needed to aid small businesses mitigate disaster-related business disruptions. The findings of this study should be of importance to business leaders, academic scholars, government officials, and business continuity practitioners to increase their understanding of BCMS practices and vulnerabilities identified in U.S. small businesses. I will share the study findings with the participants of this study, business leaders, BCMS related conferences, and during related training.

#### **Recommendations for Further Research**

Two recommendations for further research, drawn from this study's limitations, are to expand the sample size and to expand the research area into additional countries. Researchers conclude that minimizing study bias is an important requirement for qualitative research (Lang et al., 2022). To address this qualitative requirement, I anticipate that by expanding the research sample size, it will aid in recognizing participant bias by confirming some of this study's themes and identifying new study themes. Increasing the sample size can also aid in preventing generalizations (Yin, 2018). Expanding this study into additional countries can identify new disaster-related business disruption experiences incurred by the small business community. These additional experiences can aid business continuity professionals in mitigating future disaster-related business disruptions.

Actioning the two recommendations for further research will increase analyzed data pertaining to a small business resiliency during times of disaster-related situations. The additional data drawn from further research will also help the small business communities around the world, which are known for having limited experience and resources (Wu, 2022). Ultimately, I believe the topic of small business continuity needs more research to aid in bringing down the number of small businesses that fail following a disaster-related business disruption.

### Reflections

My experience with completing the Walden University DBA Doctoral Study process was a good one. The process from the beginning with the development of my prospectus, to completing my final study, was logically organized - which I love. In addition to the suitable program layout, which I consider to be an easy-to-understand chain of steps, the process was complemented by the support I received from the Walden University staff. The staff always went above and beyond what I expected and provided usable solutions to any issues I experienced in a timely manner.

As a security and investigations professional, I have encountered many business continuity related events throughout my career. Because of my exposure to and understanding of the impact on small businesses from disasters, the choice of topic for this study was driven by those experiences. Further, my understanding that my previous experiences could inject bias into the study, I mitigated bias by following strict ethical and IRB requirements throughout this study. At the conclusion of this study, my view that additional research is needed on the topic has not changed, as this study exhibited

that there is still work to be completed to help small businesses mitigate disaster-related business disruptions.

#### Conclusion

The purpose of this qualitative multiple case study was to explore strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. The importance of this study, which is highlighted and concluded by researchers, that 25% of small businesses do not reopen following a major disaster (United States Small Business Administration, 2021), cannot be overstated. Considering that most U.S. businesses are small, it is important to the U.S. economy, and the welfare of U.S. citizens that small businesses succeed. The impact on the U.S. economy from failed small businesses from COVID-19 exhibits the importance of making more resources available to small businesses.

Exhibited in the findings from this study, 100% of the participants were impacted by the COVID-19 pandemic. Out of the seven participants, 100% of them also had to update or add pandemic business continuity management disaster plan protocols to successfully mitigate the COVID-19 related business disruptions they encountered. These findings, along with the finding that less than half (43%) of the participants conduct disaster-related exercise training, is a cause for additional research, and availability of resources for U.S. small businesses. Further to this end, additional research and resources can help small businesses mitigate disaster situations successfully, and aid communities by reducing unemployment, which also affects community mental health of the unemployed (Bushe, 2019).

#### References

- Adams, W. C. (2010). Conducting semi-structured interviews. *Handbook of practical program evaluation*, 365.
  - https://onlinelibrary.wiley.com/doi/10.1002/9781119171386.ch19
- Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semistructured interviews. *Journal of the American College of Clinical Pharmacy*, 4(10), 1358–1367. https://doi.org/10.1002/jac5.1441
- Akbari, D., & Gurning, R. (2020). Development of risk-based business continuity plan using house of risk method on container terminal. *Earth & Environmental Science*, 557, 1–8. https://doi.org/10.1088/1755-1315/557/1/012024
- Alfrey, A., Field, V., Xenophontes, I., Springham, N., & Holttum, S. (2022). Identifying the mechanisms of poetry therapy and perceived effects on participants: A synthesized replication case study. *The Arts in Psychotherapy*, 78. https://doi.org/10.1016/j.aip.2022.101882
- Allen, M. (2017). *The sage encyclopedia of communication research methods* (Vols. 1–4). SAGE Publications, Inc. <a href="https://doi.org/10.4135/9781483381411">https://doi.org/10.4135/9781483381411</a>
- Allicon, K. (2020). A mindfulness toolkit to optimize incident management and business continuity exercises. *Journal of Business Continuity & Emergency*Planning, 13(3), 220–229. https://pubmed.ncbi.nlm.nih.gov/32093813/
- Amundsen, D., Msoroka, M., & Findsen, B. (2017). It is a case of access: The problematics of accessing research participants. *Waikato Journal of Education*, 22(4), 5–17. https://doi.org/10.15663/wje.v22i4.425

- Aydemir, M., & Ates, B. (2018). Employing upper echelon approach to the crisis management team intervening in terror incidents and regional conflicts. *Defense Against Terrorism Review*, 10, 65–84.
  - https://www.tmmm.tsk.tr/publication/datr/volume\_10/04\_EmployingUpperEchelo nApproachtotheCrisisManagementTeamInterveninginTerrorIncidentsandRegional C.pdf
- Azadegan, A., Syed, T., Blome, C., & Tajeddini, K. (2020). Supply chain involvement in business continuity management: effects on reputational and operational damage containment from supply chain disruptions. *Supply Chain Management: An International Journal*, 25(6), 747–772. https://doi.org/10.1108/scm-08-2019-0304
- Baldwin, S. (2019). Business continuity management as an operational risk service provider: An approach to organizational resilience. *Journal of Business Continuity* & *Emergency Planning, 13*(2), 102–110. https://pubmed.ncbi.nlm.nih.gov/31779738/
- Baumgart, A., Craig, J. C., & Tong, A. (2021). Qualitative research in CKD: How to appraise and interpret the evidence. *American Journal of Kidney Diseases*, 77(4), 538-541. https://doi.org/10.1053/j.ajkd.2020.12.011
- Belitski, M., Guenther, C., Kritikos, A., & Thurik, R. (2021) Economic effects of the COVID-19 pandemic on entrepreneurship and small businesses. *Deutsches Institut Für Wirtschaftsforschung: DIW-Wochenbericht, 32*, 543.

  <a href="https://link.springer.com/content/pdf/10.1007/s11187-021-00544-y.pdf">https://link.springer.com/content/pdf/10.1007/s11187-021-00544-y.pdf</a>

- Bennett, E., & McWhorter, R. (2021). Virtual HRD's role in crisis and the post COVID-19 professional lifeworld: Accelerating skills for digital transformation. *Advances in Developing Human Resources*, 23(1), 5–25. https://doi.org/10.1177/1523422320973288
- Bhardwaj, P (2019). Types of sampling in research. *Journal of the Practice of*Cardiovascular Sciences, 5(3), 157–163. https://doi.org/10.4103/jpcs.jpcs\_62\_19
- Bonsu, S., & Kuofie, M. (2019). Small business survival. *Journal of Marketing & Management*, 10(1), 51–63. <a href="https://gsmi-ijgb.com/wp-content/uploads/JMM-V10-N1-P03-Samuel-Bonsu-Business-Survival.pdf">https://gsmi-ijgb.com/wp-content/uploads/JMM-V10-N1-P03-Samuel-Bonsu-Business-Survival.pdf</a>
- Braaten, B., Kramer, A., Henderson, E., Kajfez, R., & Dringenberg, E. (2020). Accessing complex constructs: Refining an interview protocol. 2020 IEEE Frontiers in Education Conference (FIE), Frontiers in Education Conference (FIE), 2020 IEEE, 1–3. https://doi.org/10.1109/FIE44824.2020.9274260
- Brar, G., Brar, Z., Kaur, S., Ahuja, A., & Verma, V. (2021). A look at COVID-19's influence on MSMEs, agriculture, and education and more. *International Journal of Social Sciences Review*, 9(3), 227–229.

https://www.vgls.vic.gov.au/client/en\_AU/vgls/search/detailnonmodal/eds:\$002f\$
002f1657660369\$002f0\$002fsih\$007c\$007c153280633/ada/59082a9b-ef53-4c7f999f-

193ac2743d40.\$002bcVauI1NUGMFNBBfM32RJw\$003d\$003d?qu=Australian+Poultry+Industries+Association.&if=ee%09edsExpanderFacet%09fulltext&d=eds

- %3A%2F%2F1657660369%2F0%2Fsih%7C%7C153280633%7E1657660369% 7E22&te=1657660369&ps=300
- British Standards Institution. (2007). *Business continuity management Part 2: Specification*. <a href="https://www.en-standard.eu/bs-25999-2-2007-usa-edition-business-continuity-management-specification/">https://www.en-standard.eu/bs-25999-2-2007-usa-edition-business-continuity-management-specification/</a>
- British Standards Institution. (2012). *Moving from BS 25999-2 to ISO22301: The new international standard for business continuity management systems*.

