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Social Media Presence and Innovation in Minority-Owned Small- and Medium-Sized Enterprises

Lionel Alexander Edlam Jr
Walden University

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Walden University

College of Management and Human Potential

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Abstract

Social Media Presence and Innovation in Minority-Owned Small- and Medium-Sized
Enterprises

by

Lionel Alexander Edlam Jr.

MPhil, Walden University, 2023

MS, Purdue University, 2019

BS, John Jay College of Criminal Justice, City University of New York, 1992

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Management

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Abstract

Minority-owned (e.g., Asian, Black/African American, Hispanic, and women) small- and medium-sized enterprises (SMEs) account for a small percentage of U.S. businesses in this sector. In this context, owners and managers of these businesses need to capitalize on social media to increase their marketplace survivability within the first 18 months of operation. The purpose of this quantitative correlation study, which was based on the technology acceptance model and absorptive capacity theory, was to examine whether the number of social media platforms presences predicts social strategy, customer involvement in innovation, and knowledge gained from customers for innovation in the United States. The number of social media platforms was the independent variable, and social strategy, customer involvement in innovation, and knowledge gained from customers for innovation were the dependent variables. An online survey was administered to managers of 164 randomly selected minority-owned SMEs in the United States. Data analysis featured the Pearson correlation coefficient and linear regression. The results indicated a statistical significance in the predictive ability of the number of social media platform presences for social strategy, customer involvement in innovation, and knowledge gained from customers for innovation in minority-owned SMEs in the United States. The implications for positive social change include the potential for owners and managers of minority-owned SMEs to understand how to increase innovation success for marketplace sustainability. By improving the sustainability of their businesses, owners and managers may be able to promote the social well-being of their families and employees and the communities in which they operate.

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Table of Contents

List of Tables	iv
List of Figures	v
Chapter 1: Introduction to the Study.....	1
Background of the Problem	2
Problem Statement	4
Purpose Statement.....	5
Nature of the Study	6
Research Questions and Hypotheses	7
Theoretical Framework	8
Operational Definitions.....	10
Assumptions, Limitations, and Delimitations.....	12
Assumptions.....	12
Limitations	12
Delimitations	13
Significance of Study.....	13
Contributions to Business Practice	14
Implications for Social Change.....	15
Chapter 2: Literature Review	16
Literature Search Strategy.....	17
Theoretical Framework	17
Absorptive Capacity Theory	19

Technology Acceptance Theory	23
Literature Related to Key Variables and/or Concepts	24
The Small- and Medium-Sized Enterprises Sector	25
Social Media and Small- and Medium-Sized Enterprises	30
Social Strategy	38
Innovation	40
Small- and Medium-Sized Enterprises' Social Media Presence and Innovative Initiatives.....	48
Summary and Conclusions	57
Chapter 3: Research Method	59
Research Design and Rationale.....	60
Research Design.....	61
Research Questions and Hypotheses	63
Methodology	65
Population	65
Sampling and Sampling Procedures	65
Instrumentation	66
Procedures for Recruitment, Participation, and Data Collection	67
Data Analysis Plan	68
Threats to Validity	69
Ethical Consideration.....	70
Summary	71

Chapter 4: Results	72
Data Collection	73
Descriptive Statistics	74
Test of Assumptions	75
Data Analysis	82
Study Results	90
Test for Assumptions	90
Research Question 1.....	92
Research Question 2.....	93
Research Question 3.....	95
Summary	97
Chapter 5: Discussion, Conclusions, and Recommendations	101
Interpretation of Findings.....	103
Limitations of the Study.....	106
Implications	107
Recommendations	109
Conclusions	111
References	114
Appendix A: Permission to Use Survey	144
Appendix B: Survey Instrument	146

List of Tables

Table 1. Pearson's Multiple Correlation Coefficient	83
Table 2. Research Question 1 Model Summary	84
Table 3. Research Question 1 Analysis of Variance Test Statistics	84
Table 4. Research Question 1 Coefficients Model	85
Table 5. Research Question 2 Model Summary	86
Table 6. Research Question 2 Analysis of Variance Test Statistics	86
Table 7. Research Question 2 Coefficient Model.....	87
Table 8. Research Question 3 Model Summary	88
Table 9. Research Question 3 Analysis of Variance Test Statistics	88
Table 10. Research Question 3 Coefficients Model	89

List of Figures

Figure 1. G*Power Sample Size Calculation Presurvey	66
Figure 2. G*Power Sample Size Calculation Postsurvey	74
Figure 3. Scatterplot of Social Strategy by Number of Platforms	76
Figure 4. Scatterplot of Customer Involvement by Number of Platforms.....	77
Figure 5. Scatterplot of Knowledge Gained From Customer by Number of Platforms	77
Figure 6. Scatterplot of Regression Standardized Residual vs. Standardized Predicted Value for Dependent Variable Social Strategy	78
Figure 7. Scatterplot of Regression Standardized Residual vs. Standardized Predicted Value for Dependent Variable Customer Involvement	79
Figure 8. Scatterplot of Regression Standardized Residual vs. Standardized Predicted Value for Dependent Variable Knowledge Gained From Customer	80
Figure 9. Histogram of Dependent Variable Social Strategy	81
Figure 10. Histogram of Dependent Variable Customer Involvement	81
Figure 11. Histogram of Dependent Variable Knowledge Gained From Customer.....	82

Chapter 1: Introduction to the Study

Social media and social media platforms (e.g., Facebook, Twitter, LinkedIn, Instagram, Yammer, Pinterest, and blogs) have become an essential business tool for the leaders of small- and medium-sized enterprises (SMEs). In 2022, SMEs accounted for more than 99.9% of businesses in the United States, and 57% of the small- and medium-sized businesses in the United States were minority-owned (Census, 2022; Minority, n.d.; TNJ Staff, 2021; Yang & del Carmen Triana, 2019; U.S. Census Bureau, 2021). Compared to other SMEs, minority-owned SMEs are failing at a higher rate (United States Census, 2022; Simple Insurance, n.d.; TNJ Staff, 2021). Innovation is crucial for all SMEs to achieve sustainability in the marketplace, and social media have become an essential business mechanism used to ignite innovation in today's marketplace (Bhimani et al., 2019; Moe & Schweidel, 2017; Munniger et al., 2019).

Understanding social media platforms' relationship with innovation may improve minority-owned SMEs' market survivability. Understanding the relationship between social media platforms and innovation as a mechanism to spur innovation could increase or improve the number of new products, services, manufacturing processes, managerial processes, customers, and technology absorption at SMEs (Schlagwein & Hu, 2017). In this study, I examined whether the number of social media presence platforms (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, YouTube, and blogs) predicts social strategy, customer involvement in innovation, and knowledge gained from customers for innovation in innovation U.S. minority-owned SMEs.

Background of the Problem

SMEs are critical to the economic viability of the United States, and minority-owned SMEs play a vital economic and societal role in the communities where they operate (Bhimani et al., 2019; da Silva Etges & Cortimiglia, 2017; Olanrewaju et al., 2020). In 2022, minorities accounted for approximately 32% of the population in the United States (i.e., Asian, Black/African American, Hispanic, and Woman), and 19.9% of businesses were minority-owned (Small Business and Entrepreneurship, n.d.; U.S. Census Bureau, 2022). Minority-owned businesses create 2 out of every 3 jobs in the United States and are vital to the economic viability of the United States (Small Business and Entrepreneurship, n.d.). Minority-owned SMEs are failing more than other SMEs. According to the Bureau of Labor Statistics (BLS), approximately 20% of all new businesses fail within the first 2 years, 45% during the first 5 years, and 65% during the first 10 years (Dean, 2022). Innovation is crucial for small and medium-sized enterprises (SMEs) to achieve sustainability in today's marketplace. The use of social media has become an essential business mechanism for igniting innovation (Bhimani et al., 2019; Moe & Schweidel, 2017; Munniger et al., 2019; Schlagwein & Hu, 2017).

Malik et al. (2022) mentioned the need for social media presence and innovation in minority-owned SMEs while researching the circular economy adoption by SMEs in emerging markets: towards a multilevel conceptual framework. Malik et al. stated that the significance of SMEs in the economic growth of many nations is vital, and minority-owned SMEs are especially important since they may help reduce income disparity and promote diversity. Minority-owned enterprises confront substantial obstacles, such as

limited resources and access to financing technology, and these obstacles may hamper their capacity to develop and compete in the marketplace, thereby making it imperative to use social media channels for advertising their goods and services and engaging with consumers (Malik et al., 2022).

Mustafa and Yaakub (2018) reflected on the association between minority-owned businesses' social media presence and innovation. Mustafa and Yaakub mentioned that the use of social media platforms might give SMEs access to new markets, information, and resources, enabling them to innovate and enhance their competitiveness. Social media platforms allow SME leaders to interact with consumers, elicit helpful feedback, and adjust their offers to match their customers' demands; this input may inform the development of products and services, leading to innovation. Bhimani et al. (2019) stated that social media may serve as a bridge between SMEs and other stakeholders, such as suppliers, consumers, and partners. By interacting with these stakeholders, SME leaders may gain access to innovative new ideas, information, and resources.

Malik et al. (2022) noted that despite the potential advantages of social media, minority-owned SMEs continue to struggle to build a prominent presence on these platforms; lack of digital skills, limited resources, and language hurdles are among the challenges faced by these leaders. It is essential to give the leaders of these firms assistance and training to help them overcome these obstacles and successfully exploit social media platforms; this assistance may include training on social media best practices, access to funding and technology, and translation assistance. Mustafa and Yaakub (2018) noted that businesses encounter several obstacles in creating a significant

presence on these platforms; thus, it is crucial to equip them with the required assistance and training to exploit social media correctly. Understanding the relationship between the number of social media platform presences, social strategy, customer involvement, and knowledge gained from customers for innovation and innovation may improve the survivability of minority-owned U.S. SMEs in the marketplace.

Problem Statement

Minority-owned SMEs fail more than other SMEs and have not capitalized on social media for innovation compared to non-minority-owned SMEs, with 80% of African American-owned businesses failing within the first 18 months and approximately 20% of women-owned businesses within the first 2 years (BLS, n.d.; Mazur, 2022; Moshin, 2022; TNJ Staff, 2021; U.S. Census Bureau, 2022). Social media are an essential business tool for SMEs to increase their innovativeness (Bhimani et al., 2019; Fan et al., 2021; Perez-Gonzalez et al., 2017). Using social media platforms to increase customer involvement and gain customer knowledge for innovation could provide minority-owned SMEs with an invaluable pipeline for innovativeness (Candi et al., 2018; Fan et al., 2021; Perez-Gonzalez et al., 2017).

Although researchers such as Candi et al. (2018), Fan et al. (2021), Nworgu (2020), Perez-Gonzalez et al. (2017), and Scuotto et al. (2017) have investigated social media and innovation at SMEs, few have explored it in a quantitative manner, based on my review of the literature. I found no studies concerning whether the number of social media platform presences (i.e., Facebook, Twitter, LinkedIn, Instagram, Yammer, Pinterest, and blogs) predicts social strategy, customer involvement in innovation,

knowledge gained from customers for innovation, and innovation in minority-owned SMEs in the United States. Specifically, the problem was that owners and managers of minority-owned SMEs could not exploit their social media platform presence to engage customers in innovation and gather insights for innovativeness. The lack of a viable social media presence negatively impacts these businesses' survival rate in the marketplace within their first 18 months of operation, which is an existing concern (Census, 2022; Minority Entrepreneur, n.d.; TNJ Staff, 2021; U.S. Census Bureau, 2021). In this study, I examined whether the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts social strategy, customer involvement in innovation, and knowledge gained from customers for innovation and innovation in minority-owned SMEs in the United States. This study extends Candi et al.'s (2018) research on social strategy to gain knowledge for innovation. The results of this study may provide valuable insights for owners and managers of minority-owned SMEs. The marketplace success of minority-owned SMEs is vital to the U.S. economy's growth and the communities these businesses serve (Census, 2021; TNJ Staff, 2021; U.S. Census Bureau, 2022).

