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Strategies for Using Crowdsourcing as a Product Development Tool to Increase Innovation

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This is to certify that the doctoral study by

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Abstract

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MBA, Tarleton State University, 2010

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Doctoral Study Submitted in Partial Fulfillment

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Abstract

Failure to increase innovation and revenue can harm business operations. Small business owners must explore strategies to increase innovation and revenue to remain competitive. Grounded in the diffusion of innovation theory, the purpose of this qualitative multiple case study was to explore strategies small business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. The participants were five small business leaders in northern Utah who engaged in collaboration initiatives to increase innovation and revenue. Data were collected from semistructured face-to-face interviews, member checking, field notes, a review of company documents, and artifacts. Data were analyzed using Yin's five-step approach. Three main themes emerged: business strategy, collaboration, and marketing. A key recommendation is that small business owners incorporate consumer input throughout the innovation. The implications for positive social change include the potential to provide insights and strategies for small business owners to become more competitive when innovating new products and services. Business leaders obtaining growth and financial success could provide the community with more employment opportunities, resulting in more prosperous communities.

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Dedication

The study is dedicated to my mom, Meryta Gutierrez, and my dad, Alejandro

Castillo, for giving me life, for teaching me how to navigate it, for being my first life

mentors, and for instilling in me that sense of drive and determination that is nurturing

my motivation to always strive for more. To my daughter, Samara Carriaga, for being my

inspiration and motivation to overcome daily obstacles that may stand in our way of

achieving what seems unattainable. Samara, you are the reason why I make every effort

to make this world a little better every day. To my life partner, Cody Berry, your

unconditional love and support has been essential to completing this program. To all

close family and friends, who have always encouraged me never to give up and who have

been there for the tears, laughs, successes, and failures. To those leaders, military and

civilian, I have encountered throughout this journey we call life, who have taught me that

empathy is an essential element of leadership and that discipline, accountability, courage,

and integrity are the foundation of personal and professional growth. Goals are meant to

be achieved, but without ambition, our goals would not be as invigorating. Life is worth

living and fighting for each day.

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Section 1: Foundation of the Study

In this study, I explored strategies small business leaders used to incorporate crowdsourcing as a product development tool to increase innovation. In collaboration platforms like crowdsourcing, users possess the specialized knowledge of needs and trust. Small business leaders use Crowdsourcing to shape new products in such a way that it provides real value to consumers (Larson-Garcia, 2017).

Background of the Problem

Some small business owners understand that a combination of internal and external human capital is imperative to achieve efficient innovation through collaborative work (Peisl et al., 2016). Large groups of people use crowdsourcing to collaborate through virtual worlds in platforms where diverse collective intelligence merges (Yang et al., 2021). Small business leaders use crowdsourcing to find new solutions through active consumer participation (Kavaliova et al., 2016). Companies of all sizes can incorporate external knowledge to increase innovation and revenue through collaboration initiatives (Abdul, 2021).

Through crowdsourcing, leaders can significantly improve company products or services by looking deeper into consumers' contributions (Schwienbacher & Larralde, 2010). As a relatively new concept, crowdsourcing has quickly become a high-demand strategy (Wu et al., 2017). Its collective creative power comes from companies' need to tailor to consumers' unmet needs (Malhotra et al., 2020). Therefore, research opportunities exist to explore strategies that business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue.

Problem Statement

Small business leaders integrate crowdsourcing into operations to gain external expertise, lower organizational costs, and increase revenue (Kietzmann, 2017). In 2017, 84% of the world's most prestigious companies, such as Procter & Gamble, Dell, Google, Lego, and General Electric, integrated crowdsourcing into business operations to increase innovation and revenue (Blohm et al., 2018). The general business problem was that some small business leaders are not taking advantage of crowdsourcing's financial benefits. The specific business problem was that some small business leaders lack strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue.

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies small business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. The target population consisted of five northern Utah small business leaders with successful experience using strategies to integrate crowdsourcing into business operations to increase innovation and revenue. The implications for positive social change include study findings that could help business leaders integrate crowdsourcing into business operations to increase innovation and revenue. Candi et al. (2019) stated that innovative business practices help address social entrepreneurship, which in turn help address community needs. Business leaders obtaining financial success could provide the community with more employment opportunities, resulting in more prosperous communities.

Nature of the Study

The qualitative research method was appropriate for the study to explore strategies business leaders use to integrate crowdsourcing into business operations. Qualitative researchers explore a phenomenon in a real-life setting to understand how participants address a problem (McCusker & Gunaydin, 2015). Quantitative researchers test hypotheses and study dependent and independent variables to determine whether a relationship exists (Bloomfield & Fisher, 2019). The mixed-methods researcher combines qualitative and quantitative research methods to apply inductive and deductive reasoning (Mertens et al., 2016; Yin, 2018). I did not test hypotheses; therefore, I did not use the quantitative or mixed-methods approach.

The multiple case study design was the only appropriate option for the research question. Saunders et al. (2015) and Yin (2018) used case studies to explore a real-life phenomenon using participants' environmental context and triangulation of data to validate findings. Researchers use the narrative design to focus on participants' life stories and experiences (Yin, 2018). I did not use the narrative design because I did not focus on participants' life stories and experiences. Phenomenological researchers focus on participants' lived experiences to understand meanings and gain insights (Saunders et al., 2015). The phenomenological design was not suitable for the current study because I did not focus on participants' lived experiences to understand meanings and gain insights. Researchers use the ethnographic design to explore groups' cultural and social beliefs (Fields & Kafai, 2009). I did not select the ethnographic design because I did not explore participants' cultural and social beliefs.

Research Question

What strategies do business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

Interview Questions

The interview questions used to answer the central research question were as follows:

1. What strategies did you use to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

2. How did your employees respond to strategies you used to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

3. What, if any, modifications did you apply to any strategy to improve its effectiveness in successfully integrating crowdsourcing into business operations to increase innovation and revenue?

4. How were crowdsourcing strategies integrated into business operations to increase innovation and revenue communicated among the organizational ranks and stakeholders?

5. What were the key barriers to implementing strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

6. How did you overcome the key barriers to implementing strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

7. What else would you like to add about strategies used to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

Conceptual Framework

I selected the diffusion of innovation (DOI) theory for this study to explore strategies business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. Rogers (2003) developed the DOI theory and claimed that innovation has five characteristics: (a) relative advantage, (b) compatibility, (c) complexity, (d) trialability, and (e) observability. Rogers stated that customers' perceptions of these five characteristics of innovations affect customers' adoption rates of new products and the marketing channels used, increasing business organizations' profit. If a product is perceived as advantageous by early adopting consumers, this perception increases its acquisition rate based on positive experiences consumers share about the innovation (Backer & Rogers, 1998).

Researchers use the DOI theory as an exploratory framework to mitigate uncertainty while addressing users' concerns when deciding to acquire an innovation (Wang et al., 2021). Hsiao (2017) stated that researchers have suggested that relative advantage, complexity, and compatibility are the most critical innovation characteristics users focus on when referring to crowdsourcing. The DOI theory aligned with the current

study's purpose because I explored strategies business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue.

Operational Definitions

Business model: Business model is the essence of how a company will be delivering value to its customers profitably and sustainably (Pavie et al., 2013).

Crowdfunding: Crowdfunding is the act of soliciting money through the internet (Cohen, 2017).

Crowdsourcing: Crowdsourcing is a term coined by Howe in the early 2000s from the fusion of the words *crowd* and *sourcing* to describe the outsourcing of knowledge when consumers have a direct impact on innovation processes and new product development (Kavaliova et al., 2016).

New product development: New product development is a process companies use to develop concepts that create new innovative products to bring to the market to find a solution to a valid consumer problem or complaint (Poetz & Schreier, 2012).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are accepted statements not known to be factual (Cohen, 2017). I assumed that small business owners would cooperate willfully to provide data that were accurate and truthful. I also assumed the use of the concept of crowdsourcing was universal across different cultures and organizations. The qualitative method was expected to be the appropriate method to explore this study's phenomenon. I expected that the data collected from conducting semistructured interviews would enable me

answer the research question. Finally, small business owners were expected to agree to participate in the study and provide needed organizational documentation.

Limitations

Limitations are potential weaknesses that fall outside of the researcher's control (Cohen, 2017). A limitation of the current study was the meeting restrictions in place due to the COVID-19 pandemic. Participants who met the study's selection requirements did not meet in a specific location to contribute to this study due to COVID-19 limitations. Another limitation related to data collection was that participants would not be willing to share information about the best practices they use. As a result, the study's transferability would not apply to all small businesses in Utah.

Delimitations

Delimitations refer to the study's boundaries and scope under the researcher's control (Cohen, 2017). I conducted in-depth, face-to-face, semistructured interviews with a small number of participants in northern Utah. Only participants who met the eligibility criteria for the study participated in the interviews. The participants were small business owners who had applied strategies to successfully integrate crowdsourcing into business operations and increase innovation and revenue. Another delimitation was the time constraint to interview for this research.

Significance of the Study

The significance of the study includes potential contributions to business practice and the implications for social change. Business owners typically lack strategies to successfully integrate crowdsourcing into their business operations to increase innovation

and revenue (Kavaliova et al., 2016). The current study's results may help business owners identify strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue. Regarding the social change aspect, when business leaders achieve financial success, they can provide the community with more employment opportunities and address social needs and lasting social change (Muskat & Sylvester, 2012).

Contribution to Business Practice

Business leaders use crowdsourcing to ensure their innovations meet consumer demands by reaching out to large pools of participants possessing a diverse amount of knowledge and expertise (Kavaliova et al., 2016). Integrating crowdsourcing into company business models can enable business leaders to interact with the crowds dynamically, typically geographically separated but with common goals (Malhotra et al., 2017). The benefits can increase company performance by making business organizations more competitive (Malhotra et al., 2017). Business leaders able to successfully integrate crowdsourcing into their business practices become more competitive than those who opt out by finding solutions to their everyday problems and developing innovative products and services through crowd involvement (Malhotra et al., 2017).

Implications for Social Change

Implications for positive social change in the current study include the opportunity to help business owners become more competitive when it comes to innovating and developing new products and services, thereby allowing for business growth and job creation (see Malhotra et al., 2017). Business leaders use crowdsourcing

as a collaborative concept to overcome resource boundaries, access value generated through a crowd of applicants, and enable their communities to become prosperous (Xu et al., 2015). When business owners obtain financial success, they can increase employment opportunities within their communities and increase tax revenues for local governments to provide services to the local community. Business owners reaching financial success could also make donations to community-based organizations to benefit needy citizens.

A Review of the Professional and Academic Literature

Crowdsourcing began in the early 2000s to help different-size businesses and entrepreneurs. Howe (2006) evaluated how crowdsourcing has grown in popularity to become mainstream. Within the available literature in crowdsourcing, researchers identified the DOI theory and innovation process as means of helping businesses become more aware of their crowdsourcing capacity. Section 1 includes a review of the innovation theories that have served as a foundation for crowdsourcing's creation and how these influenced crowdsourcing's evolution.

The literature review's primary resources included peer-reviewed journal articles, seminal works, books, dissertations, government sites, professional business websites, and other professional business articles. Articles were identified through the following databases in the Walden University online library: Business Source Complete, EBSCO, ABI/INFORM Complete, Emerald Management, Sage Premier, Academic Search Complete, Scientific Direct, AOSIS, Google Scholar, and ProQuest Central. The following keywords were used: *crowdsourcing*, *product development*, *innovation*, *open*

innovation, *diffusion of innovations theory*, *business model*, *new product development*, *disruptive innovation*, and *small business strategies*.

The current study includes an extensive review of the literature using the DOI theory as a conceptual framework. The literature review focuses on the widely diverse application of DOI theory. I documented the literature review using EndNote software, ensuring that most sources were peer-reviewed studies published within 5 years of the expected publication date of the current study. I used Microsoft Excel to create a file of all sources used in the study.

Table 1 summarizes 150 total articles, of which 107 (71%) were scholarly peer-reviewed articles and books. A total of 105 scholarly peer-reviewed articles (70%) were published less than 5 years from expected publication date of the current study. Other literature sources represented 28% of the total sources.

Table 1

Summary of Sources

Reference type	Total	< 5 years	Percentage	> 5 years	Percentage
Scholarly and peer-reviewed journals and articles	131	105	70%	26	17%
Seminal works	15		0%	15	10%
Books	4	2	1%	2	1%
Total	150	107	71%	43	28%

Literature Review Organization

The literature review section has several subsections. The current section begins with an introduction, which includes information about the strategy for searching the literature, the frequencies and percentages of peer-reviewed articles, and publication

dates. In the next section, I focus on applying the literature to the research question and include a brief description of the purpose of the study. The themes I discuss in this literature review are innovation, small businesses, and crowdsourcing. The themes are the subsections that my literature review contains, helping expand the research to address the research question. Throughout the literature review, I contrast different views and relationships between previous research and findings with this study.

The first theme, innovation, includes a critical analysis and synthesis of the conceptual framework. The DOI theory selected for the study included supporting data and contrasting theories from relevant literature on crowdsourcing to increase innovation and revenue. Some of the supporting and contrasting theories that paved the way for crowdsourcing to develop were (a) Schumpeter's theory of economic development, (b) disruptive innovation theory, and (c) open innovation theory. I also provide an overview of the critical characteristics of innovation concerning crowdsourcing.

The second theme, small businesses, begins with the Small Business Administration's definition of a small business. The second theme also includes a discussion of small businesses' contributions to the U.S. economy. In this section, I provide examples of early entrepreneurs who failed before achieving success. I also include a small business perspective regarding the competitive advantage and the relationship to job creation. I discuss small businesses' survival rates, overcoming barriers of adoption through the DOI theory, sustainability barriers, and challenges within the public system.

The third and final theme is crowdsourcing. The theme begins with an overview of crowdsourcing. I provide examples of successful crowdsourcing platforms used to increase innovation and revenue. I discuss the benefits of using crowdsourcing for value creation among small businesses and how small businesses apply the DOI theory to reduce uncertainty within their innovations. I describe the use of word of mouth (WOM) as an element of collaboration. Finally, I provide an overview of how crowdsourcing branched into crowdfunding.

Application to the Applied Business Problem

The purpose of this qualitative multiple case study was to explore the strategies business leaders use to successfully integrate crowdsourcing into business operations and increase innovation and revenue among small businesses. Small businesses represent 99.9% of the U.S. economy, and they play an essential role in job creation (U.S. Small Business Administration, 2019). Developing an understanding of such strategies required a qualitative exploratory approach. I attempted to provide insight regarding the use of crowdsourcing to increase innovation and revenue.

The study findings may be used to develop strategies for integrating crowdsourcing into small business operations. Suitable techniques might equip leaders with the skills to improve their business practices by implementing crowdsourcing into their business operations. This study revealed strategies that may increase productivity and organizational effectiveness. Innovative business leaders allow social entrepreneurship to address social needs (Candi et al., 2018). The potential for social change rests in developing strategies to improve crowdsourcing's integration into

business operations. Business leaders obtaining financial success could provide the community with more employment opportunities, resulting in more prosperous communities.

Innovation

Creating and improving new products and services is essential to help achieve competitiveness and increase market share in the business world. Innovation comes from the Latin root *innovare*, which means to renew and is further translating into the never-ending pursuit of novelty (Crosscombe, 2018). Innovation is crucial for a company's survival, and it is a highly valuable competency that helps businesses adapt to a rapidly evolving business environment (Cascon-Pereira et al., 2019). Without innovation, companies would not have the ability to gain consumers' attention because innovation is vital to any organization (Cascon-Pereira et al., 2019).

Technological developments affect the way in which businesses are managed, including where and how companies decide to invest. As the marketplace continually changes, how individuals interact with each other and how businesses interact with their customers is also affected (Youngs & Graf, 2017). To maintain a competitive advantage, businesses must track and interpret patterns of engagement and apply them to their everyday processes when innovating (Cascon-Pereira et al., 2019; Youngs & Graf, 2017). When businesses fail to adapt their business models to encourage innovation, they also fail to meet consumer and market demands.

Any business transaction leads to establishing either a short- or long-term relationship between the parties involved. For businesses, innovation is a tool that creates

brand loyalty, whereby customers eventually become advocates for the brand

(Crosscombe, 2018). The objective is to develop a long-term relationship with the

customer so they come back for more. Businesses also must identify the best way to

spread their innovations through members of a social system (Rogers, 1962). Once a

social network accepts a product or service, increased market share is the resulting

outcome.

Diffusion of Innovations Theory

The DOI theory has its roots in innovation as a concept that has evolved over the

years. In 1903, Tarde (as cited in Beausoleil, 2018) became the first researcher to define

the innovation method as a repeatable social imitation. Recreating or improving a product

or service is the foundation of the innovation concept (Beausoleil, 2018). Schumpeter and

Nichol (1934) noted that innovation processes focus on measurable outcomes and

economic access activities. In other words, innovation drives productivity, while

productivity drives economic growth.

Measuring innovation has become a complicated activity due to the many aspects

involved in the innovation process. Moore and Benbasat (1991) adopted a framework

developed by Rogers, who included characteristics, elements, and other constructs

required to successfully evaluate the adoption and implementation of innovation. Without

adapting the business model and strategy to emphasize innovation creation and

development, it is almost impossible to make innovation the foundation of any business.

Consumers must identify the product's or service's benefits within a social system

for any innovation to succeed. Fonseca (2002) described the innovation process as

innovation experiences based on social relations. Arocena and Sutz (2021) observed that

economic growth and environmental protection affect social innovation. However,

innovations will still make their way through a social network if they meet consumers'

needs, whether social system members are geographically connected. Godin (2006)

developed one of the first theoretical constructs to comprehend science, technology, and

its relation to the economy and later used it as a linear innovation model. As technology

and science evolve, innovations increase, leading to added economic and social

development.

Rogers (2003) said that innovation adoption occurs when an innovation counts on

the correct elements and conditions within a social structure that helps its diffusion.

Rogers claimed that any innovation has five characteristics: (a) relative advantage, (b)

compatibility, (c) complexity, (d) trialability, and (e) observability. The chances of idea

adoption increase when businesses use Roger's innovation characteristics to identify the

elements that affect adopting such innovations within a network. Rogers further asserted

that customers' perceptions of the five innovation characteristics affect consumer

adoption rates of new products and their marketing channels. A social system provides

innovations that always run the risk of adoption depending on the local culture and social

structure.

Target Market Importance

Identifying the target market is also essential to help businesses develop effective

marketing communication strategies to sell a product. Sahin (2006) indicated that

Rogers's DOI theory classified adopters into five categories: (a) innovators, (b) early

adopters, (c) early majority, (d) late majority, and (e) laggards. Because individuals in a social system share similar needs and want, companies must direct their resources to identify and satisfy those needs. Backer and Rogers (1998) suggested that many companies adopt the DOI theory early to increase their acquisition rate based on consumers' positive experiences about the innovation. Once an innovation has entered a social system successfully, sales growth and brand loyalty become the end goal.

Several aspects of innovation affect adoption. Besides identifying an innovation's characteristics and adopter categories, Rogers (1962) also established the four elements of the DOI theory: (a) innovation, (b) communication channels, (c) time, and (d) the social system. The four elements are always present regarding the diffusion of innovation within a marketplace. Rogers also defined social networks as interconnected entities and characterized the variable of time as an essential strength of the diffusion of an innovation. While end users apply feedback as a communication method to influence those within their social network, the advantages of innovation can spread quickly due to instant communication and the internet.

Communication Channels Importance

Innovating to the standard spectator means exploring areas outside of people's comfort zone. Rogers (1962) defined innovation as an idea perceived as new to consumers and described communication channels as systems to transfer information within a social system. Because people belong to social networks in the virtual world or locally within their communities, they use WOM to communicate with others. Kaminski (2020) and Sahin (2006) agreed with Rogers that communication channels are vital

influencers to spread information about the innovation. Without end user's feedback passing through social networks, companies would not tell whether an innovation meets consumers' needs or wants.

Decision-Making Process Stages

Equally vital as communication channels are an innovation's characteristics, which, added to adopter categories help people understand what drives the decision-making process. Sahin (2006) noted that Rogers's innovation decision-making process included five steps: (a) knowledge, (b) persuasion, (c) decision, (d) implementation, and (e) confirmation. Blumberg (2016) agreed with Sahin that the DOI theory's stages of adoption begin with acknowledging the need for change, deciding to adopt or reject the innovation, testing the innovation, and moving forward with further implementation. For end users to accept or reject an innovation, they need to know what it is about and how it affects their organization. The benefits must outweigh the disadvantages by standing out as the best available option.