  <a href="https://www.bsigroup.com/Documents/iso-22301/resources/BSI-BS25999-to-ISO22301-Transition-UK-EN.pdf">https://www.bsigroup.com/Documents/iso-22301/resources/BSI-BS25999-to-ISO22301-Transition-UK-EN.pdf</a>
- Brown, A., & Danaher, P. A. (2017). CHE Principles: Facilitating authentic and dialogical semi-structured interviews in educational research. *International Journal of Research & Method in Education*, 42(1), 76–90. https://doi.org/10.1080/1743727x.2017.1379987
- Budiyanto, E., Gurning, R., & Pitana, T. (2021). The application of business impact analysis due to electricity disruption in a container terminal. *Sustainability*, *13*(12038), 12038. <a href="https://doi.org/10.3390/su132112038">https://doi.org/10.3390/su132112038</a>
- Buetow, S. (2019). Apophenia, unconscious bias and reflexivity in nursing qualitative research. *International Journal of Nursing Studies*, 89, 8–13. https://doi.org/10.1016/j.ijnurstu.2018.09.013
- Bush, A. & Amechi, M. (2019). Conducting and presenting qualitative research in pharmacy education. *Currents in Pharmacy Teaching & Learning*, 11(6), 638–650. https://doi.org/10.1016/j.cptl.2019.02.030

- Bushe, B. (2019). The causes and impact of business failure among small to micro and medium enterprises in South Africa. *Africa's Public Service Delivery & Performance Review*, 7(1). https://doi.org/10.4102/apsdpr.v7i1.210
- Butler-Kisber, L. (2018). *Getting started in qualitative inquiry*. SAGE Publications Ltd. https://doi.org/10.4135/9781526417978.n3
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. https://doi.org/10.1177/1744987120927206
- Canhoto, A. I., & Wei, L. (2021). Stakeholders of the world, unite: Hospitality in the time of COVID-19. International Journal of Hospitality Management, 95. <a href="https://doi.org/10.1016/j.ijhm.2021.102922">https://doi.org/10.1016/j.ijhm.2021.102922</a>
- Cardno, C. (2019). Policy document analysis: A practical educational leadership tool and a qualitative research method. *Educational Administration: Theory and Practice*, 24(4), 623–640. <a href="https://doi.org/10.14527/kuey.2018.016">https://doi.org/10.14527/kuey.2018.016</a>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815. https://doi.org/10.1016/j.cptl.2018.03.019
- Chang, C. Y., & Besel, K. (2021). Cultivating next generation of healthcare leaders in Havana: Barriers and recommendation for succession planning. *International Journal of Healthcare Management*, *14*(4), 1062–1070.

  https://doi.org/10.1080/20479700.2020.1731174

- Chicoine, G. (2018). How are we conducting and reporting mixed methods research in nursing sciences: A commentary on Seah et al. (2018) publication. *Archives of Psychiatric Nursing*, 32(6), 784–785. <a href="https://doi.org/10.1016/j.apnu.2018.07.004">https://doi.org/10.1016/j.apnu.2018.07.004</a>
- Chung, M., Han, Y., & Kim, Y. (2020). A framework for unsupervised wildfire damage assessment using VHR satellite images with planetscope data. *Remote*Sensing, 12(3835), 3835. https://doi.org/10.3390/rs12223835
- Clement, K., Botzen, W., Brouwer, R., & Aerts, J. (2018). A global review of the impact of basis risk on the functioning of and demand for index insurance. *International Journal of Disaster Risk Reduction*, 28, 845–853.

  <a href="https://doi.org/10.1016/j.ijdrr.2018.01.001">https://doi.org/10.1016/j.ijdrr.2018.01.001</a>
- Cocco, C., & Thomas-Boaz, W. (2019). Preparedness planning and response to a mass-casualty incident: A case study of Sunnybrook Health Sciences Centre. *Journal of Business Continuity & Emergency Planning*, 13(1), 6–21. https://pubmed.ncbi.nlm.nih.gov/31462359/
- Coleman, P. (2021). Validity and reliability within qualitative research in the caring sciences. *International Journal of Caring Sciences*, *14*(3), 2041–2045. http://oro.open.ac.uk/81588/1/Coleman Validity and Reliability.pdf
- Craig, C. A., Sayers, E. P., Feng, S., & Kinghorn, B. (2019). The impact of climate and weather on a small tourism business: A SWOT case study. *Entrepreneurship Education and Pedagogy*, 2(3), 255–266.

  https://doi.org/10.1177%2F2515127419829399
- Cvetek, D., Mustra, M., Jelusic, N., & Tisljaric, L. (2021). A survey of methods and

- technologies for congestion estimation based on multisource data fusion. *Applied Sciences*, 11(2306), 2306. https://doi.org/10.3390/app11052306
- Davlasheridze, M., & Geylani, P. (2017). Small business vulnerability to floods and the effects of disaster loans. *Small Business Economics*, 49(4), 865–888. https://doi.org/10.1007/s11187-017-9859-5
- DeJonckheere, M., & Vaughn, L. M. (2019). Semi structured interviewing in primary care research: A balance of relationship and rigor. *Family Medicine and Community Health*, 7(2), 1–8. <a href="https://doi.org/10.1136/fmch-2018-000057">https://doi.org/10.1136/fmch-2018-000057</a>
- Demircioglu, M., Bruneel, H., & Wittevrongel, S. (2021). Analysis of a discrete-time queueing model with disasters. *Mathematics*, 9(24), 3283. https://doi.org/10.3390/math9243283
- Department of Homeland Security. (2021a, May 26). *Business continuity plan*. <a href="https://www.ready.gov/business-continuity-plan">https://www.ready.gov/business-continuity-plan</a>
- Department of Homeland Security. (2022a, February 5). *Business continuity resource requirements*. <a href="https://www.ready.gov/sites/default/files/2020-03/business-continuity-resource-worksheet.pdf">https://www.ready.gov/sites/default/files/2020-03/business-continuity-resource-worksheet.pdf</a>
- Department of Homeland Security. (2021b, June 17). *Business impact analysis*. <a href="https://www.ready.gov/business-impact-analysis">https://www.ready.gov/business-impact-analysis</a>

Department of Homeland Security. (2022b, January 26). *Business impact analysis worksheet*. <a href="https://www.ready.gov/sites/default/files/2020-07/business-impact-analysis-worksheet.pdf">https://www.ready.gov/sites/default/files/2020-07/business-impact-analysis-worksheet.pdf</a>

Department of Homeland Security. (2021g, February 17). *Corrective action*. https://www.ready.gov/business/program/corrective

Department of Homeland Security. (2021f, February 17). *Program improvements*. https://www.ready.gov/program-improvement

Department of Homeland Security. (2021h, February 17). *Program review*. https://www.ready.gov/program-reviews

Department of Homeland Security. (2021c, June 2). *Risk assessment*. https://www.ready.gov/risk-assessment

Department of Homeland Security. (2021d, February 17). *Testing & exercises*. https://www.ready.gov/testing-exercises

Department of Homeland Security. (2021e, May 26). *Training*.

https://www.ready.gov/business-training

Donaghy, K. (2018). Disaster in the United States: Frequency, costs, and compensation. *Economic Development Quarterly*, 32(3), 257–258.

https://doi.org/10.1177/0891242418782273

Dube, S., & Mutambara, E. (2020). Dealing with conflict: A case of KwaZulu-Natal

Christian council (kzncc)'s engagement with the land-owners and land dwellers in

Dannhauser. *Gender & Behaviour*, 18(4), 16913–16927.

https://www.ajol.info/index.php/gab/article/view/203460

- Ertel, S. (2021). Small Business Post–COVID-19: Motivational needs through uncertain times. *Compensation & Benefits Review*, *53*(1), 8–15.