Purpose Statement

The purpose of this quantitative study was to examine whether the number of social media platform presences (i.e., Facebook, Twitter, LinkedIn, Instagram, Yammer, Pinterest, and blogs) predicts social strategy subscale, customer involvement subscale, and knowledge gained from customers for innovation subscale in U.S. minority-owned SMEs. In 2022, minority-owned SMEs accounted for 57% of SMEs, and their

marketplace sustainability is vital to the economy of the United States and the communities where they operate (Chamber of Commerce, n.d.; Minority Entrepreneurs, n.d.; TNJ Staff, 2021; U.S. Census Bureau, 2022). Understanding the optimal number of social media platform presences, social strategy, customer involvement, and knowledge gained from customers for innovation and innovation could help managers and owners of minority-owned SMEs survive in the marketplace. The independent variable was the number of social media presence platforms. The dependent variables were social strategy, customer involvement in the innovation subscale score, and knowledge gained from customers for the innovation.

Nature of the Study

I used Pearson's multiple correlation coefficient and a quantitative linear regression model to address this study's research questions (RQs). The independent variable was the number of social media platforms. The dependent variables were social strategy in the innovation, customer involvement in the innovation, and customer knowledge gained for the innovation. The findings from this study could help owners and managers of minority-owned SMEs in the United States improve their survivability in the first year of operation and beyond.

The use of a linear regression model enables researchers to find the relationship, if any, between dependent and independent variables. For the study's research design, I used Candi et al.'s (2018) screening question and their Social Strategy to Gain Knowledge for the Innovation survey. All items in the knowledge survey are rated on a 5-point Likert scale (1 = *to a small extent or disagree* to 5 = *to a large extent or agree*). I

collected survey data from a randomized cross-section of 134 small minority-owned business owners/managers of retail, fitness, personal care, and financial services businesses in the United States with a minimum of 1 year of business operation.

To calculate the sample size for this study, I used the G*Power 3.1 calculator (t-test A Priori). Using Candi et al.'s (2018) Social Strategy to Gain Knowledge for Innovation survey, I collected data from 134 minority-owned SMEs in the United States. A screening question was used to collect data on the number of social media presence platforms. Eleven questions on the survey related to social strategy, six to customer involvement, and five to customer knowledge gained. The data were analyzed using IBM's SPSS Statistics program Version 29. All items on the survey were rated on a 5-point Likert scale (1 = *small extent or disagree* to 5 = *to a large extent or agree*).

Research Questions and Hypotheses

RQ1: Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict social strategy in U.S. minority-owned SMEs?

H_{01} : The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) does not predict the social strategy in U.S. minority-owned SMEs.

H_{11} : The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts in U.S. minority-owned SMEs.

RQ2: Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict customer involvement in innovation in U.S. minority-owned SMEs?

H₀₂: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) does not predict customer involvement in innovation in U.S. minority-owned SMEs.

H₁₂: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts customer involvement in innovation in U.S. minority-owned SMEs.

RQ3: Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict knowledge gained from customers for innovation in U.S. minority-owned SMEs?

H₀₃: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) does not predict the knowledge gained from customers for innovation in U.S. minority-owned SMEs.

H₁₃: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts the knowledge gained from customers for innovation in U.S. minority-owned SMEs.

Theoretical Framework

The theories and concepts that grounded this study were from Cohen and Levinthal's (1989) absorptive technology theory and Davis's (1986) technology acceptance model (TAM), specifically regarding the concepts of perceived usefulness

and attitude toward using social media platforms. The logical connections between the framework presented and the nature of the study include "an ability to recognize the value of new information, assimilate it, and apply it to commercial ends" (Qian et al., 2013, p. 186). Also, adopting new technology depends on the user's perceived usefulness and attitude (Fakhreldin, 2020, p. 252). (Fakhreldin, 2020, p. 252).. An understanding of the relationship between the number of social media platform presences, social strategy, customer involvement, and knowledge gained from customers for innovation and innovation could be used by minority-owned SME owners and managers to increase their survivability during their critical 1st year of operation in the United States.

Prior researchers have examined the issue of innovation, social media platforms, and consumer engagement in connection to social media in SMEs. Cohen and Levinthal's (1989) absorptive technology theory and Davis's (1986) TAM provided the theoretical foundation for this research, which focused on the ideas of perceived utility and attitude toward the use of social media platforms. Studies on SMEs and absorptive capacity include Alisaghar et al. (2020), Lee et al. (2021), Limaj et al. (2016), Schlagwein and Hu (2017), Scuotto et al. (2017), Qian and Acs (2013), and Crittenden and Crittenden (2019). Gavino et al. (2019) employed TAM to examine Latino and Hispanic social network platform selection and the effects of social media adoption on revenue. In their qualitative study, Oser and Riding (2018) extracted the TAM concepts of perceived usefulness and ease of use to gain insight into the gendered nature of SMEs and theoretical models of the technology adoption process. Tusmsifu et al. (2020) used the TAM constructs of perceived usefulness and perceived ease of use to examine the use and influence of social

media in the fashion sector in Kenya. Tusmsifu et al. discovered that social media presence has a favorable and substantial effect on consumer engagement, leading to more SME innovation.

The studies also highlighted the significance of perceived utility and attitude toward utilizing social media platforms in influencing the choice of SMEs to embrace and use social media. The extant literature shows that social media may influence innovation in SMEs, especially those controlled by minorities. These studies emphasized the significance of absorptive ability, perceived utility, and attitude toward using social media platforms in promoting innovation in SMEs and suggested that minority-owned SMEs should design a social media strategy that focuses on improving consumer engagement and innovation by exploiting the potential of social media and social media platforms.

Operational Definitions

Customer involvement: The practice of actively engaging and working with customers in the innovation process, such as soliciting input, co-creating new goods and services, and testing prototypes (Candi et al., 2019).

Innovation: In this research, the development of new or better goods, services, processes, or business models that meet the demands and preferences of consumers and contribute to the development and sustainability of SMEs (Odrizola-Fernandez et al., 2019).

Innovation in minority-owned small- and medium-sized enterprises (SMEs): The development and implementation of new or improved products, services, or business

processes by businesses owned and operated by members of racial or ethnic minority groups in the United States (Bates et al., 2018; Crittenden & Crittenden, 2019; Gavino et al., 2019).

Minority-owned SMEs: Small- and medium-sized businesses owned and run by people or organizations from historically marginalized and underrepresented populations (Bates et al., 2018; Minority Entrepreneurs, n.d.).

Social media platforms: Online communication channels and networks that enable users to produce and share user-generated material, including text, photographs, and videos, and to engage with others in real-time (Aichner et al., 2021). The social media sites Facebook, Instagram, Twitter, and LinkedIn are examples.

Social media presence: The degree of activity, engagement, and visibility of minority-owned businesses on social media platforms, such as the number of followers, likes, comments, shares, and mentions. Social media presence also refers to the degree and quality of an SME's participation and activity on social media platforms; this may include the number of followers or fans, the frequency and kinds of postings, the reaction time to consumer questions or comments, and the overall company image and reputation presented on social media (Candi et al., 2019).

Social strategy: A term that refers to “actively putting effort into helping people to create and or enhance relationships and develop social ties among themselves on social media” (Candi et al., 2018, p. 732).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are common beliefs that have not been proven but are considered theoretically accurate (Simon, 2011). This study's assumptions included that all the study participants truthfully and accurately answered the survey questions. A second assumption was that the sample represented the larger population of minority-owned small- and medium-sized business owners and managers with similar ownership and management skills. Third, I assumed that the G*Power calculation of the appropriate sample size for the study—134 managers and owners of minority-owned SMEs—would be achieved.

Limitations

Limitations are weaknesses and deficiencies outside the researcher's control, including sampling, survey instrument, theoretical framework, limited statistical analysis, clarifications, and generalizability (Simon, 2011). The limitations of this study include the population of minority-owned small businesses geographically located in the United States. Potential validity issues are researcher positionality bias, sampling size, the integrity of answers provided by survey respondents, and data analysis (Bhimani et al., 2019). Challenges for this study include the use of email to deliver and receive surveys on time, the cost of conducting the study, a sufficient number of minority-owned businesses owners and managers willing to participate in the study, minority-owned business owners answering the questions correctly, and my knowledge and expertise in conducting a quantitative linear regression study.

The study's limitations include its sample size and data-gathering techniques. The sample size will not be typical of all minority-owned, and the data-gathering techniques will introduce bias into the research. In addition, I examined only the relationship between social media presence and innovation, excluding other variables that might affect innovative initiatives in minority-owned enterprises. I addressed these constraints by ensuring that the sample was varied and representative of the minority-owned SME community. In addition to minimizing bias and ensuring the data's accuracy, I also sought to reduce sampling error.

Delimitations

Delimitations, as defined by Simon (2011), refer to the characteristics that restrict the scope and define the boundaries of a study. These aspects are under the researcher's control and include the objectives, research questions, variables of interest, study population, and theoretical perspectives. This study's delimitations were geographical location and ownership type (e.g., minority ownership). It's important to note that the findings and results of the study may not necessarily apply to other subjects, locations, or future time periods.

Significance of Study

This study may be significant because it may provide owners and managers of minority-owned small businesses with an understanding of whether the number of social media platform presences (e.g., Facebook, Twitter, LinkedIn, Instagram, Yammer, Pinterest, blogs) predicts social strategy, customer involvement, and knowledge gained from customers for innovation and innovation in the United States. The outcomes of this

research might give minority-owned small business owners and managers essential information for enhancing their organization's performance, competitiveness, and market survival (Berg et al., 2019). The research might contribute knowledge concerning Cohen Levinthal's (1989) absorptive technology theory and Davis's (1986) TAM, particularly in the areas of perceived usefulness and ease of use toward adopting social media platforms for innovation in SMEs. In addition, the study might expand upon Candi et al. (2018)'s examination of the association between social media and innovation in SMEs

The value of this research rests in its potential to inform small business owners and managers about the role of social media in their organization's innovative initiatives, thereby boosting their capacity to make well-informed choices and market-effective strategies. The conclusions of this study might aid minority-owned small business owners and managers in understanding the influence of social media on their organization's performance, competitiveness, and market survival within the first 18 months of operations. With this knowledge, minority-owned small businesses may be able to make educated choices about their social media strategy, which could increase customer engagement and knowledge gained from customers in a way that promotes their firm's innovativeness.

Contributions to Business Practice

This study could offer valuable insights to owners and managers of minority-owned businesses and academic and other researchers interested in understanding whether the number of social media platform presences predicts social strategy, customer involvement, and knowledge gained from customers for innovation in U.S. minority-

owned SMEs. Minority-owned SMEs account for more than 99.9% of businesses in the United States (Census, 2022; Simple Insurance, n.d.; TNJ Staff, 2021; U.S. Census, 2021) and, as such, are vital to its economy and the communities it serves. Minority-owned SMEs accounted for 57% of the small- and medium-sized businesses in the United States (Census, 2022; Minority, n.d.; TNJ Staff, 2021; Yang & del Carmen Triana, 2019; U.S. Census, 2021). Understanding this relationship could help stakeholders to improve SMEs' sustainability within the 1st year of operation.