Regardless of whether innovation offers many advantages, it is still crucial to know how to market the innovation to avoid dismissal. Rogers (1962) indicated that innovations are always challenging to adopt, regardless of the many benefits the innovation may carry. Blumberg (2016) stated that Rogers expanded the DOI theory and added the five intrinsic qualities that influence an individual's decision to adopt or reject an innovation. Rogers's purpose was to help businesses better predict an innovation's adoption at an early stage of the process. Because a social network's reaction to an

innovation is the primary influencer within any marketplace, social networks can affect the overall consumer experience and impact decision making.

The end users' perception of innovation is a crucial factor that can help predict adoption. Burgess et al. (2017) suggested that the DOI theory's approach help identify influential factors that affect adoption decisions and challenges that may prevent any innovation's adoption. However, Rogers (1962) indicated that those challenges are always present. The DOI theory or any other theory to predict customer satisfaction and brand loyalty can only take people so far in predicting innovation adoption. Rogers also found that it is not always easy to fully understand human intuition and its drivers and how this affects innovation adoption or rejection.

Benefits of Rogers's DOI Theory

The DOI theory presents many benefits. Johnson et al. (2018) noted that the DOI theory provides a framework representative of different types of users worldwide, regardless of their economic status. The DOI theory focuses on user categories that incorporate personality traits to help predict adoption. The drive of innovation adoption falls between a high tolerance for ambiguity or being cautious and waiting for others to adopt the innovation first. Mohammadi et al. (2018) noted that another benefit the DOI theory presents is that to help implement any innovation, it must focus on innovation attributes. Regardless of adopter category breakdown, businesses launching an innovation must focus consumers' attention on the innovation's benefits to create a need.

Challenges Rogers's DOI Theory Presents

Among the challenges the DOI theory depicts, Sahin (2006) noted that when using the DOI theory is essential not to fail to recognize the difficulties involved with getting a new idea adopted. Sometimes, even though innovation possesses excellent benefits, it may still fail to meet consumers' expectations. Rogers (1962) argued that innovations that offer a higher degree of the five characteristics explained in the DOI theory can be adopted faster. In other words, it is on an innovation's perceived attributes where the success of adoption rests; therefore, the persuasion stage of the decision-making process is an essential step of the adoption process.

Adapting to a Collaborative Culture With Technology

Technological developments such as the internet have paved the way for companies to rethink how they do business. Big data management has become an essential element from which companies can benefit greatly. Thanks to the creation of the internet, the way the digital world interacts with the public has led data gathering and data sharing to become pivotal to our society (Pop et al., 2019). Estermann (2018) used the DOI theory and conducted a research study about society's digitalization and how this technological phenomenon has affected heritage institutions. Estermann improved how data was handled by simplifying communication, collaboration, and access to a broader audience. Pasquier et al. (2019) supported Estermann's research as helping with the incremental adoption of innovative practices toward a collaborative culture. Improving an innovation's availability and accessibility to a broader audience are essential elements that directly affect adoption.

Technological developments also bring a great deal of distrust among consumers, delaying an innovation's adoption process. Johnson et al. (2018) applied the DOI theory to investigate factors affecting the adoption of mobile payment (m-payment) services. Johnson et al. identified some entry barriers, such as well-established and entrenched alternative payment mechanisms, security, privacy concerns, the complex infrastructure of m-payments, and lack of trust. Gouws and Rheede van Oudtshoorn (2011) and Rogers (1962) agreed that getting a new idea adopted even with apparent advantages is always tricky, especially in developing environments. Johnson et al. recognized that consumers' adoption of m-payments was slow despite the convenience and added security of the services worldwide. Thus, even though the advantages of innovation may outweigh the disadvantages, external forces can always negatively influence the diffusion of an innovation.

Innovation Diffusion Barriers of Entry

Social systems themselves are barriers to entry. Gouws and Rheede van Oudtshoorn (2011) established the DOI theory identified innovation as a social change throughout a social network. Gouws and Rheede van Oudtshoorn noted that acceptance of social systems is a barrier to overcoming any innovation. A social system's local culture has proven vital when developing a market innovation strategy. Scott and McGuire (2017) indicated that an innovation waiting to be diffused must be perceived as new and appealing by the social system for its rapid spread to take place. Shaping the right marketing strategy and tailoring it to a specific social network and local culture will aid with the spread of an innovation.

In the study, consumer behavior has led to successful results that help predict the acceptance of innovation and brand acquisition, and brand loyalty. Scott and McGuire (2017) used the DOI theory's framework to build a structural analysis of constructs to investigate consumer behavior. While Rogers (1962) analyzed drivers of the decision-making process, Scott and McGuire studied how consumer behavior affects the decision to adopt an innovation or technological advancement of any type. Predicting the effectiveness of an innovation's capabilities within a social network relies on consumer behavior and other external factors coming from the local culture that may impact the end user's decision to adopt or dismiss an innovation.

External Factors Favorably Affecting Innovation Diffusion

Under certain circumstances, external factors within a social system can speed up adopting an innovation. Suwamaru (2016) modified Rogers's (1962) DOI theory when he studied the rapid adoption of mobile phones in Papua New Guinea (PNG). Suwamaru determined that cultural and political factors affect the primary drivers of accepting or rejecting an innovation rapidly. In PNG, the lack of a free market and predatory tariffs increased consumers' need to adopt an innovation. Rogers indicated that for the diffusion of innovations to transpire, diverse communication channels are essential to promote the innovation's implementation, occurring over time. Suwamaru discovered that under certain conditions and limited communication channels, immediate rapid adoption of innovation could occur given that consumer's need is greater than the limitations imposed by external factors. The case showed that limitations could also serve as a platform to help speed up innovation adoption.

Diffusion of Incremental Innovation

Incremental innovation is the process of creating an improved version of an already existing novelty. Krstic et al. (2016) suggested that the diffusion of innovations can also be a process of imitating an incredibly innovative product or service. Krstic et al. applied Rogers's DOI theory to study the diffusion of a meme and how this meme became an evolutional cultural element through the essential elements of diffusion. Memes became an innovative cultural element because of the emotional foundation of its adoption, generating brand loyalty (see Christensen, 1997), and accepting and adopting innovations within a social network requires end-users to make a personal connection with innovations.

Flexible Application of the DOI Theory Across Industries

The DOI theory has also been applied in computer science to help improve data processing. Zhang et al. (2019) used the DOI theory to create an algorithm to provide high-accuracy suggestions of novelties in a recommendation system. Zhang et al. chose Rogers's (2003) DOI theory because of its focus on users' adoption and behavior towards new objects. The DOI theory application helped Zhang et al. achieve a higher list of novelty recommendations than the traditional algorithm that only focused on consumer preferences. Creating an algorithm to help filter results based on consumers' adoption behavior helped predict an innovation's acceptance rate and pace.

The DOI theory provided a flexible enough framework that made it applicable across different industries. Murphy (2004) suggested that the diffusion of innovations theory offered a base to study family planning in developing countries. Murphy (2004)

applied the DOI theory as a framework that helps to identify the barriers of specific

systems. Murphy et al. (2017) agreed with Murphy regarding how the DOI theory

improved the systematic approach of evaluating family planning in developing countries.

Understanding what motivates end-users to adopt an innovation is the focus of the DOI

theory.

Organizations have implemented the DOI theory to help improve the evaluations

of their systems across the country. Tanye (2016) used the DOI theory to identify how

perceived security affects eLearning diffusion among university students. Tanye

determined that students focused a lot on the privacy of their information when opting for

eLearning. Johnson et al. (2003) and Tanye concluded that an innovation's perceived

benefits do not guarantee rapid adoption. Even when an innovation's benefits outweigh

its shortcomings, innovation can fail during the adoption phase.

The DOI theory used in occupational practice research has been a factor

throughout business practices. Mohammadi et al. (2018) applied Rogers's (2003) DOI

theory to assess the elements that expand the process of applying research findings on

scientific decision-making EBP. Mohammadi et al. developed a model based on the DOI

theory's concepts to increase the EBP adoption process by identifying nurses' attitudes as

major influencers for adoption. Human behaviors affect possible adopters' perceptions,

which are significant contributors to adopting or dismissing innovation regardless of the

multiple benefits.

Sasaki (2018) utilized Rogers's (2003) DOI theory to analyze the effectiveness of

the English as a Foreign Language (EFL) program in Japan and its relation to university-

level studies' acceptance rate, as well as preparation resource availability. The DOI

theory applies to study the impact school curriculums have on university admissions.

Sasaki concluded that the high expectations of the university entrance testing affected

Japanese EFL education. However, learning institutions' financial strength also affected

the programs' quality needed to meet testing demands. The timing of innovation adoption

is affected by the organization's ability to provide adequate resources and strategies to

diminish the uncertainty gap and overall adoption process.

Effect of Clear Communication on Innovation Diffusion

A profound understanding of an innovation's application is imperative for an

innovation to be accepted and adopted by a social network. Warner et al. (2019) applied

the DOI theory to examine the relationship between an innovation's characteristics

perception and its effect on proper fertilizer management. Warner et al. also applied

Rogers (1962) DOI theory to find an efficient way to reach audiences and help them

understand the importance of knowing how to apply fertilizers while maintaining water

quality. Focusing on how information is conveyed to the consumer when launching an

innovation is essential, and it must be included in the business strategy when entering the

marketplace.

The healthcare industry benefits from the application of the DOI theory to

improve processes. Telef (2016) applied Rogers's (2003) DOI theory to implement a

bronchial thermoplastic program in a union hospital in South California. Telef used

Rogers's five adopters' categories as a framework to help define how to successfully

disseminate the program information among nurses and other hospital staff. Telef and

Chesbrough (2006) agreed that resourcing to a collaborative approach for learning purposes was more productive and effective than individual learning. Tailoring an innovation's program delivery to the audience expected to become end-users must be a part of any business innovation strategy.

The DOI theory was used for research in the pharmaceutical industry. Rizan et al. (2016) identified poor handling in the process of antibiotic prescriptions among general surgeons. Rogers (1962) established that diffusion came after the innovation overcame early adoption barriers once an innovation reached critical mass. Rizan et al. noted that the DOI theory helped visualize the antibiotic prompt sheet innovation failed because of a lack of early adoption support. Early adoption of an innovation is crucial to mass adoption because early adopters are responsible for minimizing reserves about innovation within the social network.

Hadorn et al. (2016) used Rogers's (2003) DOI theory framework to analyze an innovation's attributes and how these influence the level and pace of adoption. Hospital emergency services applied the DOI theory to improve patient management based on the pain level of the services. Hadorn et al. intended to implement a clinical innovation in pain management protocol that involved task-shifting in emergency departments. Hadorn et al. referenced that the university hospital in Switzerland improved pain management processes significantly in emergency departments. Hadorn et al. analyzed the effects of patients' perceptions of the quality of care they received while in the emergency room.

Comparing the different characteristics of the four adopters' groups has helped understand an innovation's success or failure. Li and Huang (2020) used Rogers's (2003)

DOI theory as a base to evaluate distinctions between the non-adopters and the early

adopters of game-based learning (GBL). Li and Huang identified that adopters' lifestyles

and perceived attributes were very influential, while demographics were moderate. Li and

Huang applied the DOI theory constructs to conclude that non-adopters were more likely

to be older males with no video game experience but better educated. Analyzing the

different types of adapters can separate and help understand the influential factors behind

GBL's non-adoption as a teaching tool.

Perception as a Critical Element of Innovation Adoption

The use of technology has become essential to our everyday lives. The acceptance

is based on the easiness of its application and usage. Yilmaz and Olgan (2020) aimed at

Rogers's (2003) DOI theory to develop a scale of perceived attributes of computer use

(PACU) to measure the pre-service early childhood tendency towards computer

application. Yilmaz and Olgan applied the DOI theory as a framework to determine the

PACU scale produced for this study was valid and reliable. Yilmaz and Olgan concluded

that this perception influences computer adoption when teachers maintain positive views

of the utilization of computers. Consumer perception of innovation is vital for its

acceptance, but the ease of use and understanding of its application are also influencers of

adoption.

The higher education industry also had to adapt to the way instruction and

knowledge are delivered to students. Reynard (2017) pointed to Rogers's (2003) DOI

theory to study faculty and students' attitudes as the reason for opting for e-books in

academic libraries. Raynard (2017) intended to provide academic libraries with insights

on who is using academic e-books, why they are used, and how to increase academic e-books utilization. Urbizagastegui-Alvarado (2019) chose Rogers's DOI theory as a framework to explore Mexican bibliometrics produced and published by Mexican researchers. Raynard and Urbizagastegui-Alvarado concluded that Rogers's DOI theory helped identify adopters' categorization with determining attitudes toward innovation adoption. Even when innovations present many benefits, understanding end-user adoption motivators and attitudes can increase innovation acceptance.

The DOI theory's concepts have been applied to evaluate what causes influence end-users acceptance within the mobile banking industry. Alam et al. (2018) integrated Rogers's (2003) DOI theory in their research study to evaluate factors that motivate customers in Malaysia to adopt mobile banking. Alam et al. considered eight factors: (a) perceived ease of use, (b) relative advantage, (c) compatibility, (d) trialability, (e) attitude, (f) perceived behavioral control, (g) social norms, and (h) perceived risks. Alam et al. concluded that all factors significantly influenced customers' decisions and intentions regarding mobile banking usage. Even though some innovation's characteristics may become stronger predictors of adoption than others, identifying all characteristics is significant when evaluating an innovation adoption.

Ease of Use Regarding Innovation Diffusion

Innovation adoption has a social element linked to the ease of use of an innovation. However, it can become a barrier to adoption if its application and utilization are not evident to the social network. Stefaniak and Carey (2019) applied Rogers's (2003) DOI theory to explore the implementation of badge programs in three higher education

institutions. Stefaniak and Carey identified factors linked with the adoption process that helped them pinpoint implementation barriers. Stefaniak and Carey used Rogers's DOI theory as a tool to detect a lack of understanding of the innovation's usability as one of the main barriers negatively impacting adoption. The ease of use of an innovation is crucial for end-user's innovation adoption, but a clear understanding of its application within a social network is vital for successful implementation.

Managing an innovation's perception is as important as managing the quality of the information spread throughout a social network. Liu et al. (2017) grounded their research study on the DOI theory to examine public perception and motivation to participate in risk management innovations regarding nuclear/radiological events. Liu et al. applied Rogers's (2003) DOI theory to identify the two most significant barriers that affect public participation in risk management programs: (a) lack of good communication about the innovation before the innovation launched and (b) lack of feedback evidence programs. Establishing open communication channels between innovators and end-users minimizes the risk of failure due to misunderstandings or misinterpretations of the benefits and possible risks of a new product or service.

Finding ways to simplify learning within the healthcare industry has become crucial to health care workers due to the amount of information nurses and doctors must process daily. Pashaeypoor et al. (2016) applied Rogers (1962) DOI theory to explore nursing students' experiences of evidence-based practice (EBP) education in Iran. Pashaeypoor et al. focused on the DOI theory to help identify predictors of EBP to improve nursing students' overall education through EBP adoption. Pashaeypoor et al.

concluded that the DOI theory's flexible framework helps teach any subject, making knowledge delivery a more manageable process overall. Improving delivery methods for education purposes across industries, especially within the medical field, benefits students and professionals and improves the quality of processes.

Application of DOI Theory to Sustainable Business Practices

The DOI theory has also been applied to the study of business sustainability and social responsibility. Avidar (2017) utilized Rogers's (2003) DOI theory to study self-sustainable social businesses and tackle social goals. Avidar identified engagement as a significant influencer of an innovation's successful diffusion. Avidar's research concluded that the DOI theory could help enhance public relations in theory and practice. Business sustainability also entails responsible business practices in and outside of the organization. Mariani (2021) focused on sustainability through businesses' ability to adapt. Mariani observed that big data analytics could help deliver value by enabling firms to innovate more effectively and transform their business models to adapt to rapidly changing market conditions.

A business' ability to adapt to new technological developments, implement innovative business practices, and achieve sustainability is rooted in its business model and strategy. Sun et al. (2020) applied Rogers's DOI theory to develop a model integrating factors in technological, organizational, and environmental contexts that influence an organization's decision to implement big data strategies. Sun et al. determined that the adoption of technology that involves big data analysis is heavily affected by an innovation's and organization's characteristics. At the same time, Mariani

(2021) noted that big data analytics create business insights from online reviews of products and services that benefit business preservation and growth.

Other Supporting and Contrasting Theories

Over the years, researchers have developed theories to help entrepreneurs manage their businesses. No matter the size of the company, understanding business and market dynamics and how these are linked to customer acceptance of a product or service may be the key to achieving a competitive advantage. The following theories provide an insight into how crowdsourcing developed and why it is becoming an ideal option for small business owners to increase innovation and revenue.

Schumpeter's Theory of Economic Development

Schumpeter analyzed the business cycle of a capitalist economy with an innovative approach (Schumpeter & Nichol, 1934). Laumas (1962) examined Schumpeter's theory of economic growth in underdeveloped countries. Laumas discovered that Schumpeter focused on how government intervention affects the social climate and private enterprise innovation. Laumas concluded that Schumpeter's economic development theory contained an innovative approach that examined the relationship between the size of the innovation and whether innovation happens in a developed or underdeveloped economy. Schumpeter viewed innovation as a particular part of the economic process and business activity.

In contrast to Schumpeter's perceived innovation, other researchers disagreed with innovation and invention and considered them atypical business activities. Solo (1951) argued that Schumpeter's economic development theory could be revised because

invention and innovation are subject to cost and return on investment as any other business activity, driven by competition. However, describing innovation as a business output, relying on resources acting as productive elements, is a more realistic way to view innovation from the financial perspective. Simultaneously, Schumpeter placed great importance on economic development as a distinct area of financial analysis (Solo, 1951). Becker et al. (2012) claimed that Schumpeter's economic evaluation was an economic change phenomenon. Becker et al. stated that Schumpeter described and identified the process of innovation he defined as new combinations since Schumpeter's theory of economic development framework also applies to study the dynamics of financial innovations.

Innovations are only possible with the support of financial institutions willing to fund them. Akdere and Benli (2018) added that Schumpeter's theory of economic development claimed credit as an element that must be present for entrepreneurs who want to innovate. Akdere and Benli explained that Schumpeter believed financial institutions are the backbone of the capitalist economy because they control credit transfer to innovators. Akdere and Benli and Becker et al. (2012) noted that Schumpeter did not use the term innovation when developing his economic development theory, even though a revolutionary way to analyze financial institutions was found in Schumpeter's theory. Overall, innovation will always be viewed as a critical aspect of economic change.

Schumpeter's theory of economic development indicates that economic development varies between developed and undeveloped countries. Casadella et al.

(2015) discovered that collaboration among developing countries is needed to increase innovation capacity and facilitate economic relations with northern countries to improve the world population's well-being. Casadella et al. explained that researchers neglect to emphasize the importance of supporting developing countries in aspects such as economy, finance, politics, and technology. For developing countries to grow, it is crucial to provide them with the tools and resources needed to strengthen their innovation capabilities. Becker et al. (2012) noted that Schumpeter's economic development theory was an evolutionary foundation for economic development. Becker viewed it as a collaboration approach aligned with the way globalization directed businesses to function over time. Allowing developing countries to join the world's economy is a goal all developed nations aim to pursue (Becker et al., 2012).

Disruptive Innovation Theory

Disruptive innovations characterize as inexpensive and straightforward products or services that enter a market, eventually displacing established competitors. Christensen (1997) first described the disruptive innovation theory in his book *The Innovator's Dilemma.* Christensen suggested that disruptive innovations allow companies to grow when brought into the marketplace. Anthony and Christensen (2005) added that some innovations create new markets while others reshape prevailing markets. Anthony and Christensen observed that applying the correct theory can help researchers collect and accurately predict market trends. Disruptive innovations, also known as creative destructions, change markets drastically depending upon the organization's technological capacity.

Different types of innovations exist depending on whether these disrupt the market or not. Georgantzas and Katsamakas (2007) explained Christensen's (1997) disruptive innovation theory and strategy as a repeatable process that companies design and replicate with popularity and success. Georgantzas and Katsamakas used the disruptive innovation theory to present the benefits of applying system dynamics modeling software to determine an increase or decrease in technology market performance over time. Whether disruptive or not, innovations that appear within a marketplace can be predicted to succeed or fail through the disruptive innovation theory and its application.