  <a href="https://doi.org/10.1177/0886368720945134">https://doi.org/10.1177/0886368720945134</a></a>
- Fairlie, R. (2020). The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy*, 29(4), 727–740.

  <a href="https://doi.org/10.1111/jems.12400">https://doi.org/10.1111/jems.12400</a>
- Fani, S., & Subriadi, A. (2019). Business continuity plan: Examining of multi-usable framework. *Procedia Computer Science*. *161*, 275–282. https://doi.org/10.1016/j.procs.2019.11.124
- Farmer, L., & Lundy, A. (2017). Informed consent: Ethical and legal considerations for advanced practice nurses. *The Journal of Nurse Practitioners*, *13*(2), 124–130. https://doi.org/10.1016/j.nurpra.2016.08.011
- Fasth, J., Åkerman, N., Elliot, V., & Hilmersson, M. (2022). Small and medium-sized enterprises response to COVID-19: The effect of external openness and procedural
  - management. International Small Business Journal: Researching

    Entrepreneurship, I. https://doi.org/10.1177/02662426221101528
- Federal Emergency Management Agency. (2021, September 12). *Declared disasters*. <a href="https://www.fema.gov/disaster/declarations">https://www.fema.gov/disaster/declarations</a>
- Federal Emergency Management Agency. (2019). Stafford Act, as amended, and related

- authorities. <a href="https://www.fema.gov/sites/default/files/2020-03/stafford-act\_2019.pdf">https://www.fema.gov/sites/default/files/2020-03/stafford-act\_2019.pdf</a>
- Fischer, R. J., Halibozek, E. P., & Walters, D. C. (2019). Contingency planning emergency response and safety. *Introduction to Security*, 249–268. https://doi.org/10.1016/B978-0-12-805310-2.00011-1
- Fofana, F., Bazeley, P., & Regnault, A. (2020). Applying a mixed methods design to test saturation for qualitative data in health outcomes research. *PLoS ONE*, *15*(6), 1–12. <a href="https://doi.org/10.1371/journal.pone.0234898">https://doi.org/10.1371/journal.pone.0234898</a>
- Ford, E. (2020). Tell me your story: Narrative inquiry in LIS research. *College & Research Libraries*, 81(2), 235–247. <a href="https://doi.org/10.5860/crl.81.2.235">https://doi.org/10.5860/crl.81.2.235</a>
- Fusch, P., Fusch, G. E., & Ness, L. R. (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
- Galbusera, L., Cardarilli, M., & Giannopoulos, G. (2021). The ERNCIP survey on COVID-19: Emergency & business continuity for fostering resilience in critical infrastructures. *Safety Science*. <a href="https://doi.org/10.1016/j.ssci.2021.105161">https://doi.org/10.1016/j.ssci.2021.105161</a>
- García, G., Ayala-Calvo, J., & Schumacher, A. (2021). Successful succession: The role of the environment and the succession plan. *Revista de Administracao de Empresas*, 61(6). <a href="https://doaj.org/article/576f1f4fc385402db48843c1272864e3">https://doaj.org/article/576f1f4fc385402db48843c1272864e3</a>
- Geddis-Regan, A. R., Exley, C., & Taylor, G. D. (2021). Navigating the dual role of clinician-researcher in qualitative dental research. *JDR Clinical and Translational Research*. https://doi.org/10.1177/2380084421998613

- Giunipero, L. C., Denslow, D., & Rynarzewska, A. I. (2021). Small business survival and COVID-19 An exploratory analysis of carriers. *Research in Transportation Economics*. <a href="https://doi.org/10.1016/j.retrec.2021.101087">https://doi.org/10.1016/j.retrec.2021.101087</a>
- Gregory, D. (2020). Disaster response for small businesses: We must learn from the past. *Small Enterprise Research*, 27(1), 97–101. https://doi.org/10.1080/13215906.2020.1740105
- Groenendaal, J., & Helsloot, I. (2020). Organizational resilience: Shifting from planning-driven business continuity management to anticipated improvisation. *Journal of Business Continuity & Emergency Planning*, 14(2), 102–109.

  <a href="https://pubmed.ncbi.nlm.nih.gov/33239142/">https://pubmed.ncbi.nlm.nih.gov/33239142/</a>
- Guest, G., Namey, E., & Chen, M. (2020). A simple method to assess and report thematic saturation in qualitative research. *PLoS ONE*, *15*(5), 1–17. https://doi.org/10.1371/journal.pone.0232076
- Gupta, V., Sharma, M., Pachauri, R., & Babu, K. N. D. (2022). Impact of hailstorm on the performance of PV module: A review. *Energy Sources Part A: Recovery*, *Utilization & Environmental Effects*, 44(1), 1923–1944. https://doi.org/10.1080/15567036.2019.1648597
- Haas, E. J., Ryan, M., & Willmer, D. R. (2018). An examination of mining companies' online health and safety policies: Implications for improving risk management. *Journal of Safety, Health & Environmental Research*, 14(1), 337–347. <a href="https://www.onemine.org/document/abstract.cfm?docid=242960">https://www.onemine.org/document/abstract.cfm?docid=242960</a>
- Hall, K. (2021). The effects of relational coordination and supervisor support on thriving

- and job satisfaction: Evidence from sales professional in U.S. small businesses. *Atlantic Marketing Journal*, *10*(1), 1–16. https://digitalcommons.kennesaw.edu/amj/vol10/iss1/2/
- Hanwacker, L. S. (2018). Continuity of operations plans: Simple or detailed? *Journal of Business Continuity & Emergency Planning*, 12(2), 133–149.

  <a href="https://pubmed.ncbi.nlm.nih.gov/30642422/">https://pubmed.ncbi.nlm.nih.gov/30642422/</a>
- Hao, F., Xiao, Q., & Chon, K. (2020). COVID-19 and China's hotel industry: Impacts, a disaster management framework, and post-pandemic agenda. *International Journal of Hospitality Management*, 90.
  <a href="https://doi.org/10.1016/j.ijhm.2020.102636">https://doi.org/10.1016/j.ijhm.2020.102636</a>
- Hatton, T., & Brown, C. (2021). Building adaptive business continuity plans: Practical tips on how to inject adaptiveness into continuity planning processes. *Journal of Business Continuity & Emergency Planning*, 15(1), 44–52.