Implications for Social Change

The findings from this study can assist minority-owned small and medium-sized enterprises (SMEs) in better understanding how the number of social media platform presences impacts their social strategy, customer engagement, and the insights they gain from customers to drive innovation. With this knowledge, minority-owned SMEs can contribute to positive social change by strengthening the U.S. economy and improving people's lives in their communities. These businesses are crucial in providing employment, products, services, and opportunities and promoting positive social change in their communities.

Chapter 2: Literature Review

The literature review consists of a discussion of the theoretical framework, a discussion of the concepts of social media, social media platforms, social strategy, and innovation, a discussion on SMEs and minority-owned SMEs, an analysis and synthesis of the extant literature related to social media and innovation at SMEs, and a discussion. A thorough academic and professional literature review provides the essential basis for analyzing and synthesizing extant literature and theoretical or conceptual framework (s) related to the research study's contributions to academic scholars, business owners, managers, and practitioners.

The literature review first explains Leventhal and Cohen's (1989) absorptive capacity theory and Davis's (1986) TAM, followed by an explanation of social media platforms, social strategy, customer involvement, and innovation examined in the milieu of minority-owned SMEs. The findings of this research could be helpful to government officials, business owners, and other interested parties who want to comprehend the meaningfulness and usefulness of social media use among minority-owned SMEs. This research may shed light on how social media could assist in eliminating marketplace sustainability gaps in minority-owned SMEs. The research results will add to the current extant literature on the use of social media in SMEs and could guide initiatives for reducing disparities and increasing marketplace survival of minority-owned SMEs within the first 18 months of operations.

Literature Search Strategy

The literature was searched using the following databases available in the Walden University library: EBSCO, ABI/INFORM, Business Source Complete, Emerald Insight, ProQuest, Science Direct, Scholar Works, Business Academic Search, and Google Scholar for scholarly peer-reviewed articles and journals with a date range of from 2019 through 2021 using the keywords *small business, small- and medium-sized business, small business' and minority-owned and social networks, social media analytics, social media technology, blogs & RSS-feeds, microblogs, media and file sharing platforms, social media, research articles, social media presence and innovation in minority-owned SMEs, minority-owned SMEs, tagging and social bookmarking, review and social media presence, instant messaging services, social E-learning platforms, innovation in minority-owned SMEs, virtual communities, innovativeness, innovation, and innovation management* generated 8,763 articles.

Theoretical Framework

It is widely accepted that innovation is necessary for economic development, competition, new markets, and the introduction of new products, services, manufacturing, management improvements, and new technology (Odriozola-Fernandez et al., 2019; Melendez & Melgar, 2019). Basri and Siam (2017) stated that innovation drives many local and national economies by introducing new products, services, and goods that fuel competition, lowers prices, increase manufacturing, manage efficiencies, and introduce or improve technology. Many SMEs begin as entrepreneurial innovators (Bates et al., 2018; Basri & Siam, 2017; Candi et al., 2018; Crittenden & Crittenden, 2019; Fan et al., 2021;

Gavino et al., 2019; Nworgu, 2020; Olanrewaju et al., 2020; Yang & del Carmen Triana 2019). It has been reported that 99% of businesses in the United States, Europe, and Japan are SMEs (Odriozola-Fernandez et al., 2019).

Minority-owned SMEs account for 57% of SMEs, and their marketplace sustainability is vital to the economy of the United States and the communities where they operate (Minority SMEs, 2022; U.S. Census Bureau, 2022). According to Lee et al. (2013, p. 529), "Innovation is a principal driver of economic development and plays a vital role in competition at both the national and business levels." Innovation depends on a business's ability to determine the products, goods, processes, management improvements, production enhancements, or technology initiatives to pursue (Esposito et al., 2019; Villaluz & Hechanova, 2019). Many minority-owned SMEs do not possess the organizational structure, resources, talent, investors, or financial structuring to determine the innovation projects to pursue, which becomes a make-or-break proposition for their marketplace survival (Odriozola-Fernandez et al., 2019; TNJ Staff, 2021).

Minority-owned SMEs need to develop mechanisms that enable their business to maximize the existing technology, processes, and decision-making tools to increase their survivability within the 1st year of operation in the marketplace (Hitchen et al., 2017). Two theories that point to the importance of innovation and technology are Cohen and Leventhal's (1989) absorptive capacity theory, "an ability to recognize the value of new information, assimilate it, and apply it to commercial ends" (Qian et al. 2013, p. 186), and Davis's (1986) TAM, which posits that the use of a new technology depends and the user's perceived usefulness and attitude toward it (Fakhreldin, 2020, p. 252).

Absorptive Capacity Theory

Technology is the application of scientific knowledge for the practical aims of human life and plays a vital role in helping to meet the challenges of an ever-changing environment (Hitchen et al., 2017; Writz & Gottel, 2016), and in business (Ahmad et al., 2019; Ashrafi et al., 2019; Bhimani et al., 2019; Perez-Gonzalez et al., 2017; Scutto et al., 2017; Writz & Gottel, 2016). Cohen and Leventhal's (1989) absorptive capacity theory portends that to absorb knowledge, prior related knowledge is needed by the organization's individuals to exploit and leverage new knowledge. Social media technology as a business tool for SME innovation has been exciting for the past few years (Bakri, 2017; Bhimani et al., 2019; Candi et al., 2018; Limaj et al., 2016; Perez-Gonzalez et al., 2017).

SMEs are often disadvantaged compared to larger enterprises in their ability to exploit social media technology due to various factors, including but not limited to finances, organizational structure, time, and talented personnel (AlShaji et al., 2018; Bhimani et al., 2019; Candi et al., 2019; Cohen & Levinthal, 1990; He, 2017; Odoom et al., 2017). The most critical of these shortcomings is the lack of knowledgeable personnel or individual experts within the organization who have the skill set through prior experience and knowledge to absorb and leverage data from their social media technology to drive innovation at their organization (Benitez et al., 2018; Candi et al., 2019; Limaj et al., 2016; Muninger et al., 2019; Schlagwein & Hu, 2017; Scutto et al., 2017).

Cohen and Leventhal's (1989) absorptive capacity theory has been used as a theoretical framework underpinning several research studies linking social media and innovation at SMEs. Alisaghar et al. (2020), Process innovation in SMEs: The critical roles of external knowledge sourcing and absorptive capacity, Lee et al.'s (2021), Social capital and organizational ambidexterity: the moderating effect of absorptive capacity, Limaj et al.'s (2016), The impact of social information systems governance, utilization, and capabilities on absorptive capacity and innovation: A case of Austrian SMEs, and Scuotto et al.'s (2017), The effect of social networking sites and absorptive capacity on SME's innovation performance, and Schlagwein & Hu (2017), How and why organizations use social media; five use types and their relation to absorptive capacity. The extant literature has not unearthed recent studies examining the social media presence, strategy, innovation, and absorptive capacity in minority-owned small enterprises in the United States.

Minority-owned SMEs' social media platforms are a well-spring of external knowledge with the potential to enhance the business's organizational performance, innovativeness, competitiveness, and sustainability in the marketplace (Cohen & Leventhal, 1990). Organizations with external social media platforms can engage with their customers, business partners, suppliers, and other primary stakeholders to acquire external knowledge to provide innovation and innovativeness (Cohen & Leventhal, 1990). Absorptive capacity posits that individuals in an organization must possess the ability to assimilate, synthesize, and apply external knowledge with their internal

knowledge to spur Innovative initiatives and innovativeness (Alisghar et al., 2020; Cohen & Levinthal, 1990; Lee et al., 2021).

Synopsis of Absorptive Capacity Theory Based on Existing Research

Researchers who have studied the relationship between social media and innovation in SMEs in recent years used Cohen & Leventhal's (1989) absorptive capacity theory as a theoretical framework underpinning their study. According to Cohen & Levinthal (1990), an organization's absorptive capacity is its ability to receive, integrate, and use information from external sources. Alisaghar et al. (2020) used the absorptive capacity theory as a theoretical framework to examine social media's influence on SME innovation performance. Alisaghar et al. (2020) discovered that organizations with more absorptive ability were more likely to get innovative performance benefits from social media adoption. Alisaghar et al. (2020) mentioned that social media would be a significant source of external information for SMEs and that absorptive aptitude is required for enterprises to exploit this knowledge efficiently, and their study's results indicated that social media would considerably affect process innovation in SMEs, especially when enterprises have a high absorption capacity.

Lee et al. (2021) investigated the influence of social media in fostering knowledge acquisition and Innovative initiatives in South Korean small- and medium-sized businesses; they discovered that the usage of social media positively increased knowledge acquisition and innovation and that absorptive ability mediated this link. Lee et al. (2021) investigated the connection between SME social capital, absorptive ability, and organizational ambidexterity. Their results indicate that social capital and absorptive

ability benefit organizational ambidexterity, which is essential for innovation in SMEs.

Lee et al. (2020) stated that social media plays a significant role in boosting social capital, which can boost absorption capacity and promotes innovative initiatives.

Limaj et al. (2016) evaluated the association between social media usage, absorptive ability, and innovation success in small- and medium-sized Albanian businesses; they discovered that social media usage significantly affected absorptive ability, which in turn positively affected innovation performance. Limaj et al. (2016) suggested that social media is an essential instrument for boosting absorptive capacity, especially when organizations have good administration, technology usage, and capacities for social information systems (Cohen & Leventhal, 1989); their study's results indicated that social media benefits SMEs' absorptive ability and innovative initiatives.

Scuotto et al. (2017) investigated the impact of social media on innovation in small- and medium-sized businesses in Italy and found that social media usage positively increased innovation performance. Scuotto et al. (2017) discovered that absorptive capability moderated this association and that organizations with better absorptive capacity were likelier to get innovative performance benefits from social media.

These studies support the value of Cohen & Leventhal's (1989) absorptive capacity theory as a theoretical framework for understanding the interface between social media and innovative initiatives in SMEs. The results from these studies indicated that organizations with more absorptive capacity are more likely to gain from leveraging social media to ignite their innovation performance and that social media will considerably influence innovation, thereby providing minority-owned SMEs with a have

a higher level of innovativeness (Alisaghar et al., 2020; Lee et al., 2021; Limaj et al., 2016; Scuotto et al., 2017).

Technology Acceptance Theory

Davis's (1986) TAM has been widely used in research to understand the relationship between human behavior and technology (Davis, 1989; Foltean et al., 2019; Maragenuic & Granic, 2015). The model evolved from the theories of reasoned action (TRA) and theory of planned behavior (TPB) and attempted to understand how technology is accepted or rejected via the lenses of perceived ease of use, perceived usefulness, and acceptance (Davis, 1989; Foltean et al., 2019; Maragenuic & Granic, 2015). Perceived usefulness is the extent to which an application will help them with their job performance, and perceived use is the extent to which an application can be performed with little or no effort (Davis, 1989).

Several TAM versions have evolved, including TAM1, TAM2, TAM3, and the extended unified theory of acceptance and use of technology (UTAUT and UTAUT2). However, according to the findings by Rondon-Cataluna et al. (2015), these versions did not offer a better explanation of technology acceptance than Davis's (1986) original TAM. Davis's original premise is that perceived usefulness and ease of use predict attitudes toward technology acceptance and remain a robust model 40 years later. TAM has been used in several studies as a theoretical model in research involving social media, technology, innovation, SMEs, and minority-owned SMEs (Gavino et al., 2019; Omiunu, 2019).