The disruptive innovation theory, as a phenomenon, has also been applied to identify its effect on social change. Mahto et al. (2020) centered their research on Christensen's (1997) disruptive innovation theory on building a theoretical framework to understand how disruptive innovation applies to social change. Mahto et al. based their research on the abundance philosophy to explain the role of scarcity and abundance in disruptive innovation. Mahto et al. concluded that markets must meet certain conditions to support incremental or disruptive innovations to move from scarcity to abundance and promote growth. Christensen's disruptive innovation theory helped evaluate proper conditions in developing and underdeveloped countries where innovations grow from extreme poverty, scarcity, and greater need.

Adapting to technological developments and market conditions has always been imperative to the development of innovations across industries. Disruptive innovation constructs have been applied to evaluate crowdsourcing initiatives. Peisl et al. (2016)

discussed how organizations use crowds to evaluate disruptive ideas and implement

crowdsourced innovation practices. Peisl et al. identified how to detect an expert crowd

composition and size suitability, how organizations can attract expert crowds, and the

limitations companies encounter when implementing crowdsourcing. Furthermore,

Christensen's (1997) disruptive innovation theory is used as a framework to evaluate the

theory-building process along with theory development.

Evaluating theory development and application effectiveness over time has been

crucial to theory application. Riesmeier (2020) studied how disruptive innovation has

progressed over the years through Kuhn's scientific development theory. Riesmeier

examined Christensen's (1997) disruptive innovation theory building process and

determined predictive value as a crucial point of theory development in the future. The

original application of Kuhn's framework emphasizes crucial developments and faults.

Kuhn's theory measured how disruptive innovation's development matches the four

stages of scientific development: (a) crisis, (b) revolution, (c) everyday science, and (d)

the accumulation of anomalies. Riesmeier concluded that Kuhn's framework was a

successful way of conceptualizing disruptive innovation development.

Open Innovation Model

The open innovation theory is the opposite of the closed innovation theory, where

collaboration with external parties is encouraged for innovation purposes. Chesbrough

(2003) coined the term *open innovation*, defining a new model for industrial innovation.

In the study, Chesbrough suggested that companies should balance internal and external

ideas for innovation purposes. Bogers et al. (2020) applied the open innovation theory to

help a food and beverage company find a way to overcome sustainable innovation challenges. Bogers et al. suggested that combining sustainability and open innovation concepts could become a theory of its own. Transitioning from the close innovation model into the open innovation approach has paved the way for collaboration platforms like crowdsourcing to evolve successfully within the business arena.

The open innovation model has parallels with the absorptive capacity concept. Barrena-Martinez et al. (2020) proposed in their study a framework to combine two branches of managerial literature: intellectual capital (IC) and Chesbrough's (2003) open innovation (OI) paradigm. Barrena-Martinez et al. determined that IC has three elements: (a) human, (b) structural, and (c) relational capital from which human and structural are absorptive capacity enablers. Barrena-Martinez et al. concluded that IC's three elements enhance the open innovation approach. Chesbrough (2004) stated that allowing companies to reach out and obtain external sources of technology or other means of support increases innovation opportunities. Chesbrough observed that more companies have to incorporate external knowledge to innovate than to maintain internal processes. Companies must count on the proper competencies to merge and process external and internal knowledge to innovate successfully.

Focusing on long-term value capture and sustainability when incorporating a new business model is imperative to any successful transition. Chesbrough and Appleyard (2007) viewed companies applying open innovation initiatives to their business models but struggling to manage value capture and sustainability. Chesbrough and Appleyard determined that the solution was to adapt the business strategy to align with

Chesbrough's (2003) open innovation model. Chesbrough and Appleyard defined the specific strategy to balance value creation and value capture successfully. A good business model without proper adaptation and implementation of a well-structured business strategy leads to stagnant growth, poor performance, and ultimately failure.

Other innovation platforms with a collaborative approach have originated since the inception of the open innovation model. Kohler and Chesbrough (2020) acknowledged crowdsourcing as a commonly accepted innovation tool derived from Chesbrough's (2003) open innovation model. Kohler and Chesbrough proposed a framework to create crowdsourcing platforms for social innovation since crowdsourcing has applied to commercial settings. Kohler and Chesbrough stated that social innovation offers the benefits of doing good at the public level through social crowdsourcing outweigh the challenges. Even though social innovation is challenging, crowdsourcing initiatives to solve systemic social and environmental matters align with corporate social responsibility initiatives.

Key Characteristic of Innovation Concerning Crowdsourcing and the DOI Theory

Collaboration platforms allow citizens to achieve innovation creation and, under certain circumstances, funding through community support. Özdemir et al. (2015) determined that supporting innovation is more difficult within the developing world due to the social, economic, and political issues that affect innovation ecosystems. Online platforms based on collaborative approaches led to crowdsourcing, which branched into crowdfunding. Jespersen (2018) investigated crowdsourcing implementation into organizations' innovation processes. Jespersen concluded that innovation outcomes are

dependent upon knowledge environments. The knowledge environment, whether local or distant, is crucial when developing crowdsourcing design strategies. Collaborative ecosystems encourage innovation to develop, even when the primary motivator is monetary or intellectual.

Collaboration platforms have motivators behind their purposes, which drive participation across the world. Albors et al. (2008) analyzed network collaboration paradigms to identify motivators, benefits, and challenges resulting from participating in crowdsourcing platforms. The increase of social interaction worldwide is a direct consequence of the internet, which is also a significant contributor to globalization. Albors et al. noted that network collaboration alternatives are continually evolving, positively influencing business models. Cheng et al. (2019) acknowledged that crowdsourcing platforms increased popularity, allowing companies to tap into external knowledge sources. The equilibrium is formed by interacting with stakeholders: the platform, sponsors, and participants. Cheng et al. concluded that innovations grow from a business transaction among stakeholders who use crowdsourcing processes for a fee. Collaboration platforms act as mediators between sponsors and participants, where the business is conducted at a cost.

Small Businesses Effect on the Economy

In the United States, the Small Business Administration defines a small business as a company or organization with less than 500 employees (U.S. Small Business Administration [SBA], 2019). Small businesses are a vital contributor to the U.S. economy and represent 99.9% of all businesses (U.S. Small Business Administration

Office of Advocacy, 2019). Early entrepreneurs such as Henry Ford, J.C. Penney, and

H.J. Heinz failed before achieving success (Schweikart & Doti, 2009). According to the

United States Small Business Administration Office of Advocacy (2012), small

businesses increase their survival chances as the business ages. Half of all new businesses

go under within the first five years (Johnston, 2018), and one-third achieve the 10-year

survival mark (Cohen, 2017). Historically, small businesses are responsible for a high

proportion of job creation, economic growth, and innovation achieved through a

competitive advantage (Warren, 2016).

Warren (2017) described President Franklin Roosevelt's focus on economic

recovery centered on supporting small businesses, job creation, and restructuring the

banking system. Malchow-Moller et al. (2011) stated that small business is central to job

creation due to the speed of growth they experience compared to larger businesses.

Consequently, franchising expanded through great lengths during the 1950s (Wadsworth

& Cox, 2011). During this time, the SBA was founded by Congress in 1953 (U.S. SBA,

2019) to provide counseling, capital, and contracting expertise to small businesses while

strengthening the overall economy (U.S. SBA, 2019; Warren, 2017).

Overcoming Challenges in Business Through the DOI Theory

Barriers of adoption affect small to medium enterprises (SMEs) in different

aspects of the business. Kozan and Akdeniz (2014) found a lack of proper funding as a

success barrier for SMEs. O'Reilly and Cunningham (2017) identified personal

relationships, asset scarcity, and proximity issues as barriers of adoption affecting SMEs.

Hosseini et al. (2016) applied Rogers's (2003) DOI theory and proposed a framework to

help shed light on the state of BIM adoption in Australia. Hosseini et al. concluded that even though lack of knowledge among SMEs is a contributing barrier affecting BIM adoption, the main obstacles are linked to vulnerabilities associated with uncertainty on return on investment (ROI). Therefore, overcoming barriers of adoption is crucial to the survival and success of any business.

Barriers of adoption are a risk to every business regardless of their location. Loukis et al. (2011) used Rogers's DOI theory (2003) to investigate the barriers of the adoption of B2B e-marketplaces. By large enterprises in the Hellenic Aerospace Industry (HAI) of Greece. Loukis et al. identified significant differences between the barriers of adoption between large enterprises and SMEs. The most considerable challenges of adoption were technological and organizational. Moeller et al. (2012) noted that financial management is crucial for any business survival. Whether big or small, businesses always face adoption barriers depending on their business capacity and available resources.

Businesses can overcome sustainability barriers by incorporating social change initiatives. Allen (2018) based his study on Rogers's (2003) DOI theory to explore how business leaders could overcome sustainability challenges when integrating disruptive innovation initiatives. Allen found that to integrate and sustain disruptive innovations, companies must: (a) focus on training, (b) changeover mechanisms, (c) proper utilization of critical resources, (d) increase meaningful employment, and (e) enhance livelihoods regarding social change. Mclver (2019) intended to help small businesses overcome challenges when adopting information and communication technology (ICT). Mclver indicated that Rogers's (2003) DOI theory helped develop strategies allowing business

leaders to enhance processes, stay competitive, and boost profits. Proper implementation of ICT is crucial for small businesses to obtain a solid online presence and participate in the global market. Allen and McIver determined that achieving sustainability through social change contributes to local and international economies' growth. Global exposure is dependent upon the application of technological developments in an efficient manner.

For SMEs to succeed, they must adapt to current market changes and technological demands to boost business performance (Mansor et al., 2021). Vega et al. (2008) used Rogers's (2003) DOI theory to study public program interventions' efficiency when assisting small-medium enterprises (SMEs) in adopting e-business. As technological developments affect the marketplace and how organizations conduct business, existing laws must change to meet current business trends and market demands. Vega et al. identified that SMEs lack adequate knowledge and resources to adapt, modify, and apply complex innovations. Public program interventions have restrictions that limit service personnel to help meet SMEs' adoption of e-business applications. The Rogers's DOI theory helped Vega et al. identify the systematic issues present within public programs, allowing policymakers to improve communication and processes between SMEs and public service personnel managing the intervention programs.

Crowdsourcing Overview in Relation to the DOI Theory

Small business leaders could use Crowdsourcing's collaboration initiatives to achieve value creation through WOM. The DOI theory constructs can serve as a platform to help small business owners incorporate and reinforce collaboration strategies. To small

business owners, relying on crowds and their networks for value creation might effectively increase competitiveness.

For Value Creation

Handling collective innovation is not an easy task, but it is achievable with the right strategy. Vernette and Hamdi-Kidar (2013) stated that creating the internet has allowed online communities to develop, in which individuals co-created value dependent upon the participants' perceived benefits. Chesbrough (2006) brought individuals with different backgrounds, experiences, knowledge, and perspectives to help innovate while helping businesses find their innovative drive-in meeting consumers' needs and expectations. Christensen (1997) pointed out that innovation helped improve people's quality of life by making their daily tasks more straightforward and less challenging. Mount et al. (2020) identified crowdsourcing as interconnected to design thinking and a problem solver tool to assist non-designers in finding solutions that match designers' expectations of safety and applicability. Businesses need consumers to acquire innovations, and consumers rely on innovations to improve quality of life, while companies rely on their expertise despite their professional upbringing.

Without consumers, businesses are not always capable of fulfilling consumer needs. Consumer needs identify through the DOI theory, and these are then matched with businesses' innovation capabilities. Kramer and Porter (2011) observed that companies had become instruments of societal value creation, where companies need consumers to succeed, and consumers need companies to survive. A relationship exists if companies manage to create that need. As technology evolved and the business world changed,

many companies have opted for a collaborative approach to achieve a specific goal (Kramer & Porter, 2011). Chesbrough (2006) and his open innovation approach allowed other collaboration models to pave the way for innovation models like crowdsourcing to grow. Pang and Liu (2016) discovered a relationship among outsources and how the quality and level of their expertise attract and encourage other participants with the same description to join. Whether the goal is business-related or personal, collaboration initiatives have affected and changed the way individuals and businesses coexist, even among the participants themselves.

Entrepreneurs and innovators rely on crowds to support their projects in exchange for a reward or compensation. Rouse (2011) described collaboration platforms as business software used by online communities to broaden their networking capacity. Crowdsourcing has helped innovators reach out to the crowds to help them meet their unmet needs (Malhotra et al., 2020). Kohler and Chesbrough (2020) recognized the crowds could spark ideas and solutions for social causes and encourage their application for social reasons. Blohm et al. (2013) observed that people would not have been able to join online communities without the internet and other technologies and contribute to each other beyond their boundaries. Entrepreneurs innovate through collaborative platforms, allowing participants' contributions to become influentially spread among users while helping individuals, businesses, and communities.

As a collaborative approach, crowdsourcing relied on independent contributors' diverse knowledge, expertise, assets, and capacity to increase innovation. Mitra (2012) identified crowdfunding, crowdsourcing, and other collaboration platforms as part of a

new wave of technologies that allowed companies and individuals to tap into many contributors. Busarovs (2011) and Chang et al. (2021) agreed that innovation processes over time have become user-driven, helping collaboration platforms evolve as powerful strategies of their own that also feature value co-creation. Blohm et al. (2018) added that even though crowdsourcing as a fundamental concept is the same across the board, different types of crowdsourcing platforms exist depending on the need of the business. At the business level, innovation has been necessary for a firm's survival and prosperity of all sizes. At the end-user level, it has allowed us to meet and uncover unmet needs (Blohm et al., 2018).

WOM as an Element of Collaboration

Before the open innovation model and crowdsourcing, the collaboration concept seemed already influential in the business world through feedback. The DOI theory helps businesses tailor innovation diffusion strategies to consumers' wants and needs based on direct stakeholder input (Rogers, 1962). Verma and Yadav (2021) studied how sharing information through a message with credibility and content influences a positive eWOM (electronic word of mouth). Fan and Miao (2012) referenced how consumers became more active at different stages of the innovation process, products shaped in a way that provided actual value to consumers (Sandmeier et al., 2010). Consumers' contributions began going further than merely giving feedback. Fan et al. (2013) also added how participants allocated their donations based on consumer attitudes and decision-making processes directly impacted by a product's message content. Successful innovation is the result of end-user feedback and contributions to its creation from beginning to end.

From Crowdsourcing to Crowdfunding

As crowdsourcing became a product of high market demand to better address

consumer needs in the innovation creation arena, other crowdsourcing forms developed

across different industries. Valanciene and Jegeleviciute (2013) noted that the financial

sector was the first to experience what the authors considered the effect of the unmet

need. Participants in need of financial support turned to internet platforms to raise money.

Goble (2012) stated that Michael Sullivan coined the term *crowdfunding* in 2006 through

Kickstarter. Kickstarter is a crowdsourcing platform where people publish their ideas

through campaigns for crowdfunding (Keyhani et al., 2020). Schwuenbacher and

Larralde (2006) defined crowdfunding as a new way of raising capital. The effect allowed

for a new form of crowdsourcing method to surface known as crowdfunding, in which

participants grow money by inquiring financial support from the crowds.

In the case of crowdfunding, researchers found that part of its success is the lack

of access to capital many inventors or innovators have due to the nature of their humble

projects (Carr, 2013). Kuti and Madarasz (2014) noted many already established startups,

SMEs, and others classified as amateurs whose innovations or projects need funding to

become a reality benefit from crowdfunding. Crowdfunding became famous as an

alternative source for financing where conventional funding options would not support

them unless investors get a guaranteed return on investment. The DOI theory's constructs

can minimize the uncertainty surrounding the return on investment in collaboration

platforms like crowdfunding by providing an in-depth analysis of users' characteristics

and innovation motivators, allowing businesses to consider other investment options such as crowdfunding (Kuti & Madarasz, 2014).

Whether to increase innovative ideas or crowd financing, it has become essential for crowd participants inquiring support to better convey their needs. While in crowdsourcing, for-profit businesses create value through consumers' contributions in the form of volunteerism (Schwuenbacher & Larralde, 2006). In crowdfunding, not necessarily businesspeople make the same value through crowd contributions and volunteerism (Goble, 2012). As a result, the entrepreneur community has shown increasing interest in these two collaboration models. Simultaneously, some entrepreneurs turn to crowdsourcing to access innovative ideas or solutions (Kozonen et al., 2013). Other entrepreneurs chose the crowdfunding model as a funding alternative when regular funding options are no longer possible (Carr, 2013). Regardless of the goal, finding ways to influence contributors' decision-making process is the basis for a successful campaign.

Transition

In the literature review, I overviewed crowdsourcing, DOI theory, and the integration of crowdsourcing in business. In Section 1, I described the problem's background, problem statement, purpose statement, nature of the study, research questions, and qualitative methodology. Section 2 provides a comprehensive summary of the study's purpose, object analysis, interviews responses, and instruments used to analyze crowdsourcing in business practices. Section 3 presents findings identifying how small business owners use crowdsourcing as a product development tool to increase

innovation and revenue. Section 3 includes the presentation of findings, applications of

the study's findings, and recommendations for future research. Finally, this section ends

with the reflections on the research process and the study's conclusions.

Section 2: The Project

As technology evolved and business environments became more dynamic, consumers became a key element at different stages of the innovation process, enabling crowdsourcing to become entrenched in the core of business operations (Grewal-Carr & Bates 2016). Large groups of people can now connect, contribute, and collaborate through virtual worlds in a platform in which diverse collective intelligence merges (Peisl et al., 2014). The value business owners create through consumers' contributions using crowdsourcing platforms helps improve businesses' innovation capabilities and revenue while meeting consumers' demands. Section 2 includes the purpose statement, researcher's role, participants, research method, research design, population and sampling, ethical research, data collection instruments and techniques, data organization techniques, data analysis, and reliability and validity.

Purpose Statement

The purpose of this qualitative multiple case study was to explore strategies business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. The target population consisted of five northern Utah business leaders who had experience using strategies to integrate crowdsourcing into business operations to increase innovation and revenue. The implications for positive social change include study findings that could help business leaders integrate crowdsourcing into business operations to increase innovation and revenue. Business leaders obtaining financial success could provide the community with more employment

opportunities, resulting in more prosperous communities. Using innovative practices addresses social entrepreneurship and social needs (Candi et al., 2018).

Role of the Researcher

Researchers review literature from different sources in a qualitative study to gain in-depth knowledge about a research topic (Cleary et al., 2014). The researcher's role is to conduct the study in an ethical manner (Yin, 2018). As the primary data collection instrument, I conducted interviews and managed all interactions with participants. In the qualitative multiple case study design, my role as a researcher involved (a) determining, collecting, analyzing, and interpreting the best candidates for the interviews; (b) collecting and analyzing data; and (c) interpreting data to represent the participants' perspective. Yin's (2018) five-step approach to data analysis enabled me to evaluate textual data gathered through my interviews until I reached data saturation, which led to findings.

Crowdsourcing was an unfamiliar topic for me before my research project began. I gained insight into crowdsourcing, including what it entails and its impact on different industries across the business world through research on the topic. A relationship with the participants was nonexistent. I found contributors through a Google search of local small businesses in northern Utah. I did not know any small business owner who had implemented crowdsourcing as part of their business model. The state of Utah has been my residence since 2015, and I am interested in helping small business owners develop strategies to help them grow and produce more capital.

As the researcher, I adhered to the ethical standards identified by The Belmont Report. Providing participants with a safe environment while assuring them the information collected would be confidential, I upheld the highest ethical standards. The Belmont Report, under the common rule, established regulations to diminish the potential harm of human subjects who are part of a research project (Metcalf, 2016; Packette & Ross, 2015). I protected participants' confidentiality as a safety measure.

As the primary data collection instrument, I endeavored to mitigate biases related to my cultural background and experience. Peterson (2019) stated that to mitigate bias, researchers must maintain transparency throughout all study stages. Because participants share their experiences through open-ended questions, qualitative researchers should be documenting their emotions during the data collection and analysis phases (Cleary et al., 2014; Grossoehme, 2014). I recorded my emotional reactions and responses during the data collection and analysis phases by reflecting through journaling. To mitigate bias, I conducted interviews with open-ended questions and performed member checking to ensure data accuracy.

Qualitative researchers use interviews to collect data, and through open-ended questions they encourage participants to provide thorough answers that allow for theme expansion or discovery (Fusch et al., 2018). Semistructured interviews were the best data collection method to help me explore how small businesses use and apply crowdsourcing to increase innovation. I used the information extracted from these semistructured interviews to identify themes. Rabionet (2011) stated that finding a neutral location for interviewing is imperative to create an environment in which participants feel

comfortable establishing rapport. I communicated with participants to find a neutral place for them to feel comfortable contributing truthful responses.