  <a href="https://pubmed.ncbi.nlm.nih.gov/34465409/">https://pubmed.ncbi.nlm.nih.gov/34465409/</a>
- Hawkins, L., & Hoon, S. (2020). The impact of customer retention strategies and the survival of small service-based businesses. *IUP Journal of Marketing Management*, 19(2), 7–34. <a href="https://doi.org/10.2139/ssrn.3445173">https://doi.org/10.2139/ssrn.3445173</a>
- Hays, D. G., Wood, C., Dahl, H., & Kirk-Jenkins, A. (2016). Methodological rigor in journal of counseling and development qualitative research articles: A 15-year review. *Journal of Counseling & Development*, 94(2), 172–183.
  <a href="https://doi.org/10.1002/jcad.12074">https://doi.org/10.1002/jcad.12074</a>
- Heale, R., & Twycross, A. (2018). What is a case study? Evidence Based Nursing, 21(1),

## 7–8. <a href="https://doi.org/10.1136/eb-2017-102845">https://doi.org/10.1136/eb-2017-102845</a>

- Helou, A., Stewart, K., Ryan, K., & George, J. (2021). Pregnant women's experiences with the management of hypertensive disorders of pregnancy: A qualitative study. BMC Health Services Research, 21(1), 1–13.

  https://doi.org/10.1186/s12913-021-07320-4
- Henderson, H. (2018). Difficult questions of difficult questions: The role of the researcher and transcription styles. *International Journal of Qualitative Studies in Education*, 31(2), 143–157. https://doi.org/10.1080/09518398.2017.1379615
- Herbane, B. (2019). Rethinking organizational resilience and strategic renewal in SMEs. *Entrepreneurship & Regional Development*, 31(5/6), 476–495. https://doi.org/10.1080/08985626.2018.1541594
- Herbane, D. (2020). Locational contiguity and business continuity: Perceived organizational resilience of small- and medium-sized enterprises in U.K. Business Parks. *SAGE Open*, *10*. https://doi.org/10.1177/2158244020927417
- Hiramatsu, T., & Marshall, M. (2018). The long-term impact of disaster loans: The case of small businesses after Hurricane Katrina. *Sustainability*, *10*(7), 2364. https://doi.org/10.3390/su10072364
- International Association for Standardization. (2019). Security and resilience Business continuity management systems Requirements.

  https://www.iso.org/standard/75106.html

- Johansson, P. E., & Wallo, A. (2019). Exploring the work and competence of interactive researchers. *Journal of Manufacturing Technology Management*, *31*(8), 1539–1559. https://doi.org/10.1108/jmtm-09-2018-0307
- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A review of the quality indicators of rigor in qualitative research. *American Journal of Pharmaceutical Education*, 84(1), 138–146. https://doi.org/10.5688/ajpe7120
- Johnson, L. R., Stribling, C., Rivera, N., Preissner, K., Hsu, C. P., Jones, A., & May-Schroeder, A. (2019). Earning the right: Conducting community based research. *Critical Questions in Education*, *10*(3), 161–179.
- Jones, A., Caes, L., Rugg, T., Noel, M., Bateman, S., & Jordan, A. (2021). Challenging issues of integrity and identity of participants in non-synchronous online qualitative methods. *Methods in Psychology*, 5.

  <a href="https://doi.org/10.1016/j.metip.2021.100072">https://doi.org/10.1016/j.metip.2021.100072</a>
- Josephson, A., Schrank, H., & Marshall, M. (2017). Assessing preparedness of small businesses for hurricane disasters: Analysis of pre-disaster owner, business and location characteristics. *International Journal of Disaster Risk Reduction*, 23, 25–35. https://doi.org/10.1016/j.ijdrr.2017.03.013
- Kabene, S., & Baadel, S. (2021). 20<sup>th</sup> anniversary of 9-11: Corporate disaster preparedness, lessons learned, and ways forward. *International Journal of Management and Data Analytics*, 1(2), 29 37.

  <a href="http://www.ijmada.com/index.php/ijmada/article/view/7/8">http://www.ijmada.com/index.php/ijmada/article/view/7/8</a>
- Kabir, E., Guikema, S. D., & Quiring, S. M. (2019). Predicting thunderstorm-induced

- power outages to support utility restoration. *IEEE Transactions on Power Systems*, *34*(6), 4370–4381. <a href="https://doi.org/10.1109/TPWRS.2019.2914214">https://doi.org/10.1109/TPWRS.2019.2914214</a>
- Kato, M., & Charoenrat, T. (2018). Business continuity management of small and medium sized enterprises: Evidence from Thailand. *International Journal of Disaster Risk Reduction*, 27, 577–587. <a href="https://doi.org/10.1016/j.ijdrr.2017.10.002">https://doi.org/10.1016/j.ijdrr.2017.10.002</a>
- Kaur, H., & Singh, S. (2021). Multi-stage hybrid model for supplier selection and order allocation considering disruption risks and disruptive technologies. *International Journal of Production Economics*, 231. https://doi.org/10.1016/j.ijpe.2020.107830
- Khalil, P., Honein-Abou Haidar, G., El Achi, D., Al-Hakim, L., Tamim, H., & Akl, E. A. (2022). Views of medical residents on a research training program: A qualitative study. *PLoS ONE*, *17*(1), 1–12. <a href="https://doi.org/10.1371/journal.pone.0261583">https://doi.org/10.1371/journal.pone.0261583</a>
- Kokina, J., Pachamanova, D., & Corbett, A. (2017). The role of data visualization and analytics in performance management: Guiding entrepreneurial growth decisions.

  \*\*Journal of Accounting Education, 38, 50–62.\*\*

  https://doi.org/10.1016/j.jaccedu.2016.12.005
- Koks, E., Pant, R., Thacker, S., & Hall, J. (2019). Understanding business disruption and economic losses due to electricity failures and flooding. *International Journal of Disaster Risk Science*, 10(4), 421–438. <a href="https://doi.org/10.1007/s13753-019-00236-y">https://doi.org/10.1007/s13753-019-00236-y</a>
- Koonin, L. M. (2020). Novel coronavirus disease (COVID-19) outbreak: Now is the time to refresh pandemic plans. *Journal of Business Continuity & Emergency Planning*, 13(4), 298–312. <a href="https://www.henrystewartpublications.com/jbcep">https://www.henrystewartpublications.com/jbcep</a>

- Kowo, S., Akinrinola, O., & Akinbola, O. (2021). Management succession and entrepreneurship business sustenance. *RUDN Journal of Public Administration*, 8(3), 256–276. <a href="https://doi.org/10.22363/2312-8313-2021-8-3-256-276">https://doi.org/10.22363/2312-8313-2021-8-3-256-276</a>
- Kvande, M. E., Delmar, C., Lauritzen, J., & Damsgaard, J. B. (2021). Ethical dilemmas embedded in performing fieldwork with nurses in the ICU. *Nursing Ethics*, 28(7/8), 1329–1336. https://doi.org/10.1177/0969733021996025
- Kwok, P. K., Yan, M., Chan, B. K. P., & Lau, H. Y. K. (2019). Crisis management training using discrete-event simulation and virtual reality techniques. *Computers & Industrial Engineering*, 135, 711–722.
  <a href="https://doi.org/10.1016/j.cie.2019.06.035">https://doi.org/10.1016/j.cie.2019.06.035</a>
- Kwon, W., Woo, H., Sadachar, A., & Huang, X. (2021). External pressure or internal culture? An innovation diffusion theory account of small retail businesses' social media use. *Journal of Retailing and Consumer Services*, 62.
  <a href="https://doi.org/10.1016/j.jretconser.2021.102616">https://doi.org/10.1016/j.jretconser.2021.102616</a>
- Labus, M., Despotovic-Zrakic, M., Bogdanovic, Z., Barać, D., & Popovic, S. (2020).

  Adaptive e-business continuity management: Evidence from the financial sector. *Computer Science & Information Systems*, 17(2), 553–580.

  <a href="https://doi.org/10.2298/CSIS190202037L">https://doi.org/10.2298/CSIS190202037L</a>
- Laere, J., & Lindblom, J. (2019). Cultivating a longitudinal learning process through recurring crisis management training exercises in twelve Swedish municipalities. *Journal of Contingencies & Crisis Management*, 27(1), 38–49.

### https://doi.org/10.1111/1468-5973.12230

- Lang, A. C., Lim, P. S., Everhart, S. A., Linneman, N. G., Davies, W. H., & Alderfer, M. A. (2022). Ethical challenges in qualitative methods to improve pediatric clinical care: Researcher perspectives. *Clinical Practice in Pediatric Psychology*, 10(2), 222–232. <a href="https://doi.org/10.1037/cpp0000404.supp">https://doi.org/10.1037/cpp0000404.supp</a>
- Langer, S. L., Castro, F. G., Chen, A. C., Davis, K. C., Joseph, R. P., Kim, W., Larkey,
  L., Lee, R. E., Petrov, M. E., Reifsnider, E., Youngstedt, S. D., & Shaibi, G. Q.
  (2021). Recruitment and retention of underrepresented and vulnerable populations to research. *Public Health Nursing*, 38(6), 1102–1115.
  <a href="https://doi.org/10.1111/phn.12943">https://doi.org/10.1111/phn.12943</a>
- Lantos, J. (2020). The Belmont Report and innovative clinical research. *Perspectives in Biology and Medicine*, 63(2), 389. <a href="https://doi.org/10.1353/pbm.2020.0026">https://doi.org/10.1353/pbm.2020.0026</a>
- Lear, H., Eboh, W., & Diack, L. (2018). A nurse researcher's guide to reflexive interviewing. Nurse Researcher, 25(4), 35–42.