Gavino et al. (2019) employed TAM to examine Latino and Hispanic social network platform selection and the effects of social media adoption on revenue. Oser and Riding's (2018) qualitative study extracted the TAM concepts of perceived usefulness and ease of use to inform on the gendered nature of SMEs and theoretical models of the technology adoption process. Tusmsifu et al.'s (2020) study used TAM's perceived usefulness and perceived ease of use to examine social media influence and the use of social media in dealing with fashion in Kenya. TAM application as a theoretical framework "has become well established as a robust, powerful, and parsimonious model for predicting user acceptance" (Rodan-Cataluna & Ramirez-Correa, p. 792).

Literature Related to Key Variables and/or Concepts

Previous research has demonstrated a beneficial association between social media usage and innovation in SMEs (Bhimani et al., 2019; Fan et al., 2021; Olanrewaju et al., 2020; Pfothenaur et al., 2019). The study contributes to the current literature by focusing on minority-owned SMEs, a historically underrepresented population in social media, social strategy, and innovation research. The study results could aid minority-owned SMEs in better exploiting the benefit of a more substantial social media presence, boosting their market competitiveness and ensuring their survival (Pitlik et al., 2021). The study may offer insightful information on the link between social media presence, social strategy, customer involvement, knowledge gained from customers for innovation, and innovative initiatives in minority-owned SMEs. It emphasizes the significance of social media platforms as a vehicle for innovation. It portends that minority-owned SMEs benefit from using social media to communicate with their consumers and gather insights

they can use to develop (Garcia et al., 2020). The results of this research may be valuable for minority-owned SMEs owners and managers, researchers, academicians, grassroots community organizers, and policymakers interested in encouraging the growth and development of these businesses.

The Small- and Medium-Sized Enterprises Sector

The U.S. SBA Office of Advocacy (2023) defined a small business as a corporation with fewer than 500 workers. Small business owners make up around 99% of all owners, 50% of the private workforce, and more than 50% of the private gross domestic product (GDP) in the United States (Chamber of Commerce, n.d.; Covington, 2021; Mazur, 2022; Minority Entrepreneurs, n.d.; U.S. SBA, 2023.; TNJ Staff, 2021; U.S. Census Bureau, 2021). The United States has the most significant long-term growth rate among industrialized economies due to its robust small- and medium-sized businesses (Turner & Endres, 2017). Micro-, small-, and medium-sized enterprises are all examples of small businesses (Ellis, 2016). Small business owners are essential to creating employment, maintaining social stability, and expanding the economy. Small- and medium-sized business owners contribute significantly to economic growth and development by readily adjusting to environmental and technological changes (Bhimani et al., 2019; Odriozola-Fernandez et al., 2019).

SMEs are vital to economic systems, and they positively impact a nation's GDP, employment, value, and revenue (Minority Entrepreneurs, n.d.; Moshin, 2022; Olanrewajue et al., 2020). SME owners are responsible for employment creation in developing nations and are vital to global economies (Quartey et al., 2017). Forty-one

percent of SME leaders start a business to launch a new product, while 34% aim to earn more or better money (Melendez & Melgar, 2019). Unemployment is a significant factor in forming new businesses. It spurs individuals with an entrepreneurial spirit to start small businesses as they recognize opportunities larger companies overlook (Bates et al., 2018; Fan et al., 2021; Minority Entrepreneurs, n.d.; Olanrewaju et al., 2020). In certain instances, establishing a small business is also a direct source of employment growth. Fitzgerald and Muske (2016) found a correlation between the number of successful small business owners in a town and its overall health, and small business owners often hire more individuals as unemployment rises (Mallet & Wapshott, 2017).

Owners of SMEs typically recruit wage workers from underserved populations and are more likely to recruit elderly, disabled, rural, and low-educated individuals (Bates et al., 2018, Fan et al., 2021, Minority Entrepreneurs, n.d.; Olanrewaju et al., 2020). SMEs' contribution to employment creation in the United States economy is substantial, and understanding and comprehending why business owners fail is crucial to learning how to remain in business (Chamber of Commerce, n.d., Covington, 2021; Mazur, 2022; Odriozola-Fernandez et al., 2019; TNJ Staff, 2021, Turner & Endres, 2017).

Effectiveness of Small- and Medium-Sized Business Sector

SMEs play a critical role in economic development globally, but the vast majority are short lived and the failure rate is high in all global regions (Namadda et al. 2020) The SBA has reported that 2 out of every 3 businesses in the United States are closed by their owners (SBA Office of Advocacy, 2017). In light of this instability and the importance of SMEs to national economies and the global economy at large, the effectiveness of SMEs

has been extensively studied in recent years, shedding light on the factors that contribute to their success and growth. Although a majority of work in failure prediction models for SMEs is based in financial data (cf. Waqas & Md-Rus, 2018; Zizi et al., 2020), numerous non-financial factors including technological advancements and intellectual capital have been identified as essential elements for SMEs to remain competitive and sustainable (Prasanna et al., 2019; Demartini & Beretta, 2020). Embracing digitalization and adapting their business models to incorporate innovative practices have been found to improve the performance of SMEs (Bouwman et al., 2019). Furthermore, the COVID-19 pandemic has highlighted the importance of flexibility and adaptability for SMEs, with those able to shift to remote working environments demonstrating better performance (Zhang et al., 2021).

Human resource management practices and strategic approaches also play a crucial role in SMEs' financial performance (Chinyamurindi et al., 2021). Bartolacci et al. (2020) argue that the integration of sustainability considerations into SMEs' strategies positively impacts their financial performance. In emerging and developing markets, awareness and adoption of state-of-the-art technologies can lead to growth and enhanced competitiveness, as evidenced during the COVID-19 pandemic (Akpan et al., 2022).

In addition to these factors, innovative business strategies have been linked to improved financial performance for SMEs in developing countries, consequently influencing the global economy (Umadia Sr & Kasztelnik, 2020). Baporikar (2021) emphasizes the importance of business competitiveness on the performance of SMEs, suggesting that firms need to actively engage in competitive behaviors to achieve

success. High-performance work systems that involve the implementation of innovative practices have been shown to enhance innovation in small firms (Do & Shipton, 2019). Shah and Ahmad (2019) and Kivuitu and Karugu (2020) demonstrated that entrepreneurial orientation and differentiation strategy significantly contribute to the performance of SMEs. These studies highlighted the importance of SMEs adopting a proactive and innovative mindset to remain competitive and achieve success in the marketplace.

SMEs in the United States

According to the SBA, there are approximately 31,000,000 small companies in the United States, representing 99.9% of all U.S. firms, where around 8,000,000 are minority-owned companies (Jiao et al., 2020). In recent years, SMEs have increasingly relied on social media to advertise their operations and attract new clients (AlSharji et al., 2018; Bhimani et al., 2019; Candi et al., 2019; Fan et al., 2021; Hitchen et al., 2017; Scutto et al., 2017). Social media sites such as Facebook, Twitter, and Instagram give SMEs a cost-effective and readily available means to engage with consumers, raise brand recognition, and boost sales (AlSharji et al., 2018; Bhimani et al., 2019; Candi et al., 2019; Fan et al., 2021; Muinger et al., 2019). A survey conducted by the National Small Business Association (2021) mentioned that 73% of small companies use social media for marketing purposes.

Innovation is essential for the marketplace success of SMEs. In today's highly competitive, evolving global marketplace, minority-owned enterprises may confront specific obstacles that limit their innovativeness. Restricted access to money, talent,

technology, inadequate management practices, and organizational structure are historical roadblocks that have prevented minority-owned SMEs from innovation (Jiao et al., 2020). Social media usage may help the owners and managers of small enterprises overcome some of these obstacles by offering a forum for showcasing their goods and services, connecting with other entrepreneurs, and gaining access to knowledge and resources that can assist them in innovating and expanding (AlSharji et al., 2018; Bhimani et al., 2019; Candi et al., 2019; Fan et al., 2021; Hitchen et al., 2017; Scutto et al., 2017). Exploiting social media to ignite innovation at minority SMEs may assist these firms in connecting with consumers who are interested in supporting minority-owned firms, which may aid these firms in reaching a larger audience, establishing loyal customers, and increasing their marketplace sustainability during the first 18 months of operation. Social media may also facilitate access to funds and resources from groups encouraging diversity and entrepreneurship inclusion for minority-owned SMEs (Garcia et al., 2020).

Minority-owned SMEs who use social media may find it an effective business tool to promote their operations, innovate, and expand (Jiao et al., 2020). Minority-owned SMEs must use social media efficiently and intelligently, which may require an investment in social media training, the hiring of specialized social media experts, and other resources to create a social strategy that corresponds with their business functions (Bates et al., 2017; Basri et al., 2017; Candi et al., 2019; He et al., 2017; Scutto et al., 2017).

Social Media and Small- and Medium-Sized Enterprises

The term social media has existed for over 3 decades and has morphed numerous times since its introduction in 1994 (Aichner et al., 2017). Social media online platforms such as Facebook, YouTube, Twitter, Instagram, TikTok, blogs, social networks, business networks, forums, and virtual tools are used to share, communicate, collaborate, and build relationships for both commercial and personal purposes (Aichner et al., 2017, Candi et al., 2019). Social media's proliferation as a business tool has been of great interest and can no longer be ignored as an essential component of any commercial organization's business strategy (Aichner et al., 2021; Bakri, 2017; De Oliveira et al., 2023). Social media has completely replaced or modified traditional business practices related to marketing, sales, collaboration, financing, soliciting, attracting new customers, retaining existing customers, and hiring and searching for talented employees to help them execute their business strategy. Organizations of all sizes and structures have attempted to capitalize on their social media technology, social networks, and platforms to increase their competitiveness, performance, innovativeness, marketplace sustainability, and survivability (Aichner et al., 2021; Ali Qalati et al., 2020; Bakri, 2017).

Social media provides SMEs with a conduit to connect with customers, suppliers, employees, and businesses through widely accessible social media tools (Smartphones, Laptops, PCs, and Tablets) that seamlessly interface with social media platforms and can be used for transactions, customer engagements, supplier feedback, and innovation collaborations (Bogea & Zamith, 2018). The information technology- (IT-) enabled

technology creates 24-hour connectivity between SMEs and their customers, markets, suppliers, employees, and shareholders, allowing for a continuous bi-directional flow of communication with their stakeholders (Scutto et al., 2017). SMEs must possess the business practices to absorb the large influx of consistent data streams to exploit their social media (Jiao et al., 2020). Social media has permanently changed how business is conducted in the 21st-century marketplace. SME leaders must incorporate a social strategy to utilize social media to survive and remain competitive in the market.

Effectiveness of Social Media

The use of social media in SMEs has been recognized as a valuable tool for enhancing their effectiveness and performance. Social media marketing has the potential to increase brand exposure, increase targeted traffic, improve lead generation, provide valuable market insights, and enable reciprocal customer interaction (Rugoya & Prenaj, 2016). Wardati and Mahendrawathi's (2019) systematic literature review found that social media usage positively impacts the sales process in SMEs with no notable negative effects of adopting a social media strategy. While privacy risks for consumers are a major topic of debate with regard to social media marketing (cf. Dwivedi et al., 2021), effective implementation of a social media marketing strategy appears to only have positive effects, though their value will value based on implementation and the nature of the particular business sector the SME is operating in (Wardati & Mahendrawathi, 2019).

Qalati et al. (2021) revealed that adopting social media could significantly improve SMEs' performance in developing countries. Bocconcelli et al. (2017) mentioned that social media serves as a vital resource in the sales process for SMEs.