According to Yin (2018), researchers should introduce the study topic to participants, add subquestions, and share the researcher's thoughts and ideas during the data collection phase. An interview protocol is essential to ensure that the collected information will address the study's research question. I disclosed the study's topic and the purpose of the research to participants during the data collection stage. I added subquestions to the interview process to understand the phenomenon from the participants' perspective. The interview protocol, located in Appendix A, shows participants' ability to choose the interview location, and Appendix B includes interview questions that I used during the interviews.

Participants

Hunt (2011) stated that researchers should provide enough information about the participants to help readers determine whether they were appropriate to support the study. Peterson (2019) focused on the importance of identifying a big enough sample size to explore a phenomenon without underestimating the length and depth of interviews to allow for data saturation (see also Hunt, 2011). I selected five participants based on their personal experiences and knowledge of the research topic. Eligibility for participant selection included (a) participants are the decision maker within the organizations they own and manage, (b) participants are in northern Utah, (c) participants' business is active, and (d) participants currently use crowdsourcing within their business models.

Participants must be willing to be interviewed because, through a well-conducted interview, the researcher will obtain an in-depth insight into the interviewee's experiences through a form of storytelling (Jacob & Furgerson, 2012). To gain access to participants, I conducted a local Google search of small businesses using crowdsourcing initiatives. I chose 20 potential participant to contact via email or by phone. I intended to use at least five participants for this study and abided by the ethical standards regarding informed consent and disclosure established by the Belmont Report.

Establishing a working relationship with participants is imperative to obtain truthful comments from the interviewee (Rabionet, 2011). Fusch and Ness (2015) stressed that understanding others' points of view opens the door for participants to feel comfortable and contribute their ideas. Rabionet (2011) added that an interviewer's introduction to the participants and the interview questions are the two most important aspects of information accessibility. I contacted participants through email and phone to provide them information about the study and request their consent to become participants.

Jacob and Ferguson (2012) and Peterson (2019) stated that it is essential to build rapport and trust to create a friendly environment for the interview to generate insight into the phenomenon. To establish a working relationship with each participant, I contacted my prospects by email and followed up with a phone call. After establishing contact, I provided a clear idea of the study's purpose, obtained participants' consent, explained the time commitment, and ensured participants' safety and confidentiality. Once I selected the qualified participants, I emailed them a summary of my study and

asked to visit their organization. Finally, I continued to build rapport with participants by working around their availability and inviting them to participate in the interview.

Research Method and Design

As the researcher, I used the nature of this study's phenomenon and the research question to select a qualitative multiple case study as the best research method and design. I explored strategies that business leaders use to successfully integrate crowdsourcing into their business operations to increase innovation and revenue. Qualitative researchers use a multiple case study design to explore and understand a phenomenon in a real-life scenario.

Research Method

Three methodologies exist to conduct research studies: (a) quantitative, (b) qualitative, and (c) mixed methods. In quantitative studies, researchers examine the relationship between variables using statistical analyses through hypothesis testing (Saunders et al., 2015). Researchers also conduct quantitative studies to test objective theories by examining the variables' relationships and using closed-ended questions to test the hypothesis (Mooney, 2016). A mixed-methods researcher combines qualitative and quantitative research processes to apply inductive and deductive reasoning (Mertens et al., 2016; Yin, 2018). I did not test hypotheses to explore crowdsourcing; therefore, a quantitative or mixed-methods approach was not needed.

Qualitative researchers seek to explore what, why, and how of a phenomenon in real-life settings (Yin, 2018). Because qualitative research is interpretative (Saunders et al., 2015), qualitative researchers use this method to discover themes that have the

potential of emerging through interaction with participants (Marshall & Rossman, 2016).
The qualitative research method was appropriate for the current study to explore
strategies business leaders use to integrate crowdsourcing into business operations.
Qualitative researchers use this method to explore and understand a phenomenon in a
real-life scenario through open-ended questions rather than numbers (Korstjens & Moser,
2017).

Research Design

The four research designs considered for this study were (a) ethnographic, (b)
narrative, (c) phenomenological, and (d) case study (see Marshall & Rossman, 2016; Yin,
2018). Ethnographic researchers focus on exploring groups' cultural and social beliefs
(Fields & Kafai, 2009). I did not select the ethnographic design because I did not study a
community's cultural and social beliefs. Researchers use narrative design to focus on
participants' personal stories and experiences in an open and interpretative way (Yin,
2018). I did not use narrative design for my study because I did not focus on participants'
stories and experiences in an open and interpretative way. Researchers conduct
phenomenological studies to gain insights into participants' lived experiences and
understand meanings over a long period (Saunders et al., 2015). The phenomenological
design was not suitable for my study because I did not focus on participants' lived
experiences to understand meanings over a long period.

I chose a multiple case study design. Saunders et al. (2015) and Yin (2018) used
case studies to engage in an in-depth exploration of a real-life phenomenon, using
participants' environmental context and triangulation of data collected to validate

findings. Researchers who choose a single case study limit the data advantage found in multiple case studies (Herriott & Firestone, 1983); therefore, a single case study was not appropriate for the current study. I used a multiple case study design to explore crowdsourcing's successful integration into business operations to increase innovation and revenue. The study's focus was understanding the meanings and gainful insights of participants (see Yin, 2018). A multiple case study design was appropriate for the research question because I evaluated participants' experiences.

Population and Sampling

In the current study, the target population included small business owners in northern Utah who had successfully incorporated crowdsourcing platforms within their business operations to increase innovation and revenue. Robinson (2014) indicated the importance of ensuring that the chosen population has experienced the study's phenomenon. Cleary et al. (2014) stated that although the chosen participants should fulfill the purpose of the study, they should also generate enough in-depth information to address it. The current study's selected population was small business owners who had increased innovation and revenue through crowdsourcing. Business owners can help other small business owners by providing insight into incorporating this collaboration platform to take advantage of the collective intelligence directly associated with consumers.

According to Robinson (2014), a sample is selecting a business case from which the researcher plans to extract and analyze information. Qualitative researchers use sampling to explore a population by focusing on participants' lived experiences instead of

the number of participants (Grossoehme, 2014). The current study's sample size was five

business owners directly involved with the decision-making process and incorporation of

the business model and strategy. The sample size was appropriate for this study,

considering that the information acquired would be helpful to other small business

owners in northern Utah.

Kaczynski et al. (2014) suggested that nonprobability purposeful sampling in case

studies would increase the finding's credibility, even if the sample size was small. Hunt

(2011) noted that qualitative researchers are not concerned with generalizing the research

findings within large populations, but rather creating and analyzing relationships between

themes and categories to understand participants' experiences. Palinkas et al. (2015) and

Robinson (2014) posited that researchers choose participants based on accessibility and

experience with the phenomenon in nonprobability sampling. Nonprobability purposive

sampling was appropriate for the current study because I used a Google search to find

participants who met the criteria of small business owners who successfully used

crowdsourcing to increase innovation and revenue. I also contacted the SBA of Utah to

obtain a list of companies that met my study criteria.

Data saturation occurs when the collected data no longer present new information,

themes, or codes about a studied phenomenon (Fusch & Ness, 2015). Data saturation

depends on the nature of the data source and the study's research question (Morse, 2015).

Qualitative researchers reach data saturation when they stop gathering information

because responses become repetitive and the findings do not reflect new themes, data,

information, or insights (Cleary et al., 2014). To ensure data saturation for the current

study, I limited the sample to small businesses owners who met the selection criteria.

Limiting the study's participants to five business owners located in northern Utah would

restrict the information I gathered to this geographic location. I also asked participants to

elaborate on any information they provided through the semistructured interview. I

continued to encourage in-depth responses and clarification until participants offered no

new information.

Triangulation helps boost the collected data's reliability, validity, and

legitimation, adding credibility, dependability, transferability, and confirmability of

research findings (M. D. Moon, 2019). Saunders et al. (2015) and Yin (2018) used data

triangulation to validate data collected and ensure data saturation in their case studies.

Grossoehme (2014) and Harvey (2015) applied member checking to allow participants to

review the data's interpretation. I triangulated the data to validate and ensure data

validation and data saturation. I also performed member checking by allowing

participants to review my interpretation of the data to maintain data accuracy from

beginning to end. I also was willing to make changes to the data interpretation to convey

participants' viewpoints.

Ethical Research

The Belmont Report describes the ethical standards regarding participants'

protection of their privacy, identity, and consent when conducting a research study

(Paquette & Ross, 2015). It is essential to obtain permission from the Walden IRB before

beginning the data collection process. My IRB approval number is #04-12-21-0620516.

When human subjects are involved in a research study, maintaining a high standard of

ethics is essential (Mikesell et al., 2013). Yin (2018) stated that it is necessary to obtain permission from participants as promising researchers and ensure they provide informed written consent before conducting a study. I ensured participants understood that their identity and privacy would be protected and obtained permission to participate in writing.

Marshall and Rossman (2016) stressed the importance of confidentiality. I protected participants' confidentiality by using generic names such as P1, P2, P3, P4, and P5 for all participants. Yin (2018) noted that researchers must establish adequate measures to secure and store the information collected in a research study to protect participants' confidentiality. I safeguarded participants' privacy and confidentiality by locking in a password-protected storage device for all data collected. In addition, I will store all data for 5 years following the conclusion of the study. After that timeframe is met, I will permanently delete and destroy all data linking participants to the study.

Researchers must fully disclose the risks and benefits involved when participating in a research study; therefore, the consent should include the research project, time commitment, study criteria, and other elements (Hardicre, 2014). As the researcher, I ensured that participants understood the benefits and potential risks of their participation in this study. Fusch and Ness (2015) explained that the importance of participants understanding their participation is voluntary. Participants understood that their participation was voluntary, and they could withdraw from the study at any time by contacting me through email or phone. If any participant abandoned the research, I destroyed all information linking the participant to the study. Incentives to participate in this study were not offered.

Data Collection Instruments

According to Marshall and Rossman (2016), the researcher's role is to collect the participant's credible data in a qualitative research study. For this study, the researcher utilized open-ended questions through a semistructured interview (Johnston, 2018). As the researcher, I adhered to the ethical standards identified by The Belmont Report. I ensured to protect participants' confidentiality as a safety measure (Metcalf, 2016; Paquette & Ross, 2015). Yin (2018) stated that case study researchers collect data as the primary data collection instrument in a real-world setting. Therefore, I was the primary data collection instrument in this study, and I intended to understand the phenomenon reflected in the data through the participants' lenses. In addition, researchers collect and apply the following options to collect data for their study: (a) semistructured interviews, (b) focus groups, (c) document review, (d) archival records review, and (e) observation (Ozer & Douglas, 2015). Therefore, I used semistructured interviews to obtain a more in-depth understanding of the phenomenon.

Peterson (2019) explained that to mitigate bias, researchers must maintain transparency throughout the study. Fusch et al. (2018) noted that qualitative researchers use open-ended questions to allow participants to provide thorough answers when collecting data. I minimized the risk of personal biases influenced by my cultural background and experience by including open-ended questions in the semistructured interviews. I also documented my emotional reactions to participants' interview responses through journaling. Grossoehme (2014) and Harvey (2015) described member checking as the process of allowing participants to review the researcher's interpretation

of the interview data, allowing for changes to convey participants' viewpoints. I

performed member checking to help maintain data accuracy of the study from beginning

to end. Interview protocol, located in Appendix A, shows participants could choose the

interview location, and Appendix B includes interview questions that I used during the

interviews.

Data Collection Technique

The data collection process in research makes for a more substantial case study,

where the researcher, as the primary data collection instrument, addresses the study's

research question with insightful information extracted from the data (Grossoehme,

2014). The study's research question was: What strategies do business leaders use to

successfully integrate crowdsourcing into business operations to increase innovation and

revenue? Yin (2018) stated that an effective data collection technique to help understand

human subjects is interviewing. Yin (2018) identified focusing on a specific research

topic as an advantage of interviewing. In contrast, Wright and Ogbuehi (2014) noted

participant behavior as a disadvantage of interviewing because it could affect the data and

the conclusions. I used semistructured interviews as a data collection technique

applicable to five eligible small business leaders who have successfully integrated

crowdsourcing into their business operations to increase innovation and revenue.

Miles (2013) emphasized the importance of collecting raw data before analysis.

De Massis and Kotlar (2014) listed interviews, surveys and questionnaires, observations,

focus groups, and document and material analysis as the primary data collection

techniques applied in qualitative research. Yin (2018) posited the importance of

triangulation to enhance the validity of research discovery, while Harvey (2015) explained the importance of member checking to enhance the findings' credibility and dependability. I collected public information from the company's website and other internet sources for reference purposes during the interview. I collected additional data from participants through company brochures explaining its organizational culture, mission, vision, and business strategy for triangulation purposes. Finally, I took field notes, also known as detailed notes, on the researcher's observations about the interviewee's responses, environment, and behavior.

The interview location and setting are essential and influential on human behaviors and actions (Marshall & Rossman, 2016). I also conducted interviews in a quiet environment with minimal distractors to allow participants to provide in-depth, accurate information. Harvey (2015) described member checking as the process of allowing participants to review the researcher's interpretation of the interview data, allowing for changes to convey participants' viewpoints. I performed member checking by allowing participants to review the gathered information to verify accuracy and allowed data modification if applicable. Also, I arranged interviews with participants through Zoom, a video communication software used to make video calls or a similar platform, to eliminate the risk of unintended exposure to COVID-19 due to the current limitations of protecting American citizens from getting infected.

Data Organization Technique

Cleary et al. (2014) noted that record accuracy increases data transparency and integrity. At the same time, Marshall and Rossman (2016) stressed the importance of

confidentiality. I protected participants' confidentiality by using generic names such as

P1, P2, P3, P4, and P5 for all participants. Yin (2018) noted that researchers must

establish adequate measures to secure and store the information collected in a research

study to protect participants' confidentiality. I safeguarded participants' privacy and

confidentiality by locking in a password-protected storage device for all data collected. I

will store all data for 5 years following the conclusion of the study. After 5 years, I will

permanently delete and destroy all data linking participants to the study.

Richards (2015) explained that data organization is essential to help define the

research question's path within a study's phenomenon. Cleary et al. (2014) emphasized

the importance of keeping track of gathered data while maintaining organized records

during the different research stages. I used EndNote to store, organize, and categorize

articles throughout my research process. I recorded the interviews on my laptop using an

online communication platform that I tested before conducting the semistructured

interviews. Once I completed the interviews, I emailed participants the interview

transcript to review the researcher's interpretation of the data to help maintain data

accuracy from beginning to end. I also was willing to make changes to the data

interpretation to convey participants' viewpoints.

Data Analysis

In qualitative research, data analysis entails pattern identification in the collected

data to interpret those patterns and their meanings (Ziskin, 2019). According to Yin

(2018), there are five steps to the data analysis process: (a) compiling data, (b)

disassembling data, (c) reassembling data, (d) interpreting data, and (e) concluding the

data. Qualitative researchers use triangulation as a tool or a process that uses multiple methods to study a phenomenon (Fusch & Ness, 2015). There are four types of triangulation: (a) method triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) data source triangulation (Moon, 2019).

As a research tool, triangulation involves applying multiple data collection methods of a specific phenomenon (Carter et al., 2014). For this study, I used method triangulation to validate research findings obtained through semistructured interviews, member checking, field notes, company documents, and artifacts to achieve data saturation. Investigator triangulation uses more than one researcher to collect and analyze data (Moon, 2019). I did not utilize more than one researcher to collect data for this study. Theory triangulation requires researchers to apply multiple theories to analyze and interpret data (Carter et al., 2014). I did not apply numerous theories to analyze and interpret data for this study. Data source triangulation entails collecting data from different sources such as individuals, groups, families, and communities to obtain multiple perspectives (Guy, 2019). I did not use data source triangulation for this study.

Researchers use data analysis software to minimize errors and increase the research study's quality and accuracy (Bansal & Corley, 2012). Soritiadou et al. (2014) suggested NVivo as a valuable tool for identifying critical themes through NVivo's word frequency feature, coding, and mapping data. Yin's (2018) suggested a five-step process for data analysis. I compiled, disassembled, reassembled, interpreted, and concluded the data from the interviews' transcripts, researcher notes, and other documentation. Once I

identified patterns and connections between the data, I created a new theme category, scanned the data until no new themes arose, and reached data saturation.

Reliability and Validity

Qualitative researchers ensure reliability and validity by addressing the following elements: (a) dependability, (b) credibility, (c) conformability, and (d) transferability of a study (Cope, 2014; Morse, 2015; Ronkainen & Wiltshire, 2021). Olsen et al. (2016) and Yin (2018) determined that a qualitative researcher must establish the truth, accuracy, and precision of the data collected through reliability and validity. Qualitative researchers also use reliability and validity to confirm a study's integrity and trustworthiness (Connelly, 2016).

Reliability

Yin (2018) stated that qualitative researchers use reliability to prove that their research study is coherent. In qualitative research, the goal of reliability is to find dependability, which means finding consistency in the results during the data analysis process (Noble & Smith, 2015). Since reliability is not measurable, researchers must apply additional measures to achieve it (Kihn & Ihantola, 2015). Andraski et al. (2014) recommended member checking as one method that helps achieve the finding's reliability. I used member checking by sharing my interpretation of the results with participants.

Dependability

In qualitative research, dependability determines whether other researchers may replicate a study while obtaining the same results under similar conditions (Cope, 2014).

Dependability also allows readers to analyze and assess the effects because it establishes consistency in the research findings (Moon et al., 2016). Munn et al. (2014) posited that written and logical processes increase the research results' dependability. Therefore, it is imperative to document details of the research study we are conducting, changes we find along the way to include those that may have affected the research's results (Donatelli, 2013).

Validity

Validity in qualitative research refers to the researcher's ability and approach to maintain and achieve the research findings' integrity (Kornblush, 2015). Long (2015) explained that a research study's validity relies on the research instrument's ability to portray the phenomenon intending to be studied accurately. Because qualitative research's validity depends on credibility, accuracy, and trustworthiness, the criteria to establish research validity falls on the tools, processes, and data collection techniques applied during the research (Leung, 2015). To establish validity, a research study must have credibility, conformability, transferability, and data saturation (Marshall & Rossman, 2016).

Credibility

Qualitative researchers use credibility to add value to their research study by identifying and describing a phenomenon through the participants' perspective (Phillips et al., 2014). Credibility refers to whether a study's findings are trustworthy, valuable, and recognizable by others experiencing the same (Cope, 2014; Houghton et al., 2013). Castillo-Montoya (2016) explained that a researcher must establish reliable interview

protocols to enhance research's credibility. Thomas (2017) suggested that another way to strengthen a research study's credibility is through member checking to ensure the results are consistent with what participants are trying to convey and eliminate personal bias. As the primary data collection instrument for this research study, I implemented member checking to ensure data analysis credibility. I adhered to the interview protocols shown in Appendix A.

Transferability

Transferability is the ability to transfer qualitative research study findings into another context or setting (Donatelli & Lee, 2013). Gioia et al. (2012) posited that if a research study's concepts are relevant from one stage to another, the results from a case study are transferable. Marshall and Rossman (2016) recommended that researchers provide as much detail as possible of the research context to allow readers to define if the findings are transferable to other contexts or not. Describing the population's characteristics to the reader will ensure other researchers, possibly experiencing the same phenomenon, may apply the research findings to other studies (Piskur et al., 2017).

Confirmability

Marshall and Rossman (2016) stated that confirmability and dependability have similar processes. In confirmability, qualitative researchers remove biases to reflect participants' responses and intention by requiring researchers to authenticate their findings (Brott, 2015). A well-organized research study adds reliability to the findings because it allows future researchers to replicate it and obtain similar results (De Massis & Kotlar, 2014). Ortlipp (2008) explained that researchers could use reflective journaling to

capture researchers' personal bias during the data collection phase. Childers (2014) described the importance of providing participants (and readers) full access to the original reports to enhance confirmability. I used member checking to increase conformability while validating data accuracy. I also applied reflecting journaling through the data collection phase to ensure the research findings that emerge in this study adhere to the participants' lens and are not influenced by my personal bias.