  <a href="https://doi.org/10.7748/nr.2018.e1550">https://doi.org/10.7748/nr.2018.e1550</a>
- Lee, J. (2019). Business recovery from Hurricane Harvey. *International Journal of Disaster Risk Reduction*, 34, 305–315. https://doi.org/10.1016/j.ijdrr.2018.12.004
- Li, M. (2021). Did the small business administration's COVID-19 assistance go to the hard-hit firms and bring the desired relief? *Journal of Economics & Business*, 115. https://doi.org/10.1016/j.jeconbus.2020.105969
- Low, J. (2013). Unstructured and semi-structured interviews in health research. *Researching health: Qualitative, quantitative and mixed methods, 2,* 87-

105.

https://books.google.com/books?hl=en&lr=&id=RjPtBgAAQBAJ&oi=fnd&pg=P T117&dq=unstructured+and+semi-

 $\frac{structured+interviews+in+health+research\&ots=btwizY5xQ2\&sig=qb0o3vKOg2}{KRAdvBWgIZFEDXDoQ-v=onepage\&q\&f=false}$ 

- Lu, F., Kwan, H. K., & Ma, B. (2022). Carry the past into the future: the effects of CEO temporal focus on succession planning in family firms. *Asia Pacific Journal of Management*, 39(2), 763–804. https://doi.org/10.1007/s10490-020-09748-4
- Majid, M. A. A., Othman, M., Mohamad, S. F., Lim, S. A. H., & Yusof, A. (2017).

  Piloting for interviews in qualitative research: Operationalization and lessons learnt. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1073–1080. <a href="http://doi.org/10.6007/ijarbss/v7-i4/2916">http://doi.org/10.6007/ijarbss/v7-i4/2916</a>
- Mance, S. (2021). Estimating state and local employment in recent disasters--from Hurricane Harvey to the COVID-19 pandemic. *Monthly Labor Review*, 1. <a href="https://doi.org/10.21916/mlr.2021.9">https://doi.org/10.21916/mlr.2021.9</a>
- Mantei, J., & Kervin, L. (2021). Examining children's interpretations of teacher expectations in the literacy classroom. *Australian Journal of Language & Literacy*, 44(2), 37–45. https://search.informit.org/doi/abs/10.3316/informit.883146956885696
- Margherita, A., & Heikkila, M. (2021) Business continuity in the COVID-19
  emergency: A framework of actions undertaken by world-leading
  companies. *Business Horizons*, 1. https://doi.org/10.1016/j.bushor.2021.02.020

- Martinet, M. (2021). Spinning straw into gold: The fairy tale of disaster cost recovery. *Journal of Business Continuity & Emergency Planning*, 15(1), 78–86. <a href="https://pubmed.ncbi.nlm.nih.gov/34465412/">https://pubmed.ncbi.nlm.nih.gov/34465412/</a>
- Mathaisel, B. F., & Yoost, D. A. (2017). Mitigating the threat of IT business disruptions. *RMA Journal*, 99(8), 34–40. National Institute of Standards and Technology. (2021, August 22). Business continuity plan (BCP) Glossary. <a href="https://csrc.nist.gov/glossary/term/business\_continuity\_plan">https://csrc.nist.gov/glossary/term/business\_continuity\_plan</a>
- Mathew, P., Sanchez, L., Lee, S. H., Walter, T., & Srinivasan, R. (2021). Assessing the energy resilience of office buildings: Development and testing of a simplified metric for realestate stakeholders. *Buildings*, *11*(3), 96–106.

  https://doi.org/10.3390/buildings11030096
- McGinley, S., Wei, W., Zhang, L., & Zheng, Y. (2021). The State of Qualitative

  Research in Hospitality: A 5-Year Review 2014 to 2019. Cornell Hospitality

  Quarterly, 62(1), 8–20. <a href="https://doi.org/10.1177/1938965520940294">https://doi.org/10.1177/1938965520940294</a>
- Miletic, N. (2020). Continuity of Work in the Energy Sector in the Republic of Serbia during the COVID-19 Pandemic. *Contemporary Macedonian Defense* /

Sovremena

*Makedonska Odbrana*, 20(39), 153–162.

https://www.mod.gov.mk/inc/uploads/2020/12/Sovremena-Makedonska-Odbrana\_br.39-en.pdf - page=154

Miranda, V., & Swanstrom, M. (2020). Surviving Disasters: A multi-company case Study on disaster recovery plans. *Journal of Applied Business & Economics*, 22(6), 87–

- 105. https://doi.org/10.33423/jabe.v22i6.3078
- Moon, M. D. (2019). Triangulation: A method to increase validity, reliability, and legitimation in clinical research. *Journal of Emergency Nursing*, 45(1), 103–105. https://doi.org/10.1016/j.jen.2018.11.004
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part 3: Sampling; data collection and analysis. *European Journal of General Practice*, 24(1), 9-18. https://doi.org/10.1080/13814788.2017.1375091
- Motulsky, S. L. (2021). Is member checking the gold standard of quality in qualitative research? *Qualitative Psychology*, 8(3), 389–406. https://doi.org/10.1037/qup0000215
- Muflihah, Y., & Subriadi, A. (2018). A basic element of IT business continuity plan: Systematic review. *Jurnal Informatika*, 12(1), 17–23. https://doi.org/10.26555/jifo.v12i1.a8370
- Muzari, T., Shava, G. N., & Shonhiwa, S. (2022). Qualitative research paradigm, a key research design for educational researchers, processes and procedures: A theoretical overview. *Indiana Journal of Humanities and Social Sciences*, *3*(1), 14-20. <a href="https://indianapublications.com/articles/IJHSS\_3(1)\_14-20\_61f38990115064.95135470.pdf">https://indianapublications.com/articles/IJHSS\_3(1)\_14-20\_61f38990115064.95135470.pdf</a>
- Naidu, T., & Prose, N. (2018). Re-envisioning member checking and communicating results as accountability practice in qualitative research: A South African community-based organization example. *Qualitative Social Research*, 19(3), 783–797. <a href="https://doi.org/10.17169/fqs-19.3.3153">https://doi.org/10.17169/fqs-19.3.3153</a>

- Namdar, J., Torabi, S. A., Sahebjamnia, N., & Nilkanth Pradhan, N. (2021). Business continuity-inspired resilient supply chain network design. *International Journal of Production Research*, *59*(5), 1331–1367. https://doi.org/10.1080/00207543.2020.1798033
- National Oceanic and Atmospheric Administration. (2021). U.S. 2020 billion dollar weather and climate disasters. https://www.climate.gov/media/11835
- Nienimaa, M., Jarvelainen, J., Heikkila, M., & Heikkila, J. (2019). Business continuity of business models: Evaluating the resilience of business models for contingencies.

  International Journal of Information Management, 49, 208–216.

  <a href="https://doi.org/10.1016/j.ijinfomgt.2019.04.010">https://doi.org/10.1016/j.ijinfomgt.2019.04.010</a>
- Nnenna, C. V. (2019). Credit risk management, disaster recovery and business continuity in the Nigerian banking industry: Implications on Performance. *Benefits*, 9(9). <a href="https://core.ac.uk/download/pdf/270187441.pdf">https://core.ac.uk/download/pdf/270187441.pdf</a>
- Nusbaum, L., Douglas, B., Damus, K., Paasche–Orlow, M., & Estrella–Luna, N. (2017).

  Communicating risks and benefits in informed consent for research: A qualitative study. *Global Qualitative Nursing Research*, *4*(1), 1–13.