Odoom et al. (2017) identified the antecedents of social media usage and the resulting performance benefits for SMEs, while Hitchen et al. (2017) illustrated how social media supports open innovation in SMEs. Kumar and Ayedee (2018) emphasized the role of social media tools in fostering the growth of SMEs. This view was further supported by Effendi et al. (2020), who found that the adoption of social media by SMEs during the COVID-19 pandemic was crucial, as explained through the technology-organization-environment (TOE) model. Malesev and Cherry (2021) found that digital and social media marketing could help SMEs grow their market share.

Qalati et al. (2022) stated that technological-organizational-environmental factors influenced social media adoption and positively affected SMEs' performance in developing countries. Susanto et al. (2023) showed that marketing capabilities and social media usage played essential roles in enhancing the performance of SMEs with entrepreneurial orientation. Hassani and Mosconi (2022) linked the importance of social media analytics and competitive intelligence in manufacturing SMEs to its dynamic capabilities. Oyewobi et al. (2022) discovered a positive relationship between the adoption of social media and the performance of construction SMEs in Nigeria. Fahmi et al. (2022) emphasized the role of digital marketing technology through social media in enhancing the marketing strategy of healthcare SMEs. Khamaludin et al. (2022) found that social media marketing, product innovation, and market orientation positively impacted Indonesian SMEs' marketing performance. Herlina et al. (2022) underscored the role of social media marketing in improving SMEs' marketing performance during the COVID-19 pandemic.

Social media have emerged as a critical tool for improving the effectiveness and performance of SMEs across various industries. Adopting social media platforms and business strategies enables SMEs to enhance their marketing, sales, and overall performance (Fahmi et al., 2022; Khamaludin et al., 2022; Wardati & Mahendrawathi, 2019). These studies demonstrated the positive impact of social media usage by SMEs, making it essential for business owners and managers to capitalize on their social media platform presence to remain competitive in the market.

Social Media in Minority-Owned SMEs

Social media have become a valuable tool for minority-owned SMEs that provides them with opportunities to expand their networks, market their businesses, and engage with customers (Sithas & Dissanayake, 2019). Minority-owned SMEs confront distinct obstacles in developing and exploiting a social media presence for innovation (Puangmah et al., 2020). Puangmah et al. (2020) reported a digital divide as a significant obstacle in the disparity in access and proficiency with digital technology and abilities between large organizations and SMEs; inadequate financial resources, language hurdles, and lower levels of digital competence are some factors that minority-owned SMEs are more likely to experience as obstacles to accessing and using social media. These factors make it challenging for minority-owned SMEs to compete with larger, more prominent businesses that spend more money on social media technologies (Puangmah et al., 2020).

Echeverri-Carroll and Mora (2020) emphasized the importance of social network utilization among Latino-owned businesses, helping them gain visibility and support within their communities. Gavino et al. (2019) found that Latino entrepreneurs were

actively adopting social media platforms for personal and business use, positively affecting their businesses. Kim and Liu (2022) investigated the asymmetric effects of minority-owned markers for businesses on online review platforms, suggesting that being identified as a minority-owned business could potentially impact the online reputation of SMEs. Aneja et al. (2023) explored the role of race in consumer demand for minority-owned businesses, finding that revealing the race of the business owner could lead to increased demand for products and services offered by minority-owned SMEs. Using a social media presence to express valuable markers of identity for minority-owned SMEs could lead to increased brand recognition and consumer identity with the brand, and increased performance is linked to the capability of expressing their identity through social media.

Researchers have also mentioned the survival and recovery of Black-owned businesses post-COVID-19. Lahr et al. (2022) focused on the challenges and opportunities faced by minority-owned businesses during the pandemic and the potential strategies for their recovery. Liu et al. (2022) analyzed online engagement and persistent reactions to social causes, emphasizing the importance of online presence for Black-owned businesses in promoting social issues. Kneese (2022) explored the intersection of e-commerce and social justice, highlighting the potential of online platform presence to minority-owned SMEs. Howard (2019) discussed alternative sources of capital for Black entrepreneurs, such as crowdfunding and cryptocurrency through social media, which could enable them to overcome financial challenges and access funding for their businesses. Sutherland (2019) investigated the role of social media in the Black travel

community, emphasizing its potential to create autonomous and liberated spaces for minority-owned businesses in the travel industry. These research studies underscored the importance of social media platforms in empowering minority-owned SMEs by enabling them to engage with their target audiences by creating online communities.

Minority-owned SMEs' online community could cultivate a client base more inclined to suggest their goods and services to others, reaching new customers and increasing their customer base (Fraccastoro et al., 2020). Kuehn et al. (2018) found that Latino-owned firms with a robust social media presence in the United States were more likely to innovate in product development, marketing, and customer service. By developing and nurturing customer connections through social media platforms, minority-owned SMEs could increase customer involvement, engagement, and knowledge gained for innovation through their social media usage (Candi et al., 2018; Distanont and Khongmalai, 2018; Echeverri-Carroll & Mora, 2020; Gavino et al., 2019; Kuehn et al., 2018). Social media brings both possibilities and obstacles for minority-owned SMEs (Bouwman et al., 2019).

Social Media Advantages for Minority SMEs

The prevalence of social media platforms and social media-enabled devices like smartphones, Laptops, PCs, Tablets, and Internet 2.0 has generated many potential business opportunities for minority-owned SMEs (AlSharji et al., 2018; Nworgu, 2020). Social media have transformed how businesses connect with consumers, sell goods, and communicate with their target audience (Pitlik et al., 2021). De Oliveira et al. (2023) noted that social media is essential for reaching more people since social media platforms

have made it much easier for businesses to reach out to potential customers. Minority-owned SMEs are often resource-constrained and cannot use traditional ways to advertise, and they have a low-cost mechanism to reach and connect to people. Minority-owned SMEs can use social media to tell people about their organization, brand, vision, products, and services, enabling people interested in connecting with them (De Oliveira et al., 2023).

Social media offers a low-cost alternative to established advertising methods for marketing, communicating, and selling (Addo, 2017; Kwon et al., 2021; Yao et al., 2019). Social media may help minority-owned SMEs save money on advertising, marketing, and selling, allowing them to apply savings to other crucial business operations, including innovation (Pardini & Berardi, 2022). Social media could be an efficient means for owners and managers of minority-owned SMEs to increase consumer engagement, customer involvement, and knowledge gained from customers for product improvement, industry trends, and innovation.

Pitlik et al. (2021) mentioned that social media platforms may assist enterprises in constructing their brand and reputation. SMEs may utilize social media to highlight their business' beliefs, purpose, and personality, attracting and retaining clients. Social media networking could provide a mechanism for SMEs to position themselves as experts in their sector and win the respect of their peers (Pitlik et al., 2021). Pitlik et al. (2021) noted that business owners could use social media sites to connect with other SMEs, potential customers, and suppliers. Through social media, minority-owned SMEs can

connect with similar people and businesses, learn from their experiences, and make connections that could help their businesses (Pitlik et al., 2021).

Social Media Roadblocks for SMEs

Roadblocks to successful social media use among SMEs include factors such as limited resources, lack of expertise, and measuring the impact of social media (Trawnih et al., 2021). Kumar and Ayedee (2021) highlighted the importance of social media adoption for SMEs to sustain their businesses during COVID-19. The COVID-19 crisis revealed several challenges SMEs faced in adopting and effectively utilizing social media (Kumar & Ayedee, 2021). Peter and Dalla Vecchia (2021) provided a comprehensive review of digital marketing channels and platforms, emphasizing the importance of selecting appropriate tools to meet the specific needs of SMEs. Their study highlighted the challenges SMEs face in navigating the myriad available options and potential pitfalls in adopting unsuitable social media platforms.

Setkute and Dibb (2022) explored the barriers to digital marketing in small B2B firms and described the phenomenon of the "old boys' club," which refers to traditional networks and practices that could hinder SMEs from fully embracing digital marketing due to established relationships and conservative attitudes towards change. Their study suggested that overcoming these barriers requires a shift in organizational culture and mindset, which may be challenging for some SMEs.

Munir et al. (2019) examined the effects of entrepreneurial competence and social media marketing on SMEs' competitive advantage. Their study reported the importance of entrepreneurial skills in leveraging social media for business growth and identified

roadblocks SMEs face in developing and maintaining these competencies. SMEs often struggle with limited resources, which could impede their ability to invest in training and development programs to enhance their entrepreneurial capabilities (Munir et al., 2019).

Roadblocks to successful social media use among SMEs are manifold and include challenges related to resources, expertise, organizational culture, and the rapidly evolving digital landscape (Peter & Dalla Vecchia, 2021; Kumar & Ayedee, 2021; Munir et al., 2019; Setkute & Dibb, 2022; Trawnich et al., 2021). Addressing these issues could be vital for SMEs and minority-owned SMEs to effectively harness the potential of social media to remain competitive and survive in the marketplace.

Social Strategy

Candi et al. (2018) defined a *social strategy* as the efforts of SMEs' customer involvement in innovation and knowledge gained from customers for innovation through the use of their social media. Candi et al. (2018) posit that a social strategy "represents a novel mechanism to improve a business's potential to leverage external knowledge for innovation" (p. 743-744). Candi et al. (2018) stated that a business's social strategy is integral to its business plan, particularly for small- and medium-sized businesses controlled by minorities (SMEs). Social media have developed as a potent tool for SME owners and managers to communicate with their consumers, establish brand recognition, and expand their reach. Candi et al. (2018) stated that social media might provide a more genuine and meaningful connection between minority-owned SMEs and their target audience, making cultivating a devoted customer base easier by sharing their histories, beliefs, and missions. Candi et al. (2018) stated that social media presence and innovation

are integral components of a successful marketing campaign and are thus directly related to social strategy.

Social media and digital technologies engage consumers, develop brand recognition, and drive business success (Ahmad et al., 2019; Candi et al., 2018; Fan et al., 2021; Odoom et al., 2017; Scutto et al., 2017). Cultivating and establishing a loyal customer base may be critical for minority-owned SMEs attempting to enter new markets and compete with larger, more prominent, established brands (Melendez & Melgar, 2019). Bughin and Doogan (2016) claimed that SMEs must build a complete social media strategy that focuses on providing helpful content, interacting with consumers, and monitoring the efficacy of their social media initiatives. A social strategy must align with minority-owned SMEs' business objectives and support using their social media to promote customer involvement, knowledge gained from customers for innovation, and innovation (Candi et al., 2019). Innovation is crucial to the success of minority-owned SMEs, especially in social media marketing (Oser & Riding, 2018). Social media platforms are continually growing, and organizations that do not keep up with the most recent trends and technology risk falling behind.

A social strategy is essential for minority-owned SMEs, which could assist them in overcoming traditional obstacles that hinder success, which include fewer resources, lower budgets, management know-how, and innovativeness, making competition against other SMEs and larger established businesses harder. Akhtar and Badi (2020) stressed the significance of building a social media presence representing the values and culture of the community the business serves. Social media sites like Facebook, Twitter, and

LinkedIn, businesses will establish an innovative culture that stimulates innovativeness and cooperation (Garcia et al., 2020). Akhtar and Badi (2020) stated that minority-owned SMEs could use social media to improve consumer trust and credibility and show their commitment to social responsibility and community participation.

SBA Office of Advocacy (2017) underlined the need to use social media to develop a "community" of consumers and supporters who can assist in promoting their goods or services. Papa et al. (2018) underlined the impact of social media in encouraging innovation in SMEs; they stated that social media would be utilized to develop new ideas, determine client requirements, and test new goods or services. A social strategy, social media presence, and innovation may be crucial components for minority-owned SMEs in stimulating customer involvement and keeping ahead of the curve regarding consumer, business, and technology trends. A social strategy, social media presence, customer engagement, and knowledge sharing by customers for innovation at minority-owned SMEs could increase their ability to compete with more prominent corporations and increase their market sustainability in their respective business sectors (Candi et al., 2019; Melendez & Melgar, 2019).