Data Saturation

Data saturation is reached when a researcher cannot find new data to develop more categories (Nelson, 2017). Data saturation is when information becomes redundant, and no further information emerges during our research; therefore, obtaining more data will no longer lead to discovery nor knowledge that could help address the research question (Hancock et al., 2016; Lowe et al., 2018). De Massis and Kotlar (2014) explained that multiple case studies research has become stronger because of diverse information. Robinson (2014) stressed that one way to achieve data saturation is by limiting the sample size to a local area. Fusch and Ness (2015) added data triangulation as another method to reach data saturation since it involves multiple external methods to collect and analyze data. Data saturation is critical to maintaining the research study's credibility, transferability, dependability, and confirmability of a qualitative research study (Yin, 2018). Researchers recommend applying three different methods to achieve data saturation and ensure trustworthiness (Hancock et al., 2016). I used member checking, triangulation, and company artifacts to enhance reliability and validity to achieve data saturation.

Transition and Summary

In Section 2, I explained that the study's purpose was to explore strategies business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. Section 2 explained the researcher's role, participants, research method, and research design. Other vital points in Section 2 were population and sampling, ethical research, data collection, data organization, and data analysis. Section 2 concluded with a dialogue on reliability and validity.

In Section 3, I focused on reinstating the purpose statement and reviewed the central research question. Section 3 begins with an introduction followed by the presentation of findings, application to professional practice, implications for social change. Section 3 ends with recommendations or action and future studies, personal reflections, and tying the conceptual framework to the study's conclusions.

Section 3: Application to Professional Practice and Implications for Change

Section 3 includes findings identifying how small business owners use crowdsourcing as a product development tool to increase innovation and revenue. In Section 3, I include the presentation of findings, applications of the study's findings, and recommendations for future research. This section ends with the reflections on the research process and the study's conclusions.

Introduction

The purpose of this qualitative multiple case study was to explore strategies business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. I conducted five semistructured interviews through the online platform Zoom. I opted for an online interview to adhere to federal and state meeting restrictions limiting face-to-face contact due to the COVID-19 pandemic. Participants were small business owners in northern Utah with experience implementing crowdsourcing initiatives in their business operations. Before interviews began, participants had the opportunity to review the consent form and provide an electronic approval agreeing to participate. In addition to conducting the semistructured interviews, I applied member checking to strengthen my study's credibility. I also collected data from the internet about each small business and took field notes when identifying findings and drawing conclusions.

Presentation of the Findings

In this study, the overarching research question was the following: What strategies do business leaders use to successfully integrate crowdsourcing into business

operations to increase innovation and revenue*?* Saunders et al. (2015) and Yin (2018)

used case studies to explore a real-life phenomenon using participants' environmental

context. I used a qualitative multiple case study design to answer the research question.

The data collection process consisted of participants' interviews, transcripts, field notes,

and information available through crowdsourcing platforms.

Only participants who met the eligibility criteria for the study participated in the

interviews. Participants were small business owners with an active business in northern

Utah who had effectively implemented crowdsourcing initiatives into their business

operations to increase innovation and revenue. I selected 14 active small business owners,

whom I contacted via email. Seven provided their consent. Out of the seven, two changed

their minds and stopped responding, and five agreed to participate in the interviews (see

Table 2).

Table 2

Invitation Email Responses

Small business owner (SBO) response	Number	Percentage
Accepted	5	36%
Changed mind	2	14%
No response	7	50%
Total	14	100%

I conducted five semistructured interviews through the online platform Zoom. I

opted for an online interview to adhere to federal and state meeting restrictions limiting

face-to-face contact due to the COVID-19 pandemic. Yin (2018) noted that researchers

must establish adequate measures to secure and store the information collected in a study

to protect participants' confidentiality. I coded the five participants as P1, P2, P3, P4, and P5 to safeguard their privacy and confidentiality.

Soritiadou et al. (2014) suggested NVivo as a valuable tool for identifying critical themes through NVivo's word frequency feature, coding, and mapping data. After entering all relevant data into the NVivo software, I used the manual coding option to identify, organize, and classify themes. I carefully reviewed the data analysis and checked for accuracy, validity, and reliability upon completing the data analysis. Three themes emerged from the data: (a) business strategy, (b) collaboration, and (c) marketing.

To ensure data saturation for this study, I limited the sample size to five active business owners who met the selection criteria. Qualitative researchers reach data saturation when they stop gathering information due to responses becoming repetitive and the findings not uncovering new themes, data, information, or insights (Cleary et al., 2014). I reached data saturation when no new information or themes appeared and the data became repetitive. I also applied member checking to ensure participants' interpretations were conveyed accurately, and I used triangulation to ensure research validity.

Emergent Theme 1: Business Strategy

The first emergent theme was a business strategy. The business strategy theme had seven subsections: (a) adaptability, (b) barriers, (c) experience, (d) flexibility, (e) learning process, (f) risk, and (g) safety. In this section, I tie the first emergent theme of business strategy to the conceptual framework and previous studies.

Adaptability

All participants mentioned adaptability as a critical element to success in the business world. According to Cascon-Pereira et al. (2019) and Youngs and Graf (2017), businesses must track and interpret engagement patterns to maintain a competitive advantage and then apply them to their everyday processes when innovating. When small businesses fail to adapt their business models to current market conditions, they also fail to meet consumer and market demands. Three out of the five participants (P1, P3, and P5) I interviewed identified the COVID-19 restrictions and limitations as beneficial to their business growth. P1 stated "the pandemic was a big challenge we needed to adapt survive, so I incorporated the by appointment only approach to limit exposure protecting my clients and myself." P3 noted "the pandemic increased our business because it made us invest even more in our online presence." P5 added "the pandemic affected my business, but as a consulting business, it increased the number of small business owners I was helping because they were all looking for advice to overcome the pandemic restrictions." The COVID-19 restrictions encouraged participants to innovate. Participants used an internet platform for advertising their business and increasing market share through eWOM using visuals of their small business offerings.

For a small business, adapting to current market conditions defines its success or failure. Pasquier et al. (2019) stated that the internet had affected the incremental adoption of innovative practices toward a collaborative culture. Rogers's (2003) DOI theory provides the constructs to successfully help small business owners mitigate uncertainty and adapt to market conditions. All five interviewed participants reported that

pandemic restrictions and limitations allowed them to explore electronic networking by joining groups on crowdsourcing platforms to obtain referrals and increase business exposure. The pandemic restrictions and limitations also helped all five participants offer safety-focused strategies to minimize their customers' risk of COVID-19 exposure. All five participants were also able to find cheaper talent and experienced human capital willing to work with them on a freelancing basis without long-term commitments due to the drastic need for online jobs because of the pandemic.

Barriers

All participants reported barriers they had to overcome for their small businesses to stay competitive, grow, and survive. Johnson et al. (2018) identified lack of trust as a barrier of entry. Three of the five participants (P1, P3, and P4) reported difficulties acquiring customers due to the newness of their business. P1 shared "the biggest barrier for me was to get out of my own head and to not be afraid to be on my own." P3 noted "adapting to social media rules was a barrier because requirements changed, and we had to find other ways to advertise our business. Since we were new, that didn't help." P4 said "reassuring people we were as good as the competition even though we were new was difficult." Participants took extra effort to convince prospective customers that they were as competitive as other already established companies were.

As supported by DOI theory, addressing consumers' needs is essential, but focusing on customers' perceptions is crucial. Loukis et al. (2011) concluded that the most significant adoption challenges for small businesses were technological and organizational. One of the five current participants, P5 stated their biggest challenge was

information technology (IT) because managing the business site required specialized knowledge they were in the process of personally acquiring. P5 stated "IT was a barrier for me because my business was not prepared to sustain an increase of virtual foot traffic due to the pandemic. I had to find an IT savvy person to help me manage my page." P2 described the most significant challenge as funding to sustain the business expansion and recruit human capital to beat competition from more prominent companies already established in the market. P2 noted the "biggest barrier was finding investors to help us grow. Being new in business demands persistence and constantly reaching out to others."

Experience

Finding ways to implement and simplify learning for small business owners is crucial to maintaining competitiveness and relevance within their industries. Ali and Anwar (2021) highlighted the importance of learning and development as constant elements that lead to sustainable practices. In the current study, P1, P2, and P3 worked as employees for big companies to acquire knowledge and experience in their fields before launching their businesses. P1, P2, P3, and P4 agreed that having firsthand exposure to what they wanted to pursue as business owners was the best way to understand their customers' perspectives and expectations of the service they offer. P3 emphasized a bad experience as a customer with a well-established business in the pet grooming industry, which led them to set up a pet grooming service.

In addition, Rogers's (2003) DOI theory centers on learning from a different angle. Rogers focused on the importance of making knowledge delivery more manageable to improve the overall quality of the final product. Ali and Anwar (2021)

noted that conventional initiatives that can effect change are not always the best option.

P3 stated "I had bad experiences with big chain pet grooming salons. They don't always

have the time to gain the pet's trust, and that's what makes us different." The training P3

acquired was through YouTube videos, and practice occurred on family and friends' pets

for free until they could master pets' grooming needs. An outcome was learning how to

handle animals that had experienced trauma and working on ways to meet animals at

their level to help them cope with the grooming stressors.

Flexibility

All five participants identified maintaining flexibility throughout their business

operations as a skill small business owners need to master. Bouncken et al. (2021)

indicated that maintaining flexibility in business operations is essential to business

resiliency. Rogers's (2003) DOI theory focuses on user adoption and behavior toward

new objects necessary to adapt business models. Maintaining flexibility means tailoring

products and services to a specific audience, and it must be a part of any business

innovation strategy for consumers to adopt an innovation.

P1 noted "we own my schedule as a business owner we have a better handle of

our availability, so we can accommodate, let's say, special events, for example, ahead of

time." P2 shared "our business is flexible enough that I can adapt quickly, especially now

that our online presence is much stronger than before the pandemic." P3 said "we belong

to social media groups, and we also attend wedding events to look for clients." P4 added

"since this is a side business, we control how much business we can handle, which is

perfect because we can literally balance better our time." P5 said "flexibility is what

allowed me to accommodate the extra flow of small business owners needing consulting

during the pandemic. As a business owner, you must have the courage to ask for business

anywhere, anytime."

Consumers often hesitate to invest time and money in testing products' usability

and effectiveness, which affects their adoption (Stefaniak & Carey, 2019). However, it is

imperative to adapt business operations to market conditions, which can only be achieved

through a flexible business model. Bouncken et al. (2021) noted the importance of

helping business owners, no matter the size of the business, understand that implementing

a flexible model allows for resiliency enhancement in the long term. Learning and

adjusting products or services and how these are marketed is what all current participants

identified as essential to meet consumer demand and increase market share.

Learning Process

Participants also mentioned the importance of continuous learning to improve the

overall condition of the business. Telef (2016) identified that learning through

collaborative approaches is more productive and effective than individual learning. As

stated in Rogers's (2003) DOI theory, it is important to minimize or eliminate uncertainty

while meeting customers' needs. Four out of five participants (P1, P2, P3, and P5)

disclosed that they invested time to learn the basics of their services, and the same

participants obtained knowledge and experience through a combination of collaborative,

digital, and face-to-face approaches. YouTube was one of the P3's primary resources

regarding learning pet grooming styles for their business. P3 shared "we learned a lot of

our pet grooming techniques from YouTube. It saved us a lot of money, and the good thing is we can always find new videos. There is always something new posted."

P4 referred to first- and second-year medical students' direct input to discover their needs when developing the site that provided studying aids to help them achieve high-level learning in the medical field. P1 went to school to become a cosmetologist and worked for big companies within the hair and beauty industry to acquire the necessary hands-on experience to become a salon manager before establishing their own business. P1 shared "working through various companies just trying to learn and gain experience, but also build a clientele was very helpful." P5 shared that she obtained an accounting degree and further managed several businesses at different business life cycles before establishing a consulting firm that focuses on supporting minorities who decide to become business owners or own a business. P5 said "being an accountant and playing a dual role (accountant and recruiter) within the company I worked for helped me build the basis for my business since I was able to learn how to manage different areas of a business."

Risk

The DOI theory is used as an exploratory framework to mitigate uncertainty and minimize risk by better understanding the consumer. Regarding risk, all five participants agreed that taking risks is an essential part of growing as a business owner. However, two sides exist regarding taking risks: (a) the business owner's side and (b) the consumer's side. Alam et al. (2018) identified perceived risks as one of many factors that could influence customers' decisions and intentions. According to all five current participants,

business owners taking risks means not being afraid of putting their business and their

names out there. P4 said "don't be afraid to put your name out there within your network

because that's how you grow and become known. Also, always ask for referrals. That's a

risk you cannot afford not to take." Business owners need to keep their eyes and ears

open to grasp an opportunity to offer their services even when the time and place may not

seem appropriate for it. Finally, taking risks includes having the courage to explore new

areas outside of their comfort zone, like crowdsourcing platforms to advertise, find

human capital, find financial support, and find support and advice.

On the consumer side, Liu et al. (2017) identified the two most significant barriers

that affect public participation: (a) lack of good communication and (b) lack of feedback

evidence. As Rogers (1962) stated in the DOI theory, customers' perceptions affect an

innovation's adoption; therefore, customer feedback is crucial to help eliminate risk.

According to all participants in the current study, maintaining open communication

channels between business owners and end users helps minimize the risk of failure.

Continuously receiving and incorporating feedback is an integral part of managing their

businesses. Opening communication channels also allows them to meet their customers'

needs and personalize the service, if applicable. All five participants stated that

misunderstandings or misinterpretations of the benefits and possible risks of a service

they offer could be detrimental to their businesses by limiting or reducing their market

share and damaging the business image. P5 noted "overpromising what you can do for

your clients and not delivering is bad for business. That's how you lose customers and

damage your company's reputation, and you don't want that."

Safety

Participants stated that due to COVID-19 limitations and restrictions, it became essential to follow the Centers of Disease Control (CDC) guidance to assure their customers' safety and well-being. Rogers (1962) researchers use DOI theory as an exploratory framework to mitigate uncertainty while addressing users' concerns. Following the DOI theory concepts, all five participants were able to meet safety concerns and increase the applicability of their services by abiding by the CDC safety rules to reduce the chance of COVID-19 exposure. P3 stated, "the COVID19 restrictions helped me incorporate no touch delivery. We were not set up for delivery until the CDC changed the safety rules because of the pandemic, so that helped us expand our business." Safety was not a negative element that any of the five participants considered because it helped them explore other ways to offer their services and expand their businesses while meeting current market safety conditions.

Participants also found a solution to abide by the CDC's safety guidance without losing customers. Mount et al. (2020) identified crowdsourcing as interconnected to design thinking and a problem-solver tool to assist leaders in finding solutions that match expectations of safety and applicability. For P1, the pandemic was a way to acquire more customers because their business is in a particular area of their house. Only the business owner and the client were allowed to enter to minimize contact exposure. P1 would work by appointment only, and walk-ins were not a part of the business model to minimize contact with others. P1 noted, "the pandemic restrictions helped my business because I was able to accommodate clients to come in while minimizing exposure to a larger group

of people, which is normally what you do when you go to a chain salon business." The pandemic limitations and restrictions increased P1's customer base, making P1 prefer hair salon chains because they had more control over whom they would see. P1 received many recommendations and exposure through social media platforms where clients willingly posted pictures of their work as part of the eWOM advertising process and as a direct result of satisfied customers.

P2 and P5 shared that safety was not a concerning element for their businesses because the services were offered entirely through an online platform format since business inception. Both participants claimed their businesses only benefited from the restrictions because the pandemic limitations and restrictions pushed people to look for online services a lot more than before the CDC recommended limited face-to-face contact. According to Cohen (2017), limitations are potential weaknesses that fall outside the researcher's control. However, the pandemic limitations had an opposite effect on P2 and P3's businesses. Instead of affecting P2 and P3 negatively, limitations helped increase the business' electronic footprint, increasing market share and acquiring new customers. P2 stated, "we were able to create a greater online presence because of the pandemic since many of our clients were now looking for services online and avoiding face to face contact."

Cascon-Pereira et al. (2019) stated that innovation is crucial for a company's survival, and it is a highly valuable competency that helps businesses adapt to a rapidly evolving business environment. P3 described that when they launched their business, they were not set up for virtual management. P3 learned how to manage the business

from a virtual platform solely because of the pandemic. P3 also implemented local no-touch delivery for their smoked meat business to meet safety guidelines. The pandemic limitations also led to them adding more products to the menu, such as desserts and beef jerky, which allowed them to explore out-of-state mail orders, expanding the business outside of the local area as a result. P3 asserted, "we would have never expanded our product line as fast as we did if we did not have a need and customers created that need for us." P3 manages all orders through Facebook Messenger, Instagram, phone, text, or email, but acknowledged their business could not detach entirely from the face-to-face interaction. P3 described that part of the marketing strategy involved a tasting portion, which they could not eliminate despite the pandemic restrictions. However, they stated that they could deliver smoked meat samples per request without offering tasting parties to gain more customers.

Rogers's DOI theory stated that customer perceptions affect innovation acquisition rates and the marketing channels used. P4 explained how their business became a need due to the pandemic limitations and safety concerns. Keränen et al. (2021) determined that a solution to value creation is to adapt the business strategy, the business model, and industry value networks to help diffuse an innovation. P4 said they benefited from public safety concerns because the pandemic restrictions helped narrow down the market niche. P4 decided to offer personalized grooming services to people with pets and could not go into public chain grooming salons to minimize exposure. The strategy allowed them to control the workload they could manage. P4 relied heavily on eWOM as a marketing tool on social media platforms to make the business known, especially to

know who the target market was. P4 preferred pets with anxiety issues that would already have difficulty going to a bigger grooming salon. P4 said, "We started this side business because we had a bad experience with pet grooming chain salons. They just don't have the time to gain pets' trust like we do". P4 took time to learn how to deal with pets who had experienced trauma and found ways to meet them at "pet level" to make them feel safe when they received grooming services.

Emergent Theme 2: Collaboration

The second emergent theme was collaboration. In this section, I tied the second emergent theme of collaboration to the conceptual framework. In this section, I also explained the participants' perceptions of crowdsourcing and collaboration. The theme of collaboration has four subsections: (a) crowdsourcing, (b) growth, (c) networking, and (d) social media platforms.

Crowdsourcing

Among other benefits, collaboration platforms like crowdsourcing allow business owners to achieve value creation through community support. Cheng et al. (2019) noted that crowdsourcing platforms increased popularity over time, allowing continuous interaction between platforms, sponsors, and participants. Four out of five participants (P1, P3, P4, and P5) identified crowdsourcing as a concept but used the term collaboration instead. One out of five participants, P2, was thoroughly familiar with crowdsourcing as a term and its applications. P2 stated, "Getting involved with collaborations, crowdsourcing, and partnerships is by far the most efficient way to ensure longevity in any space." P2 was also extremely comfortable using the term without

hesitation throughout the interview, while P1, P3, P4, and P5 were not. It is important to note that P2 was the biggest small business owner among all five participants.

All five participants agreed collectively that crowdsourcing had changed the way they do business because, through collaborations, they had become more competitive against more prominent companies within their market. Larson-Garcia (2017) noted that crowdsourcing allows the free flow of information shaping products and services to provide real value to consumers. P1 stated, "social media groups have made a big difference in my marketing approach because a lot of referrals come from there." All participants acknowledged that crowdsourcing platforms allowed them to manage and increase an online presence. Participants also took advantage of the free flow of information through social media platforms to reach consumers who would not have reached through traditional advertising channels. P4 mentioned:

> Every time we have the chance, we post before and after pictures of our work, so people can see what we do. It has been a game changer because now we have visuals that get passed around through social media platforms.

As Peisl et al. (2016) discovered, crowdsourcing allows large groups of people to connect, contribute, and collaborate through virtual worlds in a platform where diverse collective intelligence merges. Since the inception of the internet, business environments have become more dynamic, enabling crowdsourcing to become a part of the core of business operations. All five participants acknowledged that without customers' direct input, they would not have met their needs or improved the services they offer to find their niche market. P1 noted, "it has been helpful to have a social media page because

customers leave comments and feedback others can read. That's how I get more business". However, participants' focus was on business expansion and survival; therefore, competing against corporations within their markets was the goal behind the customer-focused strategies implemented.

Growth

Participants who were interviewed for this study recognized that without business growth, they had no success. According to Malhotra et al. (2017), business growth leads to job creation. Whether that growth is gradually monitored and managed, based on business owners' capacity to perform the services they offer, or if growth is rapid and continuously progressive, growth is vital to business owners. As participants developed new products, services, or a way to deliver both, they became more competitive. P4 described, "the pandemic restrictions helped us explore new areas of the business, and that is how we developed new products and a new delivery system that we are going to continue to offer even after the pandemic." P5 said, "my business is growing, and now I need help. I had to hire an IT expert to help me manage my website because what I need is outside of what I know". Business growth and job creation are among the benefits all five participants experienced after implementing crowdsourcing in their daily operations.