  <a href="https://doi.org/10.1177/2333393617732017">https://doi.org/10.1177/2333393617732017</a>
- Occupational Safety and Health Administration. (2020). *Guidance on preparing*workplaces for COVID-19.

  https://www.osha.gov/sites/default/files/publications/OSHA3990.pdf
- Olu, O., Usman, A., Kalambay, K., Anyangwe, S., Voyi, K., Orach, C. G., Azazh, A., Mapatano, M. A., Nsenga, N., Manga, L., Woldetsadik, S., Nguessan, F., &

- Benson, A. (2018). What should the African health workforce know about disasters? Proposed competencies for strengthening public health disaster risk management education in Africa. *BMC Medical Education*, *18*(1), 60. <a href="https://doi.org/10.1186/s12909-018-1163-9">https://doi.org/10.1186/s12909-018-1163-9</a>
- Palladino, L. (2019). Small business fintech lending: The need for comprehensive regulation. *Fordham Journal of Corporate & Financial Law*, 24(1), 77–103. https://doi.org/10.2139/ssrn.3194694
- Palaniappan, K., & Kum, I. (2019). Underlying causes behind research study participants' careless and biased responses in the field of sciences. *Current Psychology*, 38(6), 1737. https://doi.org/10.1007/s12144-017-9733-2
- Paunescu, C. (2017). How prepared are small and medium sized companies for business continuity management? *Quality Access to Success, 18*(161), 43–48. Q-as\_Vol.18\_No.161\_Dec-2017\_p.43-48-with-cover-page-v2.pdf (d1wqtxts1xzle7.cloudfront.net)
- Paunescu, C., & Argatu, R. (2020). Critical functions in ensuring effective business continuity management. Evidence from Romanian companies. *Journal of Business Economics & Management*, 21(2), 497–520.

  https://doi.org/10.3846/jbem.2020.12205
- Pearson, N., Naylor, P., Ashe, M., Fernandez, M., Yoong, S., & Wolfenden, L. (2020).

  Guidance for conducting feasibility and pilot studies for implementation

  trials. *Pilot and Feasibility Studies*, 6(1), 1–12. <a href="https://doi.org/10.1186/s40814-020-00634-w">https://doi.org/10.1186/s40814-020-00634-w</a>

- Phillips, R., & Tanner, B. (2019). Breaking down silos between business continuity and cyber security. *Journal of Business Continuity & Emergency Planning*, 12(3), 224–232. <a href="https://pubmed.ncbi.nlm.nih.gov/30857581/">https://pubmed.ncbi.nlm.nih.gov/30857581/</a>
- Poliatykina, L., Samoshkina, I., & Slavkova, O. (2019). Economic aspects of the development of insurance activity of small businesses. *Baltic Journal of Economic Studies*, *5*(4), 197–202. <a href="https://doi.org/10.30525/2256-0742/2019-5-4-197-202">https://doi.org/10.30525/2256-0742/2019-5-4-197-202</a>
- Popovic A, & Huecker M. (2021) Study bias.
  - https://www.ncbi.nlm.nih.gov/books/NBK574513/
- Powell, J. (2020). Why and how to implement an incident command system in business continuity management. *Journal of Business Continuity & Emergency Planning*, 13(3), 250–264. https://pubmed.ncbi.nlm.nih.gov/32093816/
- Pyrczak, F., & Bruce, R. R. (2017). Writing empirical research reports: A basic guide for students of the social and behavioral sciences (8<sup>th</sup> ed.). Pyrczak Publishing.
- Rackham, R., & Kelly, A. (2018). Emergency planning and business continuity: Why blood services must plan for both. How the EBA working group (WG) is assisting blood services. *ISBT Science Series*, *13*(1), 51–58.

  <a href="https://doi.org/10.1111/voxs.12386">https://doi.org/10.1111/voxs.12386</a></a>
- Rada, V., & Martínez, V. (2020). Household sampling designs: Differences and similarities between probability sampling and route and quota sampling. *Revista Española de Investigaciones Sociologicas*, 171, 23–42.

  <a href="https://doi.org/10.5477/cis/reis.171.23">https://doi.org/10.5477/cis/reis.171.23</a>
- Rance, J., Lafferty, L., & Treloar, L. (2021). Considering treatment-as-prevention scale-

- up for Australian prisons: a qualitative sub-study of expert stakeholders from the Australian "surveillance and treatment of prisoners with hepatitis C" project (SToP-C). *Harm Reduction Journal*, *18*(1), 1–10. <a href="https://doi.org/10.1186/s12954-021-00494-4">https://doi.org/10.1186/s12954-021-00494-4</a>
- Ranf, D., Manescu, G. & Badea, D. (2021). Specific business continuity management practices during the COVID-19 pandemic crisis. *Revista Academiei Fortelor*Terestre, 26(1), 62–68. https://doi:10.2478/raft-2021-0010
- Redman, B. K., & Caplan, A. L. (2021). Should the regulation of research misconduct be integrated with the ethics framework promulgated in the Belmont report? *Ethics* & *Human Research*, 43(1), 37–41. https://doi.org/10.1002/eahr.500078
- Reid, R. D. (2020). Be Ready: How business continuity planning helps organizations plan for emergencies. *Quality Progress*, *53*(11), 48–51.

  <a href="https://www.proquest.com/docview/2468685053/fulltextPDF/40456D84DD8A48">https://www.proquest.com/docview/2468685053/fulltextPDF/40456D84DD8A48</a>

  A7PQ/1?accountid=14872
- Ricks, M., & Boswell, L. (2019). Assessing the resilience of an IT portfolio. *Journal of Business Continuity & Emergency Planning*, 13(1), 22–31.

  <a href="https://pubmed.ncbi.nlm.nih.gov/31462360/">https://pubmed.ncbi.nlm.nih.gov/31462360/</a>
- Riglietti, G., Avatefipour, A., & Trucco, P. (2021). The impact of business continuity management on the components of supply chain resilience: A quantitative analysis. *Journal of Business Continuity & Emergency Planning, 15*(2), 182–195. <a href="https://pubmed.ncbi.nlm.nih.gov/35016752/">https://pubmed.ncbi.nlm.nih.gov/35016752/</a>
- Romig, T. (2021). A collaborative approach to business continuity and organizational

- resilience when dealing with a major crisis, such as COVID-19. *Journal of Airport Management*, *15*(3), 226–234. <a href="https://trid.trb.org/view/1870575">https://trid.trb.org/view/1870575</a>
- Roush, K., Opsahl, A., Parker, K., & Davis, J. (2021). Business continuity planning: An effective strategy during an electronic health record downtime. *Nurse*Leader, 19(5), 525–531. https://doi.org/10.1016/j.mnl.2021.01.003
- Russo, F. (2019). Connecting the disaster dots: The benefits of enhanced collaboration between business continuity and risk management. *Journal of Business Continuity*& Emergency Planning, 12(3), 277–285.

  <a href="https://pubmed.ncbi.nlm.nih.gov/30857586/">https://pubmed.ncbi.nlm.nih.gov/30857586/</a>
- Sahebjamnia, N., Torabi, S. A., & Mansouri, S. A. (2018). Building organizational resilience in the face of multiple disruptions. *International Journal of Production Economics*, 197, 63–83. <a href="https://doi.org/10.1016/j.ijpe.2017.12.009">https://doi.org/10.1016/j.ijpe.2017.12.009</a>
- Saleh, S. (2021). Shifting positionalities in a time of COVID-19: The transnational public health doctor and ethnographer. *Frontiers in Sociology*, 6. <a href="https://doi.org/10.3389/fsoc.2021.776968">https://doi.org/10.3389/fsoc.2021.776968</a>
- Santha, K. (2019). Appearance of triangulation in teacher trainees' research plans. *Pedagogy*, *91*(2), 275–281. <u>Appearance Of Triangulation In Teacher</u>

  Trainees' Research Plans: @ Walden University Library (ebscohost.com)
- Sarmiento, J., Sarmiento, C., Hoberman, G., Jerath, M., & Sandoval, V. (2019). Small and medium enterprises in the Americas, effect of disaster experience on readiness capabilities. *AD-Minister*, *35*, 117–137. <a href="https://doi.org/10.17230/Administer.35.5">https://doi.org/10.17230/Administer.35.5</a>

- Saunders, M., Lewis, P., & Thornhill, A. (2015). Research methods for business students (7th ed.). Person Education Unlimited.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, *52*(4), 1893–1907. https://doi.org/10.1007/s11135-017-0574-8
- Schatter, F., Hansen, O., Wiens, M., & Schultmann, F. (2019). A decision support methodology for a disaster-caused business continuity management. *Decision Support Systems*, 118, 10–20. https://doi.org/10.1016/j.dss.2018.12.006
- Schmid, B., Raju, E., & Jensen, P. (2021). COVID-19 and business continuity learning from the private sector and humanitarian actors in Kenya. *Progress in Disaster Science*, 11(100181-). https://doi.org/10.1016/j.pdisas.2021.100181
- Schultz, R., & Hendrickse, R. (2018). Perceptions of the financial sustainability of an indigent policy in a selected municipality in the western cape, South

  Africa. *Problems and Perspectives in Management, 16*(2), 12–22.