Innovation

Innovation has long been considered the key to developing and delivering new products, services, management practices, and processes into the marketplace, allowing a business to command a competitive advantage in the marketplace. The ability to innovate is a major indicator that allows organizations to compete and survive in a free market economy (Hernandez-Perlines et al., 2020; Le et al., 2019; Villaluz & Hechanova, 2019).

Two theories that point to the importance of Innovation and technology are Schumpeter's creative disruption and Christensen's disruptive Innovation. Hernandez-Perlines et al. (2020) mentioned that Schumpeter (1934) identified three essential elements related to innovation: 1) the development of new products and services, 2) new production methods, and 3) new forms of organization. Christensen et al. (2018) mentioned our fundamental characteristics of disruptive innovation: 1) sustaining Innovation, 2) overshoot of customer needs, 3) the emergence of a disruptive innovation where incumbents can respond but do not, and 4) the flailing of an incumbent firm when they are being disrupted.

SME owners who wish to remain viable in their respective marketplaces must commit to an innovative approach that allows their organization to grow and compete and must be agile enough to adapt to disruptive technologies. Kademteme and Twinomurinzi (2019., p. 252) mentioned that "Disruptive technologies and trends such as virtual reality (VR), artificial intelligence (AI), robotics and the Internet of Things (IoT) are evolving and changing the way people live and work". Social media is the dominant disruptive technology for all business organizations in today's global market. Through social media technology, many B2B transactions, customer engagements, supplier feedback, and innovation collaborations occur (Bogea & Zamith, 2018; Jiao et al., 2020).

As an IT technology tool, the SME's capabilities influence social media usage. Jao et al. (2016) stated that insufficient and steady cash flow is essential for technological innovation, and insufficient financial resources limit the pursuits of technology innovation approaches. Villaluz and Hechanova (2019) suggested that organizational

structure, readiness, resources, management support, size, expertise, and IT systems are needed to support innovative approaches and efforts. Many SMEs have embraced Open Innovation as a lower-cost innovation strategy. OI prevents SMEs with a paradigm to improve their innovation outcomes by lowering innovation cost, time-to-market, and risk (Esposito et al., 2018). SMEs who cannot commit their resources to innovation can embrace OI as an option, allowing them to engage in collaborations, buying, leasing, or licensing processes or inventions from other organizations or business entities (Esposito et al., 2018).

Open Innovation

Open innovation (OI) is a key concept that has garnered significant attention in the context of innovation SMEs. OI refers to using internal *and* external sources of knowledge, technology, and resources to enhance a company's innovation capacity (Chesbrough, 2003). OI enables businesses to tap into a broader range of ideas, expertise, and opportunities, ultimately leading to improved competitiveness and performance (Ramdani et al., 2022). OI allows SMEs to compete with their marketplace competitors “by implementing a new way to delegate, motivate, and simplify administrative tasks” (Odrizola-Fernandez et al., 2019, p. 550). OI has been credited with positively impacting both business growth and performance (Esposito et al., 2018). The literature on open innovation in SMEs highlights the numerous benefits associated with embracing the concept, which includes inter-organizational collaboration, digital innovation, innovation culture, eco-innovation, stakeholder management, high-performance work systems, and local open innovation, which have been identified as key factors contributing to the

successful implementation of open innovation initiatives in SMEs. Albats et al. (2020) examined the interdependencies and strategic actions in SME open innovation. Their study revealed the importance of actively managing stakeholders, both internal and external, in order to successfully implement open innovation initiatives. Their finding emphasized the need for SME owners to effectively communicate and engage with relevant stakeholders throughout the innovation process.

Anshari and Almunawar (2022) discussed adopting open innovation for SMEs in the context of the fourth industrial revolution, stressing the importance of embracing open innovation to remain competitive in the rapidly evolving global business landscape. Chege and Wang (2020) analyzed the effects of IT innovation on job creation in developing countries, finding that IT innovations can lead to increased employment opportunities within SMEs. Chen and Liu (2020) examined the role of customer participation in green product innovation in SMEs, reporting that opportunity recognition and exploitation mediate this relationship. Donbesuur et al. (2020) found that innovations can lead to improved international performance, with the domestic institutional environment playing a moderating role. Their study suggested that SMEs operating in favorable institutional environments are better positioned to benefit from OI efforts.

Haar et al. (2022) investigated the influence of high-performance work systems on innovation in New Zealand SMEs, considering the effects of firm size and competitive environment. Their findings highlight the importance of implementing high-performance work systems to foster innovation and drive business growth in SMEs. Hanifah et al. (2019) studied the innovation culture among Malaysian SMEs and found that an

innovation-oriented organizational culture can significantly enhance innovation performance. Their finding highlights the need for SMEs to cultivate a supportive and encouraging environment that fosters innovation and creativity. Le and Ikram (2022) examined the impact of sustainability innovation and firm competitiveness on SME performance in Vietnam and revealed that both factors could contribute to improved firm performance. Their study underscored open innovation's significant role in driving business success for SMEs.

Leckel et al. (2020) explored the potential of local open innovation to stimulate collaboration and improve the innovation capacity of SMEs, emphasizing the role of supportive public policies in facilitating this process. They stated that policymakers should consider implementing initiatives that promote local OI to stimulate SME growth and development. Lestari et al. (2020) investigated the antecedents and consequences of innovation and business strategy on SME performance and competitive advantage. They found innovation crucial in enhancing performance and maintaining a competitive edge. Qurashi et al. (2020) examined the impact of intellectual capital on innovation in Pakistani pharmaceutical manufacturing SMEs, finding that intellectual capital can significantly enhance innovation performance. Ramdani et al. (2022) systematically reviewed SMEs' digital innovation, highlighting the potential for digital technologies to facilitate OI processes and improve firm performance. Surya et al. (2021) emphasized the role of OI in promoting economic growth and increasing productivity among SMEs, reporting the potential benefits of adopting OI practices. Valdez-Juárez and Castillo-Vergara (2021) explored the relationship between technological capabilities, OI, and eco-

innovation and found that dynamic capabilities can contribute to increased corporate performance among SMEs. Zahoor and Al-Tabbaa (2020) conducted a systematic review and mentioned that collaboration between SMEs and external organizations could enhance innovation and improve business performance.

Coupling OI with social media usage could significantly help SMEs enhance innovation capacity, improve competitiveness, and drive business performance. OI is a critical concept for social media adoption, given that the resources of social media platforms are inherently external to any business that uses them to interact with their consumer base, businesses, employees, suppliers, and all of their essential stakeholders. SME owners should consider a social media strategy incorporating OI.

Innovation in Minority-Owned Businesses

Innovation is a crucial factor for the success and growth of SMEs, including minority-owned businesses. Several studies have explored the factors affecting innovation among minority-owned SMEs, providing insights into the barriers and enablers these businesses face in pursuing innovation. Abrams (2022) discussed financing minority entrepreneurial efforts in the United States. Abrams (2022) highlighted the challenges minority entrepreneurs faced in accessing capital for innovation and growth. Abrams's (2022) findings stated the importance of developing targeted financing mechanisms to support innovation among minority-owned SMEs.

Chien (2019) emphasized the importance of increasing diversity in innovation by tracking women, minorities, and startup innovators who patent their inventions. Chen (2019) stated that supporting experimentation in inclusive innovation can help bridge the

gap between minority-owned businesses and their counterparts regarding innovative output. Chen (2019) suggested policies and initiatives that foster a more inclusive innovation ecosystem. Dutta et al. (2022) investigated the role of government funding in supporting entrepreneurial ventures through the U.S. Small Business Innovation Research Program. Their findings suggest that government-funded programs can significantly impact the innovative capacity of minority-owned SMEs. Korede et al. (2023) examined innovation in challenging contexts, focusing on the experiences of ethnic minority restaurant owners during the COVID-19 pandemic. They found that minority entrepreneurs could shift their business models by leveraging digital technologies, enabling them to adapt and innovate. Their study highlighted the resilience and adaptability of minority-owned SMEs when facing adversity and suggested that their ability to innovate is influenced by their capacity to respond to external challenges.

Link and van Hasselt (2020) explored the impact of research and development (R & D) on patenting activity in small women-owned and minority-owned entrepreneurial firms. They found a positive relationship between R&D investments and patenting activity, indicating that increased investments in R&D could lead to more significant innovative outputs in the form of patents. Their study revealed the importance of R&D investment as a key driver of innovation among minority-owned SMEs. Link and Morrison (2019) studied the innovative activity of minority-owned and women-owned businesses using evidence from the U.S. Small Business Innovation Research Program. They found the importance of government-funded programs in supporting and fostering

innovative activities in minority-owned businesses. Their study suggested that access to funding is a crucial factor influencing the innovative capacity of minority-owned SMEs.

Martin (2021) found that the lack of patent protection could hinder the innovative potential of minority-owned SMEs. Martin (2021) emphasized the need for policies and interventions to increase patent protection for minority-owned businesses to facilitate their engagement in innovative activities. Robinson et al. (2019) mentioned that urban innovation policies that focused on creating an enabling environment for entrepreneurship and innovation could significantly impact the innovative capacity of minority-owned businesses. Their study suggested that the broader policy context plays a crucial role in shaping the innovation landscape for minority-owned SMEs. The studies revealed several factors affecting innovation among minority-owned SMEs. They highlighted several key themes that included access to funding, investment in R & D, resilience and adaptability in the face of external challenges, the role of urban policy and entrepreneurship, and the importance of an inclusive innovation ecosystem. They outlay a complex interplay of barriers and enablers that minority-owned businesses face in their pursuit of innovation; however, the influence of social media is absent from these studies as a key driver of innovativeness at minority-owned businesses.

Using social media platforms, minority-owned enterprise owners may solicit ideas and comments from their consumers, include them in the co-creation of new goods and services, and test product prototypes (Oser & Riding, 2018). A social media presence may encourage client participation in the innovation process, and this participation may give SMEs significant insights into consumers' wants and preferences, creating more

creative and market-driven goods and services (Candi et al., 2018). Social media's influence on SME's business success, branding, competitiveness, communication, customer engagement, and innovation cannot be haphazardly cast aside, and its incorporation into an SME business strategy may be a determining factor in its marketplace survival (Ahmed et al., 2019; Bakri, 2017; Fan et al., 2021; Nworgu, 2020).

Small- and Medium-Sized Enterprises' Social Media Presence and Innovative Initiatives

Social media have become an essential business tool for minority-owned SMEs to communicate with consumers, build brand recognition, strengthen customer relationships, and gather feedback related to their products, goods, and services to meet customer's expectations (Candi et al., 2018; Kwon et al., 2021; Nguyen et al., 2015). Social media allows SMEs to exchange expertise and interact with other businesses, fostering innovation (Hitchens et al., 2017). Several studies have identified a correlation between SME social media presence and innovative initiatives (Barlatier & Josserand, 2018; Candi et al., 2018; Hitchen et al., 2017; Moe & Schweidel, 2017; Papa et al., 2018; Perez-Gonzalez et al., 2017; Scuotto et al., 2017a, 2017b; Zubielqui & Frygas, 2019). These studies provide valuable insights that implicate the benefits of coupling an SME's social media with their firm's innovativeness. However, the researchers did not investigate social media and innovation in minority-owned SMEs. This study addressed this gap by examining how the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict social strategy,

customer involvement in innovation, and knowledge gained from customers for innovation in U.S. minority-owned SMEs.