Networking

An essential element of collaboration, either virtual or face-to-face, can be neglected by many small business owners. Rouse (2011) described collaboration platforms as business software used by online communities to broaden their networking capacity. All five participants claimed their businesses relied heavily on mostly virtual

networking due to the pandemic. eWOM is a common way all five participants apply

crowdsourcing to increase exposure and define their niche market. Businesses also must

identify the best way to spread their innovations through members of a social system

(Rogers, 2003). Once a social network accepts a product or service, increased market

share is the resulting outcome. All participants also acknowledged that most of their

clients were referrals from previous customers or people who knew someone they had

worked with in the past. Participants added that they rarely helped customers who

randomly found their business on a social media or collaboration platform. Interviewed

participants used their social networks and their customers' social networks to increase

market share. It is important to note that all participants needed visuals to acquire more

customers and expand their business. Without visuals of the services and products they

offer, expansion and growth would not have been possible, especially during the

pandemic.

P1 uses networking through virtual groups found in social media platforms to

promote their cosmetology services. P1 receives many referrals from former customers

and other small business owners from groups they belong to. P1 shared, "customer

referrals are how my business grows." P2 resorts to virtual networking with first- and

second-year medical students to become a study resource for them and those who come

after them. However, P2 also uses affiliates to expand business while improving the

quality of the services P2 offers. P2 stated, "we market through the university student

base, and by offering a discount, it helps attract customers." P3 resorts to networking to

increase referral base by attending virtual wedding shops. P3 also relies on family and

friends' social media accounts to help them recommend their business. P4 relies on social media platform referrals. P4 explained that their grooming business relies on visuals, so they always ask for pictures and feedback on social media to show the work performed. P5 has built networking relationships with the organizations that help and support minority groups. P5 has benefited from social media platform groups and feedback encouraging customers to post online for others to see.

Social Media Platforms

Social media platforms are part of the last couple of decades' technological advancements, whose usage and applicability have increased over the years, primarily because of the pandemic restrictions. Burgess et al. (2017) suggested that the DOI theory's approach helps identify influential factors that affect adoption decisions and challenges that may prevent any innovation's adoption. If the pandemic had not affected how we interact, many businesses, especially small businesses, would have probably never transitioned into incorporating social media platforms and crowdsourcing into their business models. All participants' businesses benefited from the utilization of social media platforms. Social media platforms have helped with free publicity, referrals, and providing direct contact with consumers. Rogers (1962) indicated that adoption challenges are always present because it is not always easy to fully understand human intuition and its drivers and how they affect innovation adoption or rejection. However, external factors like the pandemic can help overcome those adoption challenges. In the case of social media platforms, in relation to crowdsourcing, accelerate its usage and applicability within business operations.

An innovation's adoption successfully occurs when it counts on the right elements and conditions within a social structure to help its diffusion. Schumpeter (1934) focused on how government intervention affects the social climate and private enterprise innovation. As the pandemic expanded, government intervention implementing limitations to how we interact with one another became official, affecting the social climate by limiting face-to-face interaction, forcing businesses of all sizes to find innovative ways to maintain relevance in the markets. It is important to note that Schumpeter viewed innovation as a particular part of the economic process and business activity. The pandemic limitations established by the government and the CDC to limit exposure to the COVID-19 virus and to eliminate its continuous diffusion has created an innovation-driven climate among businesses that needed to adapt to survive. Social media platforms have developed tools geared towards virtual socialization to keep up with the unforeseen climate changes resulting from the pandemic.

As Christensen's (1997) disruptive innovation theory pointed out, proper conditions are needed in developing and underdeveloped countries to allow innovations to grow from extreme poverty, scarcity, and greater need. As P3 could use the pandemic restrictions to expand their products line, many businesses could benefit from such difficult conditions to innovate and grow. Social media platforms and other crowdsourcing initiatives have become more relevant because of the greater need to compensate for the inability to socialize in person. P1 stated, "even though we are not able to see people face to face, we do socialize through social media platforms, and that helps us avoid isolation." Anthony and Christensen (2005) added that some innovations

create new markets while others reshape prevailing markets. In the case of social media

platforms concerning crowdsourcing, even though both already existed as a socialization

and resource tool, sometimes free and available to all on the internet. As innovations,

they helped reshape prevailing markets because of the pandemic restrictions, increasing

their utilization and applicability across the masses who had internet access and the need

to maintain business as usual.

Emergent Theme 3: Marketing

The third emergent theme was marketing. In this section, I tied the third emergent

theme of marketing to the conceptual framework. The theme of marketing has two

subsections: (a) eMarketing and (b) traditional marketing.

eMarketing

Social media marketing, also known as eMarketing, is applied by all five

participants through crowdsourcing platforms. Pasquier et al. (2019) stated that the

internet affected the incremental adoption of innovative practices toward a collaborative

culture. At the same time, Verma and Yadav (2021) studied how sharing information

through a message with credibility and content influences a positive eWOM. P1 stated

they heavily rely on eWOM to expand the clientele and to advertise a business. P1 said,

"my business is referral based, so it is important for me to keep customers happy so that

they can refer me to their family members or friends." Visuals are vital for her business;

therefore, P1 always asks clients to take pictures of their work to post on social media

platforms. P1 took the initiative to research virtual groups that aligned with the business

and business purpose to join. P1 currently belongs to several social media groups on

Facebook, where referrals and support as a small business owner occur.

P1 also participates in virtual events that allow for business expansion, but

overall, claimed the biggest publicity comes from eWOM in the form of clients' virtual

referrals. Fan et al. (2013) identified how participants allocated their attention and interest

based on consumer attitudes and decision-making processes directly impacted by a

product's message content. Rogers's (2003) DOI theory describes how innovation

adoption occurs based on customers' feedback and perceptions. P1 recognized that it

would not have built a customer base quickly without the client's referrals when deciding

to launch the hair salon. P1 acknowledges eWOM was crucial for business growth and

success since the business is the livelihood and full-time job. It is important to note,

social media marketing for P1 was more than a pandemic limitation adjustment. For P1,

eWOM was how P1 socialized with their clients and other community members before

the pandemic; therefore, transitioning into eMarketing as a business owner only made

sense.

Fan and Miao (2012) observed that through eWOM, consumers become more

active at different stages of the innovation process. P2 shared that their business is virtual

in most accounts; therefore, eMarketing was incorporated from its inception. P2 reached

out to recently graduated medical students through social media groups or other means to

help expand the business. P2 noted, "Our business also relies on customers referrals. Our

focus is first- and second-year medical students who recommend our studying aids to

their friends and classmates". Since P2 provides online support and resources for first-

and second-year term medical students, it was crucial for P2 that he found a way to show their product to the right population. P2 reached its target audience through affiliations with universities all over the world. P2 also advertised through the university directly to their student base. One option for P2 concerning acquiring new customers was offering discounts to students who signed up through the university.

Regarding funding, Grewal-Carr and Bates (2016) claimed that companies of all sizes could tackle a wide range of challenges while increasing innovation and revenue through crowdsourcing. P2 stated that they reached out directly to single investors interested in funding their company in exchange for ownership in the beginning. P2 described, "Initially, we went directly to a single investor that was interested in funding the company in exchange for equity. Now we have funding from different sources". However, P2 expanded through alliances, strategic partnerships, and other collaboration initiatives like crowdsourcing as the business grew. P2 added that regular face-to-face marketing and business negotiations are never eliminated from P2's business operations because relationships are built and endured in many ways. For their business, the virtual component is only an element. It is worth noting that P2 was the biggest small business that participated in this research study, and P2 was entirely dedicated to making their business grow at a sustainable pace long term.

P3, P4, and P5 all used virtual groups found in social media platforms to advertise their businesses and become known and gain more customers relying on their clients sharing positive feedback. Rogers's (1962) DOI theory helped businesses tailor innovation diffusion strategies to consumers' wants and needs based on direct

stakeholder input. The three business owners made an essential point that they all use eMarketing to better control their workload and workflow. P4 noted:

> We actually care about your animal, and we'll listen to you. This is why I specialize and take care of pets who suffer from anxiety or other issues that make it hard to gain trust. We hope to pass this message through referrals on social media, so people know we care.

The reason behind this point is that eMarketing gave them the flexibility of removing or stopping their business advertising at any point in time, something they could not necessarily have control over with traditional marketing (i.e., business cards, flyers, etc.). It was crucial for P3, P4, and P5 to manage their time and other responsibilities effectively and efficiently without neglecting themselves or their families.

All these three business owners had other jobs aside from owning these companies. P3 stated, "we have a full-time job; this is a side and seasonal business for us." P4 said, "our business is entirely seasonal because we have other businesses, we run on a full-time basis, plus we are college students." P5 noted, "I work for several companies, but I always wanted to be a business owner, so this is an additional source of income for my family." Cascon-Pereira et al. (2019) noted that as the marketplace continually changes, the way businesses interact with their customers is also affected.

Consequently, businesses must track and interpret engagement patterns and apply them to their everyday processes when innovating (Youngs & Graf, 2017). All three participants acknowledged that social media marketing allowed them to manage their time better and meet the needs of their businesses. All three participants wanted to

continue running their businesses and help them grow, but they could not sustain their

businesses growing too fast; consequently, controlling the pace of growth is essential for

business success.

Traditional Marketing

Regarding traditional marketing, P1, P2, P3, and P5 acknowledged resourcing to

publicity through printed means like business cards, flyers, and forms with their business

logo to help identify their businesses through visual means. However, they did not rely on

traditional marketing as the primary source of social involvement. All participants

acknowledged that taking part in large media campaigns is generally too expensive for

them. According to Vernuccio (2014), social media is, in many instances, a neglected

tool that can be impactful on a business brand by reducing traditional marketing costs and

increasing business leads. P1, P2, P3, and P5 relied on some traditional marketing to

commercialize their products and services, in addition to maintaining a solid virtual

presence through crowdsourcing platforms. However, P4 did not use any traditional

marketing for advertising their business because P4 intended to maintain complete

control of how many clients they could handle since this was not the primary source of

income but a seasonal business for the present time. P4 said, "why spend money printing

flyers when I have social media platforms where I can publish pictures and interact with

my customers for free."

Rogers (1962) stated that customers' perceptions of an innovative product or

service affect the innovation adoption rates, including the marketing channels. Therefore,

if a product is perceived as advantageous by early adopting consumers, the perception

increases the acquisition rate based on positive experiences consumers share about the innovation (Backer & Rogers, 1998). Marketing is an essential tool used in business to help commercialize a product or a service. Small businesses can now resource eWOM and WOM, among other strategies, to involve social interaction and increase competitiveness against larger organizations (Taheri et al., 2021; Verma & Yadav, 2021). Since utilizing large social media campaigns can be expensive, small business owners greatly benefit from social media exposure, which can be budget-friendly or free of cost in most instances if business owners choose to only rely on social media platforms and eWOM.

Applications to Professional Practice

The research findings led to three major themes that emerged from the data: (a) business strategy with seven subthemes: adaptability, barriers, experience, flexibility, learning process, risk, and safety; (b) collaboration with four subthemes: crowdsourcing, growth, networking, and social media platforms, and (c) marketing with two subthemes: eMarketing and traditional marketing. Rogers's DOI theory reveals that crowdsourcing might be an effective way to help small businesses increase innovation and revenue, but not exclusively. The study's findings used the DOI theory constructs to understand whether crowdsourcing is the right tool to help diffuse innovation as a business tool that creates brand loyalty. The objective is to develop a long-term relationship with the customer, so they come back for more. The applicability of the findings from this study may positively influence small business owners' competitiveness by successfully implementing crowdsourcing initiatives to increase innovation and revenue.

Wang et al. (2018) identified the DOI theory as an exploratory framework to help business owners mitigate uncertainty while addressing users' concerns when deciding whether to acquire an innovation. The findings portrayed that small business owners can achieve higher market visibility while increasing innovation and revenue through crowdsourcing. However, small businesses cannot eliminate face-to-face interactions with consumers because small business owners rely on body language persuasion, which is a combination of body movements and speech, that when added to emotion, forge a bond (Gladwell, 2013; Nguyen, 2021). Applying the DOI theory to this study helped identify that small business owners cannot eliminate face-to-face interactions because forging a strong bond with their customers is essential to building long-lasting relationships.

The applicability of the findings to business practice also lays out that businesses must identify the best way to spread their innovations through members of a social system, whether these are identified as prosumers or consumers (Botelho et al., 2021 & Rogers, 2003). The study's findings have shown that small business owners may have been successful at expanding their virtual footprint by networking through online communities that helped broaden their network capacity. Crowdsourcing initiatives may positively influence business competitiveness by establishing communication networks where virtually interconnected individuals serve as connectors, which influence their social network and help diffuse an innovative product or service (Keränen et al., 2021; Rogers, 2003). eWOM is a strategy participants of this study used to increase market

share. Using visuals of the products or services participants offer provided credibility and content to the crowds, which received positive feedback resulting in referrals.

Current small business owners may find this study's findings helpful when deciding if incorporating crowdsourcing initiatives into their business operations will increase innovation and revenue. The results of this research study revealed that even though we live in a virtual-driven world, human interaction is still an essential piece to every successful business story, where businesses need to connect with consumers at the emotional and personal level (Akubia, 2021). For small business owners, mitigating uncertainty is also crucial for their survival (Rogers, 2003). Through virtual crowds, small business owners can obtain direct input from customers regarding their needs and wants and how to meet them (Christensen, 1997). Lastly, the study has shown that social networks, whether virtual or traditional, always have people known as connectors who influence their social networks by spreading the word about an innovation. Taheri et al. (2021) said WOM is viewed as the most crucial customer acquisition method. Therefore, persuading connectors to reach the crowds is vital because it is through WOM that we tend to be more responsive when communicating with one another.

Implications for Social Change

A qualitative research study is meaningful regarding social change because small business owners can use the findings to implement successfully crowdsourcing into their business operations to increase innovation and revenue while making a difference. Implications for positive social change include the opportunity to help business owners become more competitive when innovating and developing new products and services,

thereby allowing for business growth and job creation (Malhotra et al., 2017). According to Xu et al. (2015), business leaders use crowdsourcing as a collaborative-based concept to overcome resource boundaries, helping business leaders access value generated through a crowd of volunteers. Enabling small business owners to become prosperous to support their communities was the goal of this research study.

The research study helped identify proper strategies that may increase productivity and organizational effectiveness. It is important to note that innovative business leaders allow social entrepreneurship to address social needs (Candi et al., 2018). The potential for social change rests in developing strategies to improve crowdsourcing's integration into business operations. Business owners who obtain financial success can potentially influence a business' ability to increase employment opportunities within their communities. Business owners who achieve financial success could also donate to various community-based organizations to benefit disadvantaged citizens or organizations who support them (Ijon et al., 2021). Among other benefits applicable to social change include the ability of a business to expand operations remotely to use innovations to assist economies while promoting growth. Overall, small business progress can also enhance social change through sustainable growth in Northern Utah, contributing directly and indirectly to local and international economies.

Recommendations for Action

Small businesses are a vital contributor to the economy, and they represent 99.9% of all businesses in the United States (SBA, 2019). Small businesses play an essential role in job creation, implementing innovative business practices, increasing productivity and

organizational effectiveness. In collaboration platforms like crowdsourcing, users who come together possess the specialized knowledge of needs (Chesbrough, 2007) and latent needs (Wang et al., 2021). Crowdsourcing allows the free flow of information to shape new products and services in such a way that it provides real value to consumers while fulfilling unmet needs (Larson-Garcia, 2017). The value business owners create through entrepreneurship, innovation, and consumer involvement, whether for product development, innovation, or publicity, is a form of volunteerism to achieve a specific goal (Demiray et al., 2021). Successful business performance allows organizations to help address social needs, ultimately translating into businesses helping communities become more prosperous.

I intend to use the results of this study to provide an insight into the successful integration of crowdsourcing into business operations to increase innovation and revenue. Business leaders can integrate crowdsourcing into business operations and become more competitive within their markets (Malhotra et al., 2017). Business leaders who use crowdsourcing to ensure their innovations meet consumer demands reach larger pools of participants (Kavaliova et al., 2016). Integrating crowdsourcing into a company's business models enables business leaders to interact with the crowds, even when geographically separated (Malhotra et al., 2017). Since the crowds possess diverse knowledge and expertise, all businesses use crowdsourcing to tap into these assets through collaboration initiatives.

According to Blohm et al. (2018), even though crowdsourcing. As a fundamental concept is the same across the board, different types of crowdsourcing platforms exist

depending on the need of the business. Innovation has been necessary for firms' survival and prosperity of all sizes no matter what the industry (Christensen, 1996; & Xianhai & Andrew, 2018). At the end-user level, crowdsourcing has allowed consumers to meet and uncover unmet needs (Wang et al., 2021). Based on research performed for the study, small business owners identified the following as motivators to implement crowdsourcing into business operations: (a) to apply collaboration initiatives to compensate for weaknesses or shortcomings identified within their business models, (b) to increase market share based on social media platforms exposure that led to referrals, (c) to define their niche market and frame their business strategy, and (d) to help maintain control over the business through workload/crowd control.

Current small business owners, entrepreneurs, or those considering starting their own business should consider this study's findings because they can benefit from accessing the virtual space and crowds of people through crowdsourcing initiatives. Small business owners could expand their businesses' footprint into the virtual world, increasing their ability to compete against bigger businesses. Implementing crowdsourcing initiatives into business operations may also lead small business owners to increase their ability to obtain direct input from the consumer, allowing them to meet unmet needs and discover wants (Malhotra et al., 2021). Small business owners must understand the way social networks work and the importance of identifying connectors within a social network (Gladwell, 2013). Social networks and connectors, added to positive WOM and visuals, may increase innovation and revenue in the form of referrals.

My goal is to make this study's findings available to as many people as possible interested in improving their business operations, growing their businesses, or establishing their own business. I intend to reach some of these potential parties, including the local area Chamber of Commerce, the SBA, and local small business owners looking to understand the benefits of implementing crowdsourcing into their business operations. In addition, I intend to publish the findings in various business, scholarly journals, and research databases such as ProQuest, where the research study will be available for students pursuing business degrees at community colleges or other learning institutions.

Recommendations for Further Research

The results of this study include strategies small business owners use to implement crowdsourcing initiatives to increase innovation and revenue. Limitations are known as potential weaknesses that fall outside the researcher's control (Cohen, 2017). In this qualitative multiple case study, the primary limitation was the meeting restrictions due to COVID-19. I performed the interviews through Zoom. However, face-to-face interviews would have allowed me to watch participants' body language to a much deeper level. Zoom was limited to only seeing what they allowed me to see through Zoom during the call.

Another limitation was that participants who met the study's requirement did not meet in a specific location to contribute to this research study due to current COVID-19 limitations. At the beginning of the research study, the intent was to meet with participants and perform the interview in their chosen location. I also had planned to

interview over coffee or a meal to set the tone for the interview; however, plans changed due to pandemic restrictions. Data collection was not challenging. I was limited to what participants had disclosed online about their businesses since we could not meet in person for the interviews; they could not provide me with much physical marketing material to review.

The final limitation was that results transferability would not apply to all small businesses in Utah. Expanding the geographical location beyond Northern Utah may shift the research findings. Future research needs to be conducted by applying other research methodologies and designs to expand the body of knowledge on this topic. Future research could also focus on studying the impact of crowdsourcing on small businesses regarding a particular industry. Other researchers could also consider increasing the sample size and choosing a different innovation theory to complement this study's findings. Researchers could also conduct a similar study focusing solely on franchises and compare findings.

Reflections

My experience within the Doctor of Business Administration (DBA) program at Walden University has been challenging in many ways but extremely rewarding. I have obtained skills along the way that complement both my civilian and military careers. Being bicultural and bilingual have benefitted me throughout this journey because I have maintained an open mind and a flexible approach to every challenge. The cultural clash I experienced when moving to the U.S. from Peru has given me the tools I needed never to give up, no matter how difficult this so-called life-work balance became. I have

continued my educational journey through emotional storms, deployment (OIF II), service in the Army, the Air Force, job changes, motherhood, and other life events one does not choose to face. I have also experienced school and program changes due to circumstantial events that led to a transfer, which is how I made it to Walden University.

Performing the research and writing the doctoral study has been very insightful experiences thus far. My knowledge of the business world, especially small businesses, has expanded. My appreciation and understanding of what small business owners do to run their businesses and their contributions to our economy have increased. Conducting this research study has allowed me to witness over the years crowdsourcing grow from being a concept to its integration with our daily lives as virtual worlds became popular.