  <a href="https://doi.org/10.21511/ppm.16(2).2018.02">https://doi.org/10.21511/ppm.16(2).2018.02</a>
- Senkbeil, J., Myers, L., Jasko, S., Reed, J., & Mueller, R. (2020). Communication and hazard perception lessons from category five Hurricane

  Michael. *Atmosphere*, 11(804), 804. https://doi.org/10.3390/atmos11080804
- Serrano, F., & Kazda, A. (2020). Business continuity during pandemics lessons learned about airport personnel. *Transportation Research Procedia*, *51*, 56–66. https://doi.org/10.1016/j.trpro.2020.11.008

- Shufutinsky, A. (2020). Employing use of self for transparency, rigor, trustworthiness, and credibility in qualitative organizational research methods. *Organization Development Review*, 52(1), 50–58.
  - https://www.researchgate.net/publication/340539936\_Employing\_Use\_of\_Self\_fo
    r\_Transparency\_Rigor\_Trustworthiness\_and\_Credibility\_in\_Qualitative\_Organiz
    ational\_Research\_Methods
- Shufutinsky, A. & Long, B. (2017). The distributed use of self-as-instrument for improvement of organizational safety culture. *OD Practitioner*, 49(4), 36–44. The <a href="Distributed Use of Self-as-Instrument for Improvement of Organizational...:@">Distributed Use of Self-as-Instrument for Improvement of Organizational...:@</a>
  <a href="Walden University Library (ebscohost.com">Walden University Library (ebscohost.com</a>)
- Sibiya, D. Z., & Barnard, B. (2020). Institutionalizing entrepreneurship: The case of B-BBEE Based Enterprise and Supplier Development in South Africa. *IUP Journal of Business Strategy*, 17(1), 7-4.

  <a href="https://www.proquest.com/docview/2425004150?pq-origsite=gscholar&fromopenview=true">https://www.proquest.com/docview/2425004150?pq-origsite=gscholar&fromopenview=true</a>
- Soufi, H., Torabi, S. A., & Sahebjamnia, N. (2019). Developing a novel quantitative framework for business continuity planning. *International Journal of Production Research*, *57*(3), 779–800. https://doi.org/10.1080/00207543.2018.1483586
- Srikant, C. D., & Teckchandani, A. (2021). Climate change and business planning: solutions to keep disruptions at bay. *Journal of Business Strategy*, 42(4), 240–248. https://doi.org/10.1108/jbs-02-2020-0024
- Stolt, M., Kielo-Viljamaa, E., Laitinen, A.-M., Suhonen, R., & Leino-Kilpi, H. (2022).

Reporting of research ethics in studies focusing on foot health in patients with rheumatoid arthritis—A systematic review. *Journal of Empirical Research on Human Research Ethics*, 17(1–2), 39–51.

https://doi.org/10.1177/15562646211047654

- Suresh, N., Sanders, G. L., & Braunscheidel, M. J. (2020). Business continuity management for supply chains facing catastrophic events. *Engineering*Management Review, 48(3), 129–138. https://doi.org/10.1109/emr.2020.3005506
- Surmiak, A. (2018). Confidentiality in qualitative research involving vulnerable participants: Researchers' perspectives. *Research Ethics in Qualitative Research*, 19(3), 1–26. https://doi.org/10.17169/fqs-19.3.3099
- Sydnor, S., Marshall, M., Schrank, H., Niehm, L., & Lee, Y. (2017). Analysis of postnature disaster damage and disruptive impacts on the operating status of small businesses after Hurricane Katrina. *Natural Hazards*, 85(3), 1637–1663. https://doi.org/10.1007/s11069-016-2652-y
- Taguchi, N. (2018). Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System*, 75, 23–32. <a href="https://doi.org/10.1016/j.system.2018.03.010">https://doi.org/10.1016/j.system.2018.03.010</a>
- Tan, C., & Lee, S. (2022). Adoption of enterprise risk management (ERM) in small and medium-sized enterprises: Evidence from Malaysia. *Journal of Accounting & Organizational Change*, 18(1), 100–131. <a href="https://doi.org/10.1108/JAOC-11-2020-0181">https://doi.org/10.1108/JAOC-11-2020-0181</a>
- Taylan, S., & Ozkan, I. (2021). The effect of instructors' clinical experience on

- professional socialization from the perspective of nursing students: A phenomenological qualitative study. *Nurse Education Today*, *99*, 1–6. <a href="https://doi.org/10.1016/j.nedt.2021.104797">https://doi.org/10.1016/j.nedt.2021.104797</a>
- Tervo, R., Lang, I., Jung, A., & Mäkela, A. (2021). Predicting power outages caused by extratropical storms. *Natural Hazards and Earth System Sciences*, 21, 607–627. https://doi.org/10.5194/nhess-21-607-2021
- Theofanidis, D., & Fountouki, A. (2018). Limitations and Delimitations in the Research Process. Perioperative Nursing, 7(3), 155–163. http://doi.org/10.5281/zenodo.2552022
- Torabi, S. A., Giahi, R., & Sahebjamnia, N. (2016). An enhanced risk assessment framework for business continuity management systems. *Safety Science*, 89, 201–218. <a href="https://doi.org/10.1016/j.ssci.2016.06.015">https://doi.org/10.1016/j.ssci.2016.06.015</a>
- United Arab Emirates. (2021). *National emergency crisis and disaster management*authority: The national standard for business continuity management system.

  <a href="https://www.ncema.gov.ae/vassets/48c1c32a/Publication-en.pdf.aspx">https://www.ncema.gov.ae/vassets/48c1c32a/Publication-en.pdf.aspx</a>
- United States Department of Energy. (2022, January 20). Business owners: Respond to an energy emergency. <a href="https://www.energy.gov/ceser/emergency-">https://www.energy.gov/ceser/emergency-</a> response/exercises-and-training/business-owners-respond-energy-emergency
- United States Small Business Administration. (2020). *Disaster planning*.

  <a href="https://www.sba.gov/business-guide/manage-your-business/prepare-emergencies">https://www.sba.gov/business-guide/manage-your-business/prepare-emergencies</a>
- United States Small Business Administration. (2022, July 10). *Paycheck Protection Program*.