Social media platforms give SMEs access to knowledge and resources to increase their innovation capacity (Ashrafi et al., 2018; Benitez et al., 2018; Hitchen et al., 2017; Perez-Gonzalez et al., 2017; Scuotto et al., 2017). Social media will also enhance cooperation and information exchange among SMEs, leading to more significant innovation. Minority-owned SMEs confront specific obstacles, such as restricted access to financing, resources, talent, and markets, which impedes their capacity to exploit their social media for innovation fully (Bates et al., 2018; Crittenden et al., 2019; Gavino et al., 2019; TNJ Staff, 2017; Yang & del Carmen Triana). Social media could empower minority-owned SMEs with access to knowledge and tools to boost their innovative capacity (Melendez & Melgar, 2019).

SMEs' Customer Engagement and Social Media Presence

Social media platforms have revolutionized how businesses interact with their customers, leading to a growing interest in understanding the relationship between social media presence and customer engagement (Agnihotri, 2020). Cao et al. (2021) examined consumers' social media engagement behavior and the moderation effect of social media context. Their study revealed that the context in which social media engagement occurs plays a crucial role in determining the effectiveness of marketing efforts and emphasized the importance of a well-planned social media strategy. Carlson et al. (2019) examined the value-in-the-brand-page-experience (VIBE) concept and its impact on mobile social media satisfaction and customer engagement behaviors. Their findings indicate that a

strong VIBE can enhance customer satisfaction and engagement, emphasizing the need for businesses to create a holistic and valuable brand experience on social media platforms. de Oliveira Santini et al. (2020) developed a comprehensive framework for understanding customer engagement in social media through a meta-analysis of the existing literature on the subject. They found that customer engagement is driven by content relevance, social influence, and interaction frequency. All play a crucial role in determining the effectiveness of social media marketing efforts. Demmers et al. (2020) investigated consumer engagement with brand posts on social media across consecutive stages of the customer journey. Their study revealed that different types of content resonate with consumers at various stages, underlining the importance of a tailored content strategy for maintaining customer engagement throughout the customer journey. Ho and Chung (2020) examined the relationship between customer engagement, customer equity, and repurchase intention in the context of mobile apps. Their findings suggest that fostering customer engagement through social media can increase customer equity and a higher likelihood of repurchasing in the mobile app industry.

Labrecque et al. (2020) investigated the impact of pronoun choices on consumer engagement actions in the context of top global brands' social media communications. Their findings suggest that the subtle nuances of language used in social media content can significantly influence customer engagement, underlining the importance of crafting messages that resonate with the target audience. Li et al. (2020) explored the customer engagement-brand loyalty relationship in the context of tourism social media, identifying brand attachment and customer trust as essential factors. Liu et al. (2021) used big data

analytics and natural language processing to examine the impact of luxury brands' social media marketing on customer engagement, demonstrating a positive relationship between social media presence and engagement levels.

Meire et al. (2019) explored the role of marketer-generated content in customer engagement marketing, highlighting the need for brands to invest in high-quality content that resonates with their target audience. This investment can lead to improved customer engagement and overall marketing effectiveness. Park et al. (2020) investigated the potential adverse effects of social media marketing on value perceptions of luxury fashion brands, revealing that overly friendly communication can dilute luxury brands' perceived value and exclusivity. Their finding highlights the importance of balancing engaging and preserving the brand's image on social media platforms. Rietveld et al. (2020) explored the influence of message appeals on customer engagement on Instagram, indicating that the type of appeal used in social media messages can significantly impact customer engagement levels. Their finding stressed the need for businesses to carefully craft their message appeals to maximize customer engagement on social media platforms.

Sashi et al. (2019) conducted an empirical investigation using Twitter data to analyze the relationship between social media, customer engagement, and advocacy for quick-service restaurants. Their findings revealed a positive correlation between social media engagement and customer advocacy, emphasizing the importance of leveraging social media platforms to foster customer loyalty and brand advocacy. Wibowo et al. (2020) found that customer behavior is influenced by social media marketing activity and customer experience, emphasizing the need for businesses to develop a robust and

strategic social media marketing plan. Zollo et al. (2020) unpacked the relationship between social media marketing and brand equity, examining the mediating role of consumers' benefits and experiences. Their study demonstrated that providing customers with valuable experiences and benefits through social media marketing efforts can enhance brand equity, further emphasizing the importance of a well-executed social media strategy.

Customer participation is essential for SMEs to generate new goods and services that appeal to their target market. Customer participation enables owners and managers of SMEs to comprehend their clients' demands, preferences, and pain points, creating more effective goods and services (Pfothenhaur et al., 2019). By incorporating consumers in the innovation process, minority-owned SMEs may better understand their wants, preferences, and pain areas, creating new goods and services that are more suitable to their target market (Garcia et al., 2020). Customer involvement through social media has become essential for all businesses, especially SMEs, in engaging and interacting directly with their consumers, allowing them to collect feedback, analyze market trends, gain customer knowledge for innovation, and include them in the innovation process (Bihami et al., 2017). Social media platforms provide SMEs with direct access to their consumers and the ability to collect real-time feedback at little cost and with no effort (Bakri et al., 2017; Candi et al., 2018; Fan et al., 2021; Scuotto et al., 2017). Social media may give a mechanism to interact with a larger audience and their target market (Jiao et al., 2020), and could boost brand recognition, communicate with prospective consumers, and get feedback on their goods and services (Candi et al., 2028; Nguyen et al., 2015). Social

media platforms may provide minority-owned SME owners and managers a vehicle to enhance customer communication, cultivate customer loyalty, and maintain, retain, and increase their customer base (Oser & Riding, 2018).

Through social media platforms, minority-owned enterprise owners may solicit ideas and comments from their consumers, include them in the co-creation of new goods and services, and test product prototypes (Oser & Riding, 2018). This participation may give SMEs significant insights into consumers' wants and preferences, creating more creative and market-driven goods and services (Candi et al., 2018) and the link between social media presence, consumer participation; however, innovation in minority-owned SMEs is complicated and requires an optimal business strategy that aligns with their social strategy (Candi et al., 2018). The existence of social media may be a significant facilitator for SMEs to engage their consumers in the innovation process (Basri et al., 2017; Oodoom et al., 2017). Consumer engagement through social media could stimulate innovation by giving SMEs critical ideas, perspectives, and market-driven insights for producing novel goods and services (Garcia et al., 2020). Consumer engagement and social media presence may become crucial for SME innovation, especially for minority-owned SMEs (Candi et al., 2018; Pfothenhaur et al., 2019; Scuotto et al., 2017). The greater the SME's social media presence, the more potential they have to communicate with consumers and get feedback, increasing customer participation in innovation (Oser & Riding, 2018). Through social media platforms, minority-owned SMEs could interact with consumers, solicit their opinions, and include them in innovation. The more intimate

the connection between minority-owned SMEs and their clients, the more impactful potential there could be to ignite innovation (De Oliveira et al., 2023).

Application of Customer Knowledge for Innovation in U.S. Minority-Owned SMEs

Customer knowledge refers to customers' data, insights, and ideas on their requirements, preferences, and pain areas (Candi et al., 2018). SMEs may better comprehend their target market and create creative goods and services that fit their demands by acquiring knowledge gained from customers (Candi et al., 2018; Oser & Riding, 2018). Social media platforms provide SMEs with direct access to their consumers and the ability to collect real-time feedback at little cost and with no effort (Candi et al., 2018). Through social media, minority-owned SMEs may communicate with current consumers, establish a loyal client base, and cultivate customer loyalty (Basri et al., 2017; Candi et al., 2018; Pfothenhaur et al., 2019; Scuotto et al., 2017). Customer knowledge may allow minority-owned SMEs to create goods and services unique to their target market (Candi et al., 2018).

Through social media platforms, minority-owned SMEs may solicit ideas and comments from their consumers, include them in the co-creation of new goods and services, and test product prototypes (Roberts et al., 2017; Roberts & Candi, 2014). Knowledge gained from customers through a social media presence could result in cost reductions, organizational efficiency, management improvements, technology enhancements, and customer satisfaction, which could translate into more significant sales and profits, and marketplace sustainability (Ahmad et al., 2019; Candi et al., 2018). Acquiring consumer knowledge for innovation may be complicated (Candi et al., 2018).

Minority-owned SMEs must have the proper methods and tools to acquire, evaluate, and use customer information. Depending on that feedback, they must be open to client input and prepared to adjust their goods and services (Oser & Riding, 2018). Knowledge gained from customers may be essential for minority-owned SMEs to overcome specific obstacles such as restricted access to financing, talent, business networks, language hurdles, and other prejudices (Candi et al., 2018).

The role of customer knowledge in driving innovation within SMEs has been examined in recent literature. Bhimani et al. (2019) conducted a systematic literature review that explored the relationship between social media and innovation, highlighting the importance of customer engagement in fostering innovation. Lee (2018) provided a typology of social media analytics for enterprises, emphasizing the role of social media in driving innovation by generating insights from customers. Carlson et al. (2018) mentioned the value of customer engagement for understanding customer preferences, including but not limited to product features, sustainability practices, and price points, which could then be used to develop novel products and services and refine existing products. Holsapple et al. (2018) developed a conceptual framework for business social media analytics, and Kitchens et al. (2018) stressed the strategic value of integrating relationship-oriented big data in advanced customer analytics. Liu et al. (2020) demonstrated how cloud-based big data analytics could drive customer insight-driven design innovation in SMEs by emphasizing the role of technology in facilitating the effective use of customer knowledge. Hånell et al. (2020) explored the impact of e-commerce on the internationalization of retail SMEs, which revealed how digital

channels can help businesses expand their reach and their innovative offerings.

Matarazzo et al. (2021) provided a dynamic capabilities perspective on digital transformation and customer value creation in Italian SMEs. They revealed that digital channels could significantly impact business performance and innovation.

These studies can be compared with literature on minority-owned, and a few recent studies have examined the role of customer knowledge in driving innovation within minority-owned SMEs. Hasssan et al., (2019) revealed that minority-owned SMEs can benefit from social customer relationship management (s-CRM) by using social media platforms to engage customers and gather insights for innovation. Seid (2020) discussed strategies for sustaining minority-owned small businesses, and Bates et al. (2018) analyzed minority entrepreneurship in the 21st-century United States. Starbird et al. (2022) assessed the impact of formality, integration, and commitment on the performance of Latino-owned small businesses, and Smith (2018) examined the competitive strategies of minority-owned small businesses. Rahman et al. (2018) emphasized the importance of community identification and engagement for minority-owned businesses. They mentioned the inherent paradox that minority-owned businesses often face, and entrenchment in a minority community may limit broader growth with a customer base beyond the minority community.

Kim and Liu's (2022) study of the effects of emphasizing minority-owned status in social media advertising showed mixed results dependent upon the expectations of a business's current consumer base. They stated that where an existing customer base is inclined to support minority-owned businesses, it is primarily based on a resurgence of

recent social justice movements and that minority-owned markers in social media presence are beneficial and can have a neutral or negative effect if the attitudes of the existing customer base are explicitly less in favor of supporting minority-owned businesses for its own sake.

The extant research illustrates the value of customer insight analytics suggests that minority-owned SMEs could be using social media analytics to determine attitudes of the existing and potential customer base that could inform them on how businesses should adapt their social media marketing and minority-owned markers within their social media strategy (Holsapple et al., 2018; Liu et al., 2020). Minority-owned SMEs that exploit their social media presence to extrapolate customer knowledge and translate knowledge gained from their customers for innovation could increase their marketplace survivability rate beyond the first 18 months of operation.