Writing this doctoral study during the COVID-19 pandemic has widened my perspective. I recognize that enduring the pandemic limitations and restrictions would have been much harder without innovations like the internet or technological developments like mobile technology. Crowdsourcing has entered the business world as an innovation tool or strategy, but it has entered our daily lives to change the way we interact with each other. Crowdsourcing has increased communication among users no matter where we are, what language we speak, or what time zone we are located. Crowdsourcing has brought us closer together in a virtual space we may not have expected to be a part of. It has taught us the many benefits of working in a collaborative environment instead of working alone. The statement "when great minds come together, great things might happen" is true. We just need to make it happen.

The study's participants were five successful small business owners who have incorporated crowdsourcing initiatives into their business operations to increase innovation and revenue. All participants who voluntarily agreed to participate in this research study expressed they were happy to be a part of the study. Participants of this study were excited to contribute what they knew to help other small business owners succeed through crowdsourcing potentially. After completing the study, I am looking forward to practicing what I have learned and my acquired experience throughout this journey with Walden University. I am looking forward to hearing that someday, my study findings helped to make a difference.

Conclusion

The purpose of this qualitative, multiple case study was to explore strategies business leaders use to successfully integrate crowdsourcing into business operations to increase innovation and revenue. The primary data consisted of five semi structured interviews I conducted through an online Zoom platform called Zoom. I opted for an online interview to adhere to federal and state meeting restrictions, limiting face-to-face contact due to COVID-19. Secondary data collection consisted of company websites, Google searches, flyers, and readily available printed and online material. I also took field notes when identifying findings and drawing conclusions. Fusch and Ness (2015) stated that saturation is reached when information becomes repetitive. I reached data saturation when information became repetitive, and no additional information was available to answer the research question. In addition, I applied member checking to strengthen my research study's credibility.

The main three themes emerged from the research findings after I coded and analyzed the data. I associated the analysis of each emergent theme back to the literature and the conceptual framework. My study's findings were clear, suggesting that: (a) business strategy, (b) collaboration, and (c) marketing are elements participants I interviewed had in common regarding crowdsourcing application within small business operations. Future research is needed in crowdsourcing and how it can help small businesses become competitive.

References

Abdul, B. S. (2021). The effect of external knowledge sources on organizational innovation in small and medium enterprises in Germany. *Business Systems Research*, *12*(1), 60–79. https://doi-org/10.2478/bsrj-2021-0005

Akdere, Ç., & Benli, P. (2018). The nature of financial innovation: A post-Schumpeterian analysis. *Journal of Economic Issues*, *52*(3), 717–748. https://doi.org/10.1080/00213624.2018.1498717

Akubia, Y. M. (2021). *Investigating the hotel reception experience in a developing country context: a stakeholders' perspective from Ghana: A thesis submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy at Lincoln University* [Doctoral dissertation, Lincoln University].

Alam, S. S., Omar, N. A., Mohd Ariffin, A. A., & Nik Hashim, N. M. H. (2018). Integrating TPB, TAM and DOI theories: An empirical evidence for the adoption of mobile banking among customers in Klang Valley, Malaysia. *International Journal of Business & Management Science*, *8*(2), 385–403.

Albors, J., Ramos, J. C., & Hervas, J. L. (2008). New learning network paradigms: Communities of objectives, crowdsourcing, wikis, and open source. *International Journal of Information Management*, *28*(3), 194–202. https://doi.org/10.1016/j.ijinfomgt.2007.09.006

Ali, B. J., & Anwar, G. (2021). The balanced scorecard's evolution as a strategic mechanism at banking sectors. *International Journal of English Literature and Social Sciences*, *6*(1), 471–478. https://doi.org/10.22161/ijels.61.63

Allen, R. (2018). *Strategies for integrating and sustaining disruptive innovations in small businesses* [Doctoral dissertation, Walden University]. ScholarWorks.

Arocena, R., & Sutz, J. (2021). Universities and social innovation for global sustainable development as seen from the south. *Technological Forecasting & Social Change*, 162.

Avidar, R. (2017). Public relations and social businesses: The importance of enhancing engagement. *Public Relations Review*, *43*(5), 955–962. https://doi.org/10.1016/j.pubrev.2017.03.015

Backer, T. E., & Rogers, E. M. (1998). Diffusion of innovations theory and work-site AIDS programs. *Journal of Health Communication*, *3*(1), 17–28. https://doi.org/10.1080/108107398127481

Barrena-Martínez, J., Cricelli, L., Ferrándiz, E., Greco, M., & Grimaldi, M. (2020). Joint forces: Towards an integration of intellectual capital theory and the open innovation paradigm. *Journal of Business Research*, *112*, 261–270. https://doi.org/10.1016/j.jbusres.2019.10.029

Beausoleil, A. M. (2018). Revisiting Rogers: The diffusion of his innovation development process as a normative framework for innovation managers, students, and scholars. *Journal of Innovation Management*, *6*(4), 73–97. https://doi.org/10.24840/2183-0606_006.004_0006

Becker, M., Knudsen, T., & Swedberg, R. (2012). Schumpeter's theory of economic development: 100 years of development. *Journal of Evolutionary Economics*, *22*, 917–933. https://doi.org/10.1007/s00191-012-0297-x

Blohm, I., Leimeister, J. M., & Krcmar, H. (2013). Crowdsourcing: How to benefit from (too) many great ideas. *MIS Quarterly Executive*, *12*(4), 199–211.

Blohm, I., Zogaj, S., Bretschneider, U., & Leimeister, J. M. (2018). How to manage crowdsourcing platforms effectively? *California Management Review*, *60*(2), 122–149. https://doi.org/10.1177%2F0008125617738255

Bloomfield, J., & Fisher, M. J. (2019). Quantitative research design. *Journal of the Australasian Rehabilitation Nurses' Association (JARNA)*, *22*(2), 27–30. https://doi-org/10.33235/jarna.22.2.27-30

Blumberg, P. (2016). Factors that influence faculty adoption of learning-centered approaches. *Innovative Higher Education*, *41*(4), 303–315. https://doi.org/10.1007/s10755-015-9346-3

Bogers, M., Chesbrough, H., & Strand, R. (2020). Sustainable open innovation to address a grand challenge: Lessons from Carlsberg and the green fiber bottle. *British Food Journal*, *122*(5), 1505–1517. https://doi.org/10.1108/BFJ-07-2019-0534

Botelho, D. F., Dias, B. H., de Oliveira, L. W., Soares, T. A., Rezende, I., & Sousa, T. (2021). Innovative business models as drivers for prosumers integration: Enablers and barriers. *Renewable and Sustainable Energy Reviews*, *144*, 1–25. https://doi.org/10.1016/j.rser.2021.111057

Bouncken, R. B., Qiu, Y., Sinkovics, N., & Kürsten, W. (2021). Qualitative research: extending the range with flexible pattern matching. *Review of Managerial Science*, *15*(2), 251-273. https://doi.org/10.1016/j.jmsy.2020.10.010

Burgess, S., Sellitto, C., Cox, C., Buultjens, J., & Bingley, S. (2017). An innovation

diffusion approach to examining the adoption of social media by small

businesses: An Australian case study. *Pacific Asia Journal of the Association for

Information Systems, 9*(3), 1-23. https://doi.org/10.17705/1pais.09301

Busarovs, A. (2011). Crowdsourcing as a user-driven innovation: New business

philosophy's model. *Journal of Business Management*, *4*, 53-60.

Candi, M., Melia, M., & Colurcio, M. (2019). Two birds with one stone: The quest for

addressing both business goals and social needs with innovation. *Journal of

Business Ethics*, *160*(4), 1019-1033. https://doi.org/10.1007/s10551-018-3853-y

Carr, S. (2013). Collective action and the financing of innovation: Evidence from

crowdfunding. *Darden Business School Working Paper No. 2450510.*

https://doi.org/10.2139/ssrn.2450510"10.2139/ssrn.2450510

Carr, S. D. (2013). *Collective action and the financing of innovation: Evidence from

crowdsourcing* [Doctoral dissertation, Colorado University]. Leeds Faculty.

https://leeds-faculty.colorado.edu/Bhagat/CollectiveAction-CrowdFunding.pdf

Carter, N., Bryant-Lukosius, D., DiCenso, A., Blythe, J., & Neville, A. J. (2014). The use

of triangulation in qualitative research. *Oncology Nursing Forum*, *41*(5), 545–

547. https://doi.org/10.1188/14.ONF.545-547

Casadella, V., Uzunidis, D., & Liu, Z. (2015). *Innovation capabilities and economic

development in open economies*. Wiley-ISTE.

Cascon-Pereira, R., Moral Martín, J. D., & Brunet Icart, I. (2019). An exploration of the

meanings of innovation held by students, teachers, and SMEs in Spain. *Journal of

Vocational Education and Training, 71(4), 623-644.

https://doi.org/10.1080/13636820.2019.1575894

Chang, L.-C., Wang, X., Zhang, S.-Q., Chen, C.-B., Yuan, Z.-H., Zeng, X.-J., Chu, J.-Q.,
& Tsai, S.-B. (2021). User-driven business model innovation: an ethnographic
inquiry into Toutiao in the Chinese context. *Asia Pacific Business Review*, *27*(3),
359–377. https://doi-org/10.1080/13602381.2021.189549

Cheng, X., Gou, Q., Yue, J., & Zhang, Y. (2019). Equilibrium decisions for an innovation
crowdsourcing platform. *Transportation Research Part E, 125*, 241-260.

https://doi.org/10.1016/j.tre.2019.03.006

Chesbrough, H. (2004). Managing open innovation. *Research Technology Management,
47*(1), 23-26. https://doi.org/10.1080/08956308.2004.11671604

Chesbrough, H. W. (2003). The era of open innovation. *MIT Sloan Management Review,
44*(3), 35-41.

Chesbrough, H. W., & Appleyard, M. M. (2007). Open innovation and strategy.
California Management Review, *50*(1), 57-76.

https://doi.org/10.2307%2F41166416

Christensen, C. (1997). *The innovator's dilemma. When new technologies cause great
firms to fail*. Harvard Business School Press.

Cleary, M., Horsfall, J., & Hayter, M. (2014). Data collection and sampling in qualitative
research: Does size matter? *Journal of Advanced Nursing, 70*(3), 473-475.

https://doi.org/10.1111/jan.12163

Cohen, M. (2017). *Crowdfunding as a financing resource for small businesse*s [Doctoral dissertation, Walden University]. ScholarWorks.

Cope, D. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum*, *41*(1), 89–91. https://doi.org/10.1188/14.ONF.89-91

Crosscombe, N. (2018). Innovation. *Brock Education: A Journal of Educational Research and Practice, 27*(2), 48-52. https://doaj.org/toc/2371-7750

De Massis, A., & Kotlar, J. (2014). The case study method in family business research: Guidelines for qualitative scholarship. *Journal of Family Business Strategy, 5*(1), 15-29. https://doi-org/10.1016/j.2014.01.007

Demiray, M., Burnaz, S., & Li, D. (2021). Effects of institutions on entrepreneurs' trust and engagement in Crowdfunding. *Journal of Electronic Commerce Research*, *22*(2), 95-109. Title of Paper (jecr.org)

Estermann, B. (2018). Development paths towards open government: An empirical analysis among heritage institutions. *Government Information Quarterly, 35*(4), 599-612. https://doi.org/10.1016/j.giq.2018.10.005

Fan, Y. W., & Miao, Y. F. (2012). Effect of electronic word-of-mouth on consumer purchase intention: The perspective of gender differences. *International Journal of Electronic Business Management*, *10*(3), 175.

Fields, D. A., & Kafai, Y. B. (2009). A connective ethnography of peer knowledge sharing and diffusion in a tween virtual world. *International Journal of*

Computer-Supported Collaborative Learning, *4*(1), 47-68.

https://doi.org/10.1007/s11412-008-9057-1

Fonseca, J. (2002). *Complexity and innovation in organizations*. Routledge.

https://doi.org/10.4324/9780203164945

Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative

research. *The Qualitative Report*, *20*(9), 1408–1416.

https://doi.org/10.46743/2160-3715/2015.2281

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

Georgantzas, N. C., & Katsamakas, E. (2007). Disruptive innovation strategy effects on

hard-disk maker population: A system dynamics study. *Information Resources

Management Journal (IRMJ)*, *20*(2), 90-107.

https://doi.org/10.4018/irmj.2007040106

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2012). Organizational research.

Organizational Research Methods, *16*(1), 15-31.

https://doi.org/10.1177/1094428112452151

Gladwell, M. (2013). *The tipping point.* Back Black Books/Little, Brown, and Company.

Godin, B. (2006). The linear model of innovation: The historical construction of an

analytical framework. *Science, Technology, & Human Values*, *31*(6), 639-667.

https://doi.org/10.1177/0162243906291865

Gouws, T., & Rheede van Oudtshoorn, G. P. (2011). Correlation between brand longevity and the diffusion of innovations theory. *Journal of Public Affairs, 11*(4), 236-242. https://doi.org/10.1002/pa.416

Grewal-Carr, V., & Bates, C. (2016). The three billion: Enterprise crowdsourcing and the growing fragmentation of work. *Deloitte*, *20*(3), 1-16. https://www2.deloitte.com/Innovation/us-cons-enterprise-crowdsourcing-and-growing-fragmentation-of-work.pdf

Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of Health Care Chaplaincy, 20*, 109-122. https://doi.org/10.1080/08854726.2014.925660

Guy, T. (2019). *Strategies to improve small business sustainability* [Doctoral dissertation, Walden University]. ScholarWorks.

Hadorn, F., Comte, P., Foucault, E., Morin, D., & Hugli, O. (2016). Task-shifting using a pain management protocol in an emergency care service: Nurses' perception through the eye of the Rogers's diffusion of innovation theory. *Pain Management Nursing*, *17*, 80-87. https://doi.org/10.1016/j.pmn.2015.08.002

Harvey, L. (2015). Beyond member-checking: a dialogic approach to the research interview. *International Journal of Research & Method in Education, 38*(1), 23-38. https://doi.org/10.1080/1743727X.2014.914487

Herriott, R. E., & Firestone, W. A. (1983). Multisite qualitative policy research: Optimizing description and generalizability. *Educational researcher*, *12*(2), 14-19. https://doi.org/10.3102%2F0013189X012002014

Howe, J. (2006). *The rise of crowdsourcing*. https://www.wired.com/2006/06/crowds/

Hsiao, K. (2017). What drives smartwatch adoption intention? Comparing Apple and non-apple watches. *Library Hi Tech, 35,* 186-206. https://doi.org/10.1108/LHT-09-2016-0105

Hunt, B. (2011). Publishing qualitative research in counseling journals. *Journal of Counseling & Development, 89*(3), 296-300. https://doi.org/10.1002/j.1556-6678.2011.tb00092.x

Ijon, R., Azman, A., & Jamir Singh, P. S. (2021). Funding sustainability of welfare oriented non-governmental organisations: A brief analysis. *International Online Journal of Language, Communication, and Humanities*, *4*(I), 92-106.

Jacob, S. A., & Furgerson, S. P. (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report, 17*(6), 1-10.

Johnson, V. L., Kiser, A., Washington, R., & Torres, R. (2018). Limitations to the rapid adoption of m-payment services: Understanding the impact of privacy risk on m-payment services. *Computers in Human Behavior, 79*, 111-122. https://doi.org/10.1016/j.chb.2017.10.035

Johnston, J. (2018). *Strategies for new small businesses to be successful beyond 5 years* [Doctoral dissertation, Walden University]. ScholarWorks.

Kaczynski, D., Salmona, M., & Smith, T. (2014). Qualitative research in finance. *Australian Journal of Management*, *39*(1), 127. https://doi.org/10.1177%2F0312896212469611

Kaminski, C. (2020). *Breaking Capitalistic Notions of Resilience: How Individuals without Homes Constitute Resilience through Communication and Community* (Doctoral dissertation, San Diego State University).

Kavaliova, M., Virjee, F., Maehle, N., & Kleppe, I. A. (2016). Crowdsourcing innovation and product development: Gamification as a motivational driver. *Cogent Business & Management*, *3*(1), 1-18. https://doi.org/10.1080/23311975.2015.1128132

Keränen, O., Komulainen, H., Lehtimäki, T., & Ulkuniemi, P. (2021). Restructuring existing value networks to diffuse sustainable innovations in food packaging. *Industrial Marketing Management*, *93*, 509–519. https://doi-org/10.1016/j.indmarman.2020.10.011

Keyhani, M., Neyshabouri, S. M., & Amereii, A. H. (2020). Crowdfunding Canadian Theatre: An exploratory analysis of kickstarter data with U.S. comparison. *Activate: A Journal of Entrepreneurship in the Arts, 9*(1), 99-129.

Kietzmann, J. H. (2017). Crowdsourcing: A revised definition and introduction to new research. *Business Horizons*, *60*(2), 151-153. https://doi.org/10.1016/j.bushor.2016.10.001"10.1016/j.bushor.2016.10.001

Kohler, T., & Chesbrough, H. (2020). Motivating crowds to do good: How to build crowdsourcing platforms for social innovation. *NIM Marketing Intelligence Review, 12*(1), 42-47. https://doi.org/10.2478/nimmir-2020-0007

Korstjens, I., & Moser, A. (2017). Series: Practical guidance to qualitative research. Part 2: Context, research questions and designs. *The European Journal of General Practice*, *23*(1), 274–279. https://doi-org/10.1080/13814788.2017.1375090

Kozan, M. K., & Akdeniz, L. (2014). Role of strong versus weak networks in small business growth in an emerging economy. *Administrative Sciences*, *4*, 35-50. https://doi.org/10.3390/admsci4010035

Kramer, M. R., & Porter, M. (2011). Creating shared value. How to reinvent capitalism and unleash a wave of innovation and growth. *Harvard Business Review,* 1-17. https://www.relativimpact.com/downloads/HBR-Shared-value.pdf

Krstić, M., Skorup, A., & Minkov, Đ. (2016). Application of the evolution theory in modelling of innovation diffusion. *International Review*, *1*, 142-152. https://doi.org/10.5937/intrev1602142K

Kuti, M., & Madarasz, G. (2014). Crowdfunding. *Public Finance Quarterly, 55*(3), 355-366.

Larson-Garcia, C. (2017). Trust triads: Intermediaries and open innovation performance in high-tech firms. In *Seventh International Engaged Management Scholarship Conference.* https://dx.doi.org/10.2139/ssrn.3027099

Li, S. C., & Huang, W. C. (2020). Lifestyles, technology clustering, and the adoption of over-the-top television and internet protocol television in Taiwan. *International Journal of Communication*, *14*, 1-19. https://ijoc.org/index.php/ijoc/article/view/12259

Liu, B. F., Roberts, H., Petrun Sayers, E. L., Ackerman, G., Smith, D., & Iles, I. (2017). Preparing for the worst: public perceptions of risk management innovations. *Journal of Risk Research, 20*(11), 1394-1417. https://doi.org/10.1080/13669877.2016.1153508

Loukis, E., Spinellis, D., & Katsigiannis, A. (2011). Barriers to the adoption of B2B e-marketplaces by large enterprises: Lessons learned from the Hellenic aerospace industry. *Information Systems Management*, *28*(2), 130-146. https://doi.org/10.1080/10580530.2011.562129

Mahto, R. V., Belousova, O., & Ahluwalia, S. (2020). Abundance: A new window on how disruptive innovation occurs. *Technological Forecasting & Social Change, 155*. https://doi.org/10.1016/j.techfore.2017.09.008

Malchow-Moller, N., Schjerning, B., & Sorensen, A. (2011). Entrepreneurship, job creation and wage growth. *Small Business Economics*, *36*(1), 15-32. https://doi.org/10.1007/s11187-009-9173-y"10.1007/s11187-009-9173-y

Malhotra, A., Majchrzak, A., & Niemiec, R. M. (2017). Using public crowds for open strategy formulation: Mitigating the risks of knowledge gaps. *Long Range Planning*, *50*, 397-410. https://doi.org/10.1016/j.lrp.2016.06.004

Malhotra, A., Majchrzak, A., Bonfield, W., & Myers, S. (2020). Engaging customer care employees in internal collaborative crowdsourcing: Managing the inherent tensions and associated challenges. *Human Resource Management*, *59*(2), 121–134. https://doi.org/10.1002/hrm.21952

Mansor, M. F., Halim, H. A., Ahmad, N. H., Abu, N. H., & Kassim, M. A. M. (2021). Profiling crowdsourcing practices trend among SMEs in Malaysia. In *AIP Conference Proceedings*, 2347(1), 020129. AIP Publishing LLC. https://doi.org/10.1063/5.0051822

Mariani, M. M., & Nambisan, S. (2021). Innovation analytics and digital innovation

    experimentation: The rise of research-driven online review Platforms.