- https://www.sba.gov/funding-programs/loans/COVID-19-reliefoptions/paycheck-protection-program
- United States Small Business Administration. (2021, September 11). *Prepare for emergencies*.

https://www.sba.gov/business-guide/manage-your-business/prepare-emergencies

United States Small Business Administration. (2018). *United States Small Business*Administration economic profiles for 2018.

https://www.sba.gov/sites/default/files/advocacy/2018-Small-Business-Profiles-US.pdf?fbclid=IwAR17xiC7XcmVBFLu4kxCL6WGizfuIsF9Uf4zY8Xk69nTJcu jdA3iDSOEa\_Q

- Varpio, L., Ajjawi, R., Monrouxe, L. V., O'Brien, B. C., & Rees, C. E. (2017). Shedding the cobra effect: Problematising thematic emergence, triangulation, saturation and member checking. *Medical Education*, *51*(1), 40–50. https://doi.org/10.1111/medu.13124
- Wadams, M., & Park, T. (2018). Qualitative research in correctional settings: Researcher bias, western ideological influences, and social justice. *Journal of Forensic Nursing*, 14(2), 72–79. <a href="https://doi:10.1097/JFN.0000000000000000099">https://doi:10.1097/JFN.0000000000000000099</a>
- Ward, J. K., Comer, U., & Stone, S. (2018). On qualifying qualitative research: Emerging perspectives and the "Deer" (descriptive, exploratory, evolutionary, repeat) paradigm. *Interchange: A Quarterly Review of Education, 49*(1), 133–146. <a href="https://doi.org/10.1007/s10780-018-9313-x">https://doi.org/10.1007/s10780-018-9313-x</a>

- Weller, S. C., Vickers, B., Bernard, H. R., Blackburn, A. M., Borgatti, S., Gravlee, C. C., & Johnson, J. C. (2018). Open-ended interview questions and saturation. *PLOS ONE*, 13(6), Article e019606. <a href="https://doi.org/10.1371/journal.pone.0198606">https://doi.org/10.1371/journal.pone.0198606</a>
- Winton, B., Bean, B., Sargent, M., & Maellaro, R. (2021). Embedding effective communication and formal rewards into corporate culture: A path to organizational agility. *Organization Development Journal*, *39*(2), 21–35. <a href="https://www.proquest.com/docview/2562936136">https://www.proquest.com/docview/2562936136</a>
- Wolthuis, F., Hubers, M. D., Veen, K., & Vries, S. (2021). The concept of organizational routines and its potential for investigating educational initiatives in practice: A systematic review of the literature. *Review of Educational Research*, 1.

  <a href="https://doi.org/10.3102/00346543211051424">https://doi.org/10.3102/00346543211051424</a>
- Wong, W. (2019). Transforming corporate performance: A business continuity management approach. Organizational Dynamics, 48(2), 29–36. https://doi.org/10.1016/j.orgdyn.2018.08.004
- Wu, K. (2022). Market research for small businesses: A real world perspective. *Journal of Business & Finance Librarianship*, 27(1), 17–40.
  <a href="https://doi.org/10.1080/08963568.2021.1982566">https://doi.org/10.1080/08963568.2021.1982566</a>
- Wu, Y. (2020). Equilibrium in natural catastrophe insurance market under disasterresistant technologies, financial innovations and government interventions. *Insurance Mathematics and Economics*, 95, 116–128.
  <a href="https://doi.org/10.1016/j.insmatheco.2020.08.006">https://doi.org/10.1016/j.insmatheco.2020.08.006</a>
- Xiao, Y., & Watson, M. (2019). Guidance on conducting a systematic literature

- review. *Journal of Planning Education and Research*, *39*(1), 93–12. https://doi.org/10.1177/0739456X17723971
- Xing, J., Zeng, Z., & Zio, E. (2019). Dynamic business continuity assessment using condition monitoring data. *International Journal of Disaster Risk Reduction*, 41. <a href="https://doi.org/10.1016/j.ijdrr.2019.101334">https://doi.org/10.1016/j.ijdrr.2019.101334</a>
- Yadav, D. (2021). Criteria for good qualitative research: A comprehensive review. The Asia-Pacific Education Researcher, 1-11. <a href="https://doi.org/10.1007/s40299-021-00619-0">https://doi.org/10.1007/s40299-021-00619-0</a>
- Yeong, M., Ismail, R., Ismail, N. H., & Hamzah, M. I. (2018). Interview protocol refinement: Fine-tuning qualitative research interview questions for multi-racial populations in Malaysia. *Qualitative Report*, 23(11), 2700–2713. <a href="https://doi.org/10.46743/2160-3715/2018.3412">https://doi.org/10.46743/2160-3715/2018.3412</a>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.
- Zandomingo, M., Oliveira, J., Silva, D., Porcino, C., Suto, C., & Oliveira, D. (2020).

  Poverty, hunger, and abandonment: representations of the nursing team about homeless persons. *Revista Brasileira de Enfermagem*, 73.

  <a href="https://doi.org/10.1590/0034-7167-2019-0338">https://doi.org/10.1590/0034-7167-2019-0338</a>
- Zhang, W., Williams, A., Li, G., & Liu, A. (2022). Entrepreneurial responses to uncertainties during the COVID-19 recovery: A longitudinal study of B&Bs in Zhangjiajie, China. *Tourism Management*, 91, 104525.
  <a href="https://doi.org/10.1016/j.tourman.2022.104525">https://doi.org/10.1016/j.tourman.2022.104525</a>

Zhu, X., Jin, Z., Managi, S., & Xun, X. (2021). How meteorological disasters affect the labor market? The moderating effect of government emergency response policy. *Natural Hazards*, 107(3), 2625–2640. <a href="https://doi.org/10.1007/s11069-021-04526-x">https://doi.org/10.1007/s11069-021-04526-x</a>

# **Interview Protocol** What you will say—script What you will do I will introduce myself to the Script: Hi, I am Tarik Billingsley, and I want to first thank you for participating in my research interviewee, explain the study and set study's data collection via this interview. I am a the stage for the interview. doctoral student at Walden University working towards my Doctor of Business Administration. The point of this study is to analyze what strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. There are no right or wrong answers to the eight questions I will be asking you. Your name and company will remain confidential. Also, if it is okay with you, I will be recording the audio of this interview. 1. What reference have you used to develop your Watch for non-verbal queues organization's business continuity Paraphrase as needed management disaster plan? Ask follow-up probing questions to get more in depth 2. What steps do you use in your business continuity management disaster plan? 3. What type(s) of disasters are included in your disaster plan? 4. How, if at all, do you conduct disaster-related event exercises that evaluate your business continuity management disaster plan? 5. How, and how frequently, do you update your business continuity management disaster plans? 6. How are employees made aware and trained to respond in accordance with your business continuity management disaster plan? 7. How have business continuity management disaster plans aided your business operations?

	8. What additional information can you provide on creating business continuity plans?
I will wrap up interview by thanking the participant	Script: Thank you again for your participation in this research study's interview. You provided a lot of valuable information that will aid me in concluding this study. The audio recording of this interview, your signed consent and my notes will be destroyed after 5 years as required by my university.
I will schedule a follow-up member checking interview.	Script: As mentioned previously, this study will involve two interviews – the initial, which is this one, and a follow-up. The follow-up interview is designed to ensure my interpretation of your initial interview answers are correct. Let us plan for 4 weeks from now so I have time to interpret our transcript. What is a good day and time to schedule our follow-up?
I will reintroduce myself to the interviewee, explain the study and set the stage for the follow-up interview.	Script: Thank you again for taking the time out of your schedule for our follow-up interview. As you know, I am Tarik Billingsley. I am a doctoral student at Walden University working towards my Doctor of Business Administration. The point of this study is to analyze what strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity. Once again, there are no right or wrong answers to the eight questions I will be asking you. Your name and company will remain confidential. Also, if it is okay with you, I will be recording the audio again for this follow-up interview.
I will share a copy of the succinct synthesis for each individual question.	Script: I have provided you with a succinct synthesis for each question asked. We will go over each, and please let me know if I interpreted any of your answers incorrectly or need to add
I will bring in probing questions related to other information that you may have found. I will ensure the probing questions pertain to what strategies some U.S. small business owners use to create practical disaster plans to ensure business continuity and will adhere to IRB approval.	any more information.  1. What reference have you used to develop your organization's business continuity management disaster plan?

Did I miss anything? Or, what would you like to add?

- 3. What type(s) of disasters are included in your disaster plan?
- 4. How, if at all, do you conduct disaster-related event exercises that evaluate your business continuity management disaster plan?
- 5. How, and how frequently, do you update your business continuity management disaster plans?
- 6. How are employees made aware and trained to respond in accordance with your business continuity management disaster plan?
- 7. How have business continuity management disaster plans aided your business operations?
- 8. What additional information can you provide on creating business continuity plans?