    Technological Forecasting & Social Change, *172*, 1-15. https://doi-

    org/10.1016/j.techfore.2021.121009

Marshall, C., & Rossman, G. (2016). *Designing qualitative research* (6th ed.). Sage.

McCusker, K., & Gunaydin, S. (2015). Research using qualitative, quantitative, or mixed

    methods and choice based on the research. *Perfusion, 30*(7), 537-542.

    https://doi.org/10.1177/0267659114559116

Mclver, R. (2019). *Strategies for using information and communication technologies to*

    improve profitability [Doctoral dissertation, Walden University]. ScholarWorks.

Mertens, D.M., Bazeley, P., Bowleg, L., Fielding, N., Maxwell, J., Molina-Azorin, J.F.,

    & Niglas, K. (2016). The future of mixed methods: A five-year projection to

    2020. *Journal of Mixed Methods Research, 11*(1)*,* 1-35.

    https://doi.org/10.1177/1558689816676659

Metcalf, J. (2016). Big data analytics and revision of the common rule. *Communications*

    of the ACM, 59(7), 31-33. https://doi.org/10.1145/2935882

Mitra, D. (2012). The role of crowdfunding in entrepreneurial finance. *Delhi Business*

    Review, *13*(2), 67-72. https://doi.org/10.51768/dbr.v13i2.132201218

Moeller, L., & Valentinov, V. (2012). The commercialization of the nonprofit sector: A

    general systems theory perspective. *Systemic Practice and Action Research*,

    25(4), 365-370.

Mohammadi, M. M., Poursaberi, R., & Salahshoor, M. R. (2018). Evaluating the adoption of evidence-based practice using Rogers diffusion. *Health Promotion Perspectives, 8*(1), 25-32. https://doi.org/10.15171/hpp.2018.03

Moon, K., Brewer, T. D., Januchowski-Hartley, S. R., Adams, V. M., & Blackman, D. A. (2016). A guideline to improve qualitative social science publishing in ecology and conservation journals. *Ecology and Society*, *21*(3), 17. https://doi.org/10.5751/ES-08663-210317

Moon, M. D. (2019). Triangulation: A method to increase validity, reliability, and legitimation in clinical research. *JEN: Journal of Emergency Nursing*, *45*(1), 103-105. https://doi.org/10.1016/j.jen.2018.11.004

Mooney, R. (2016). *Strategies technology development marketing leaders used to commercialize a new product innovation* [Doctoral dissertation, Walden University]. ScholarWorks.

Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research, 2*(3), 192-222. https://doi.org/10.1287/isre.2.3.192

Morse, J. M. (2015). Critical analysis of strategies for determining rigor in qualitative inquiry. *Qualitative Health Research*, *25*(9), 1212-1222. https://doi.org/10.1177/1049732315588501

Mount, M., Round, H., & Pitsis, T. S. (2020). Design thinking inspired crowdsourcing: Toward a generative model of complex problem solving. *California Management Review*, *62*(3), 103-120. https://doi.org/10.1177/0008125620918626

Munn, Z., Porritt, K., Lockwood, C., Aromataris, E., & Pearson, A. (2014). Establishing

confidence in the output of qualitative research synthesis: The ConQual approach.

BMC Medical Research Methodology, *14*(1), 108–114.

https://doi.org/10.1186/1471-2288-14-108

Murphy, E. (2004). Diffusion of innovations: Family planning in developing countries.

Journal of Health Communication, 9, 123-129.

https://doi.org/10.1080/10810730490271566

Murphy, M. K., Burke, P. J., & Haider, S. (2017). A qualitative application of diffusion

of innovations to adolescents' perceptions of long-acting reversible

contraception's attributes. *Journal of Pediatric and Adolescent Gynecology,*

30(4), 484-490. https://doi.org/10.1016/j.jpag.2016.11.005

Muskat, E., & Sylvester, D. (2012). Being disruptive: How open growth is delivering

effective social change at a fast pace. *Technology Innovation Management*

Review, 2012, 16-20.

Nguyen, H. (2021). The (great) persuasion divide? Gender disparities in debate speeches

and evaluations. *Huyenttnguyen Research*, 1-109.

https://extranet.sioe.org/uploads/sioe2021/nguyen.pdf

Noble, H., & Smith, J. (2015). Issues of validity and reliability in qualitative research.

Evidence Based Nursing, *18*(2), 34–35. http://dx.doi.org/10.1136/eb-2015-102054

O'Reilly, P., & Cunningham, J. A. (2017). Enablers and barriers to university technology

transfer engagements with small-and medium-sized enterprises: Perspectives of

principal investigators. *Small Enterprise Research*, *24*(3), 274-289.

https://doi.org/10.1080/13215906.2017.1396245

Özdemir, V., Faris, J., & Srivastava, S. (2015). Crowdfunding 2.0: the next-generation

philanthropy: a new approach for philanthropists and citizens to co-fund

disruptive innovation in global health. *EMBO Reports, 16*(3), 267-271.

https://doi.org/10.15252/embr.201439548

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K.

(2015). Purposeful Sampling for Qualitative Data Collection and Analysis in

Mixed Method Implementation Research. *Administration and Policy in Mental*

Health and Mental Health Services Research, *42*(5), 533–544. https://doi-

org/10.1007/s10488-013-0528-y

Paquette, E. T., & Ross, L. F. (2015). Consent Is the Cornerstone of Ethically Valid

Research: Ethical Issues in Recontacting Subjects Who Enrolled in Research as a

Minor. *American Journal of Bioethics*, *15*(10), 61–63. https://doi-

org/10.1080/15265161.2015.1075800

Pashaeypoor, S., Ashktorab, T., Rassouli, M., & Alavi-Majd, H. (2016). Predicting the

adoption of evidence-based practice using "Rogers's diffusion of innovation

model." *Contemporary Nurse*, *52*(1), 85–94.

https://doi.org/10.1080/10376178.2016.1188019

Pasquier, T., Eyers, D., & Bacon, J. (2019). Personal data and the internet of

things. *Communications of the ACM*, *62*(6), 32–34. https://doi-

org/10.1145/3322933

Pavie, X., Hsu, E., Tillman Rodle, H., & Orozco Tapia, R. (2013). How to define and analyze business model innovation in service. *Research Center ESSEC Business School,* 1-32. https://doi.org/10.2139/ssrn.2370384

Peisl, T., Selen, W., & Raeside, R. (2016). Predictive crowding and disruptive innovation: How to effectively leverage crowd intelligence. *Journal of New Business Ideas & Trends, 14*(2), 23-41.

Peterson, J. S. (2019). Presenting a qualitative study: A reviewer's perspective. *Gifted Child Quarterly, 63*(3), 147-158. https://doi.org/10.1177/0016986219844789

Phillips, C., Kenny, A., Esterman, A., & Smith, C. (2014). A secondary data analysis examining the needs of graduate nurses in their transition to a new role. *Nurse Education in Practice*, *14*(2), 106–111. https://doi.org/10.1016/j.nepr.2013.07.007

Poetz, M. K., & Schreier, M. (2012). The value of crowdsourcing: Can users really compete with professionals in generating new product ideas? *Journal of Product Innovation Management, 2*, 245-256. https://doi.org/10.1111/j.1540-5885.2011.00893.x

Pop, F., Huang J., & Esposito C. (2019). Application of soft computing and machine learning in the big data analytics for smart cities and factories. *International Journal of Information Management*, 489-490. https://doi.org/10.1016/j.ijinfomgt.2019.08.003

Rabionet, S. E. (2011). How I learned to design and conduct semi-structured interviews: An ongoing and continuous journey. *Qualitative Report, 16*(2), 563-566.

Riesmeier, M. (2020). Application of Kuhn's theory of scientific revolution to the theory

development of disruptive innovation. *Journal of Business Chemistry*, *2*, 58-68.

https://doi.org/10.17879/22139477049

Rizan, C., Phee, J., Boardman, C., & Khera, G. (2017). General surgeon's antibiotic

stewardship: Climbing the Rogers diffusion of innovation curve-prospective

cohort study. *International Journal of Surgery, 40*, 78-82.

https://doi.org/10.1016/j.ijsu.2017.02.040

Robinson, O. (2014). Sampling in Interview-Based Qualitative Research: A Theoretical

and Practical Guide. *Qualitative Research in Psychology*, *11*(1), 25–41.

https://doi-org/10.1080/14780887.2013.801543

Rogers, E. M. (1962). *Diffusion of innovations*. Free Press.

Rogers, E. M. (2003). Diffusion of innovations (5th ed.). New York. NY: Free Pres

Ronkainen, N. J., & Wiltshire, G. (2021). Rethinking validity in qualitative sport and

exercise psychology research: a realist perspective. *International Journal of Sport

& Exercise Psychology*, *19*(1), 13–28. https://doi-

org/10.1080/1612197X.2019.1637363

Rouse, M. (2011). *Collaboration platforms.*

https://searchcontentmanagement.techtarget.com/definition/collaboration-

platform

Sahin, I. (2006). Detailed review of Rogers's diffusion of innovations theory and

educational technology-related studies based on Rogers's theory. *Turkish Online*

Journal of Educational Technology-TOJET, *5*(2), 14-23.

https://eric.ed.gov/?id=EJ1102473

Sandmeier, P., Morrison, P. D., & Gassmann, O. (2010). Integrating customers in product innovation: lessons from industrial development contractors and in-house contractors in rapidly changing customer markets. *Creativity and Innovation Management*, *19*(2), 89-106. https://doi.org/10.1111/j.1467-8691.2010.00555.x

Sasaki, M. (2018). Application of diffusion of innovation theory to educational accountability: the case of EFL education in Japan. *Language Testing in Asia*, *8*(1), 1-16. https://doi.org/10.1186/s40468-017-0052-1

Saunders, M. N., Lewis, P., Thornhill, A., & Bristow, A. (2015). Understanding research philosophy and approaches to theory development. *Research Methods for Business Students*, 122–161.

Schqeirkart, L., & Doti, L. P. (2009). *American entrepreneur: The fascinating stories of the people who defined business in the United States*. American Management Association.

Schumpeter, J. A., & Nichol, A. J. (1934). Robinson's economics of imperfect competition. *Journal of Political Economy*, *42*(2), 249-259. https://doi.org/10.1086/254595"10.1086/254595

Schwienbacher, A., & Larralde, B. (2010). Crowdfunding of small entrepreneurial ventures. *Oxford University Press,*1-23. https://dx.doi.org/10.2139/ssrn.1699183

Scott, S., & McGuire, J. (2017). Using diffusion of innovation theory to promote

universally designed college instruction. *International Journal of Teaching and*

Learning in Higher Education, 29(1), 119-128.

Solo, C. S. (1951). Innovation in the capitalist process: A critique of the Schumpeterian

theory. *Quarterly Journal of Economics, 65*(3), 417.

https://doi.org/10.2307/1882222

Sotiriadou, P., Brouwers, J., & Le, T. A. (2014). Choosing a qualitative data analysis

tool: A comparison of NVivo and Leximancer. *Annals of Leisure Research*, *17*(2),

218-234. https://doi.org/10.1080/11745398.2014.902292

Stefaniak, J., & Carey, K. (2019). Instilling purpose and value in the implementation of

digital badges in higher education. *International Journal of Educational*

Technology in Higher Education, 16(1), 1-21. https://doi.org/10.1186/s41239-

019-0175-9

Sun, S., Hall, D. J., & Cegielski, C. G. (2020). Organizational intention to adopt big data

in the B2B context: An integrated view. *Industrial Marketing Management, 86*,

109-121. https://doi.org/10.1016/j.indmarman.2019.09.003

Suwamaru, J. K. (2016). Modification of DOI theory: The case of mobile phones in rural

Papua New Guinea. *Contemporary PNG Studies*, *86*(1), 1-17.

Taheri, B., Chalmers, D., Wilson, J., & Arshed, N. (2021). Would you really recommend

it? Antecedents of word-of-mouth in medical tourism. *Tourism Management*, *83*,

1-18. https://doi-org/10.1016/j.tourman.2020.104209

Tanye, H. A. (2016). Perceived attributes of innovation: Perceived security as an
additional attribute to Roger's Diffusion of Innovation Theory. *International
Journal of Multicultural and Multireligious Understanding*, *3*(6), 6-18.
https://dx.doi.org/10.18415/ijmmu.v3i6.57

Telef, B. B. (2016). Validity and reliability study of Positive Experiences at School Scale
Okulda Pozitif Yaşantılar Ölçeği geçerlik ve güvenirlik çalışması. *Journal of
Human Sciences*, *13*(2), 2475-2487.

U.S. Small Business Administration Office of Advocacy. (2019). *2019 Small business
profile*. https://cdn.advocacy.sba.gov/wp-
content/uploads/2019/04/23142719/2019-Small-Business-Profiles-US.pdf

U.S. Small Business Administration. (2012). *Strategic plan and updates*.
https://www.sba.gov/

U.S. Small Business Administration. (2019). *Strategic plan and updates*.
https://www.sba.gov/

Urbizagastegui-Alvarado, R. (2019). El modelo de difusión de innovaciones de Rogers en
la bibliometría mexicana. *The diffusion of innovations model of Rogers in the
Mexican bibliometrics, 9*(1), 1-14. https://doi.org/10.24215/18539912e071

Valanciene, L., & Jegeleviciute, S. (2013). Valuation of crowdfunding: benefits and
drawbacks. *Economics and Management*, *18*(1), 39-48.
https://doi.org/10.5755/j01.em.18.1.3713

Vega, A., Chiasson, M., & Brown, D. (2008). Extending the research agenda on
diffusion: the case of public program interventions for the adoption of e-business

systems in SMEs. *Journal of Information Technology*, *23*(2), 109-117.

https://doi.org/10.1057%2Fpalgrave.jit.2000135

Verma, S., & Yadav, N. (2021). Past, present, and future of electronic word of mouth (EWOM). *Journal of Interactive Marketing*, *53*, 111–128. https://doi-org./10.1016/j.intmar.2020.07.001

Vernette, E., & Kidar, L. H. (2013). Co-creation with consumers: Who has the competence and wants to cooperate? *International Journal of Market Research*, *55*(4), 539-561. https://doi.org/10.2501/IJMR-2013-047

Vernuccio, M. (2014). Communicating corporate brands through social media: An exploratory study. *Journal of Business Communication*, *51*(3), 211-233. https://doi.org/10.1177/2329488414525400

Wadsworth, F. H., & Cox, K. (2011). Identifying risky franchises. *Journal of Marketing Channels*, *18*(1), 43-55.

https://doi.org/10.1080/1046669X.2011.533111"10.1080/1046669X.2011.533111

Wan, Y., Lin, H., Wang, Y., Shih, Y. (2018). What drives users' intentions to purchase a GPS navigation app: The moderating role of perceived availability of free substitutes. *Internet Research, 28*, 251-274. https://doi.org/10.1108/IntR—11-2016-0348"2016-0348

Wang, Y., Gao, J., & Wei, Z. (2021). The double-edged sword of servitization in radical product innovation: The role of latent needs identification. *Technovation*. https://doi-org/10.1016/j.technovation.2021.102284

Warner, L. A., Rumble, J. N., & Rogers-Randolph, T. (2019). Integrating personal involvement, goal orientation, and characteristics of innovations to inform fertilizer best practice video communications. *Journal of Agricultural Education, 60*(3), 47-61. https://doi.org/10.5032/jae.2019.03047

Warren, G. E. (2016). *Small business strategies for sustainability beyond 10 years* [Doctoral dissertations, Walden University]. ScholarWorks.

Wu, J., Kim, A. J., Chen, L., & Johnson, K. K. (2017). Attitudes toward crowdsourced, community-involved new product development. *Journal of Fashion Marketing and Management: An International Journal*. https://doi.org/10.1108/JFMM-02-2017-0019

Xianhai M., & Andrew, B. (2018). Innovation in construction firms of different sizes: drivers and strategies. *Engineering, Construction and Architectural Management*, *25*(9), 1210–1225. https://doi-org/10.1108/ECAM-04-2017-0067

Xu, Y., Riberiro-Soriano, E., & Gonzalez-Garcia, J. (2015). Crowdsourcing, innovation, and firm performance. *Management Decision, 53*, 1158-1169. https://doi.org/10.1108/MD-06-2014-0408

Yang, M., Li, W., & Jiang, P. (2021). A collective intelligence oriented three-layer framework for socialized and collaborative product design. *Expert Systems With Applications*, *173*, 1-14. https://doi-org/10.1016/j.eswa.2021.114742

Yılmaz, N., & Olgan, R. (2020). Perceived attributes of instructional computer use in early childhood education: A scale adaptation and validation study. *Ilkogretim Online, 19*(3), 1267-1283. https://doi.org/10.17051/ilkonline.2020.728040

Yin, R. K. (2018). *Case study research and applications: Designs and methods* (6th ed.). Sage Publications, Inc.

Youngs, A., & Graf, A. S. (2017). *Innovating the innovation: Applying mobile research methods to experience sampling* [Doctoral dissertations, Walden University]. ScholarWorks.

Zahle, J. (2019). Data, epistemic values, and multiple methods in case study research. *Studies in History and Philosophy of Science, A*(1)*,* 1-9. https://doi.org/10.1016/j.shpsa.2018.11.005

Zhang, L., Qian, X., Lv, P., & Zhou, X. (2019). A novel recommendation algorithm based on diffusion of innovation theory. *Journal of Engineering Science & Technology Review*, *12*(6), 87-95. https://doi.org/10.25103/jestr.126.11

Ziskin, M. B. (2019). Critical discourse analysis and critical qualitative inquiry: Data analysis strategies for enhanced understanding of inference and meaning. *International Journal of Qualitative Studies in Education (QSE)*, *32*(6), 606-631. https://doi.org/10.1080/09518398.2019.160911

Appendix A: Interview Protocol

Interview Protocol		
What you will do		**What you will say—script**
Introduce the interview and set the stage—often over a meal or coffee (or video call due to the pandemic)		I am a graduate student at Walden University. I am conducting this interview as part of a study in partial fulfillment of the requirements for the degree of DBA. The interview will take around 45 minutes and will include 7 questions about your experience implementing strategies for using crowdsourcing as a product development tool to increase innovation and revenue as a small business owner. I seek your permission to make an audio recording of this interview to accurately document this conversation. At your request, audio recording can be stopped at any time, and there are no consequences for this request. Your responses will remain confidential, but the information collected will be used to help small business owners develop strategies to implement crowdsourcing within their business operations to increase innovation and revenue. You have read and signed the consent form. Your participation in this study is voluntary, and we can stop or take a break at any time during this process. Please let me know if you have any questions or are ready to give your permission to initiate the interview.
• Watch for non-verbal queues • Paraphrase as needed		1. What strategies did you use to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

• Ask follow-up probing questions to get more in-depth		2. How did your employees respond to strategies you used to successfully integrate crowdsourcing into business operations to increase innovation and revenue?
		3. What, if any, modifications did you apply to any strategy to improve its effectiveness in successfully integrating crowdsourcing into business operations to increase innovation and revenue?
		4. How were strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue communicated among the organizational ranks and stakeholders?
		5. What were the key barriers to implementing strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue?
		6. How did you overcome the key barriers to implementing strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue?
		7. What else would you like to add about strategies used to successfully integrate crowdsourcing into business operations to increase innovation and revenue?
Wrap up interview thanking participant		Thank you for your participation. I will collect all your responses and share the transcript with you to verify that I have

	correctly captured the interview. I will provide information if there is anything you may want to add.
Schedule follow-up member checking interview	I respectfully request that we speak again in three weeks for 30 minutes to review interview summaries for accuracy.

Appendix B: Interview Questions

The interview questions addressing the research question are the following:

1. What strategies did you use to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

2. How did your employees respond to strategies you used to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

3. What, if any, modifications did you apply to any strategy to improve its effectiveness in successfully integrating crowdsourcing into business operations to increase innovation and revenue?

4. How were strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue communicated throughout the organizational ranks and among stakeholders?

5. What were the key barriers to implementing strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

6. How did you overcome the key barriers to implementing strategies to successfully integrate crowdsourcing into business operations to increase innovation and revenue?

7. What else would you like to add about strategies used to successfully integrate crowdsourcing into business operations to increase innovation and revenue?