Summary and Conclusions

The role of social media in SMEs has been extensively studied; researchers highlighted its potential to boost business performance, facilitate communication, and improve customer relationships (Akpan et al., 2021; Ghobakhloo & Ching, 2019; Pirola et al., 2020). Social media is recognized as an essential tool for minority-owned SMEs in promoting their businesses, communicating with stakeholders, and engaging customers (Akpan et al., 2021). The literature emphasized the importance of incorporating social media into SMEs' digital strategies and leveraging its potential to enhance business outcomes (Koh et al., 2019).

Impedances affecting innovation among minority-owned SMEs have also been examined in the literature, with studies identifying access to funding, the resilience and adaptability of these businesses, the role of urban policy and entrepreneurship, and the importance of an inclusive innovation ecosystem as critical factors influencing their innovative capacity (Link & Morrison, 2019; Korede et al., 2023; Robinson et al., 2019; Chien, 2019). Increased investment in R & D and targeted financing mechanisms have been shown to improve the innovativeness of minority-owned SMEs (Link & van Hasselt, 2020; Abrams, 2022; Martin, 2021). The findings from the studies accent the importance of understanding the unique challenges and opportunities that minority-owned SMEs face in adopting social media and other digital technologies, as well as the factors that influence their innovative capacity.

The literature on social media use, SME readiness for technological change, and innovation among minority-owned SMEs provide valuable insights that inform this study. Further examination is needed to determine whether the number of social media platform presences predicts social strategy, customer involvement, and knowledge gained from customers for innovation at minority-owned SMEs in the United States. This knowledge may contribute to the ongoing discourse on how minority-owned SMEs can harness the potential of social media and other advanced technologies to drive innovation and growth.

Chapter 3: Research Method

In this chapter, I will discuss the research method chosen for the study, a quantitative research design. Using a quantitative research method allows for acquiring objective and quantifiable data that can be statistically examined (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tutz, 2019). A quantitative research design provides a comprehensive summary of the research methodology used to examine does the number of social media presence platforms (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict social strategy, customer involvement in innovation, knowledge gained from customers for innovation in U.S. minority-owned SMEs. It outlines how the data for this research is gathered and evaluated. Chapter 3 summarizes the study's research design, sampling strategy, data collecting methodologies, data analysis methods, ethical issues, and limitations.

Using a quantitative research technique, it gathers objective, quantifiable data that can be statistically evaluated to assess the relationship between social media presence and innovation in minority-owned enterprises. A random sample of 134 minority-owned small- and medium-sized businesses in the United States retail, fitness, personal care, and financial services sectors will engage in an online survey. Based on the proposed research, a quantitative method is acceptable for this study for various reasons. First, the study's RQ is well-defined. It seeks to determine whether the number of social media platforms predicts the social strategy, customer involvement in the innovation, and

customer knowledge gained for the innovation in minority-owned SMEs in the United States.

Research Design and Rationale

A quantitative research technique is appropriate for this study based on the intended research. First, the study's RQs are well-defined. It seeks to determine does the number of social media platform presences predicts the social strategy, customer involvement in the innovation, and knowledge gained from customers for the innovation in minority-owned SMEs in the United States. Quantitative research techniques are ideal for addressing inquiries that aim to establish correlations between variables or identify their causes and effects. In this instance, the number of social media platforms is the independent variable, while the dependent variables are social strategy, customer involvement for innovation, and knowledge gained from customers for innovation (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tutz, 2019).

The data-gathering approach for this research is an online survey using structured questions used in a previous study by Candi et al., 2018. This method conforms to the quantitative research method, which collects numerical data. The study gathered data from the owners and managers of 134 minority-owned retail, fitness, personal care, and financial services SMEs in the United States. The research used statistical analysis techniques, such as descriptive statistics, Pearson's multiple correlation coefficient, and linear regression analysis, suitable for assessing quantitative data. The data was summarized using descriptive statistics to provide an overview of the sample's

characteristics. Regression analysis was used to statistically analyze the relationship between the dependent and independent variables, including the strength and direction of the relationship between the variables. A quantitative research technique is suitable for this study since it facilitates the collection of objective and measurable data that can be statistically analyzed to evaluate does the number of social media platform presences predicts the social strategy, customer involvement in the innovation, and knowledge gained from customers for the innovation in minority-owned SMEs in the United States (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tutz, 2019).

Research Design

Using an online survey to gather data from a sample of minority-owned small- and medium-sized businesses (Johnson & Onwuegbuzie, 2004) is a survey approach. The study aimed to gather information on these SMEs' social media presence and degree of innovation. The study approach is consistent with the RQs and goals since it permits the examination of the link between social media presence and innovation in minority-owned SMEs. This research performed a quantitative assessment of the social media presence and innovation of minority-owned enterprises in the United States and, thus, employed a survey instrument as the data collecting method, which collected data using an organized questionnaire to get insight into the participants' attitudes, habits, and views (Kumar, 2006).

This study's research design is a quantitative correlation research design using regression analysis. The regression analysis explored the association between minority-

owned SMEs' social media presence, customer engagement, and innovation. The selection of a quantitative correlation research design was determined by the objectives of the study, which were to investigate the connection between variables and establish statistical significance (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tutz, 2019). A quantitative approach offers a more organized and systematic method for gathering and evaluating data and may facilitate the generalization of results to a broader population (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tutz, 2019). This quantitative research used statistical tests to assess the link between the variables using IBM's SPSS version 29.

Regression analysis was selected based on its capacity to quantify the degree of association between the dependent variable and one or more independent variables, determine the amount of variation between the independent and dependent variables, and determine the direction and magnitude of the relationship (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tutz, 2019). In this research, the number of social media platform presences was the independent scale variable, while social strategy, customer involvement for innovation, and knowledge gained from customers for innovation were the dependent scale variables. Regression analysis examined how much variation can be explained by social media presence, social strategy, customer involvement, and knowledge gained from customers for innovation. The linear regression model for this study is as follows:

$$RQ_i$$

$$Y_i = m_iX + b_i + e_i$$

Y_i = Dependent variable, applicable dependent variable

X = Independent variable, number of social media platform presences (s)

m_i = slope

b_i = intercept

e_i = error term

Other research method designs were investigated that included qualitative and mixed methods. Qualitative research employs data collection techniques such as interviews and focus groups, which may be time-consuming and costly. A qualitative research design is not generalizable and may not provide insights that minority-owned business owners and managers in the United States can consider. A mixed-methods strategy was examined; however, it is a very complex design for one researcher to manage, and a quantitative technique was the most suitable to be used by a single researcher. My selection of a quantitative design resided in the data collection method and analyzing the statistical connection between the variables of interest, for which a quantitative approach was more appropriate (Fields, 2018; Frankfort-Nachmias et al., 2020; Laerd, n.d.; Warner, 2013; Wright & Tut, 2019).

Research Questions and Hypotheses

RQ1: Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict the social strategy in U.S. minority-owned SMEs?

H₀₁: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) does not predict the social strategy in U.S. minority-owned SMEs.

H₁₁: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts the social strategy in U.S. minority-owned SMEs.

RQ2: Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict customer involvement in innovation in U.S. minority-owned SMEs?

H₀₂: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) does not predict customer involvement in innovation in U.S. minority-owned SMEs

H₁₂: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts customer involvement in innovation in U.S. minority-owned SMEs.

RQ3: Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict the knowledge gained from customers for innovation in U.S. minority-owned SMEs?

H₀₃: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) does not predict knowledge gained from customers for innovation in U.S. minority-owned SMEs

*H*₁₃: The number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts knowledge gained from customers for innovation in U.S. minority-owned SMEs.

Methodology

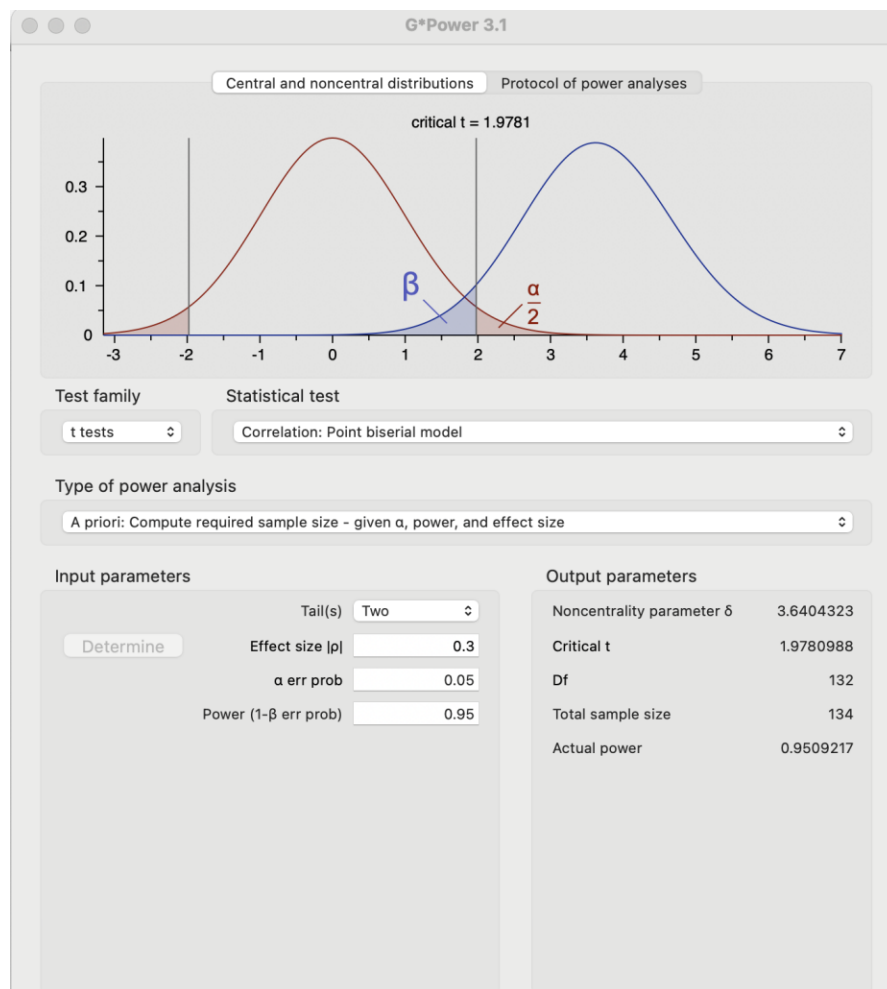
I examined whether the number of social media presence platforms (e.g., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicts social strategy, customer involvement in innovation, and knowledge gained from customers for innovation in minority-owned SMEs in the United States. To do so, I used a quantitative research approach to collect objective, measurable data that can be statistically analyzed.

Population

The targeted sample population is 134 small minority-owned business owners and managers of retail, fitness, personal care, and financial services businesses in the United States. The target group could interact with social media platforms as producers or users.

Sampling and Sampling Procedures

I randomly sampled 134 minority-owned SMEs in the retail, fitness, personal care, and financial services sectors in the United States to participate in an online survey. The sample size was based on G*Power statistical analysis using four variables (see Figure 1).

Figure 1*G*Power Sample Size Calculation Presurvey***Instrumentation**

The survey instrument included questions measuring the SME's social media platform presence, degree of innovation, and other pertinent demographic data; the research instrument collected data using an online survey. I used survey questions from Candi et al. (2019). Appendix A includes documentation of permission to use the authors'

survey. Appendix B contains Candi et al.'s actual survey. To analyze the data, I used descriptive statistics, regression analysis, and mediation analysis to evaluate the study hypotheses. The research shed light on the link between social media platform presences, social strategy, customer involvement, and customer knowledge gained from customers for innovation and innovation in minority-owned SMEs in the United States. The results from the study could aid these firms in surviving their 1st year and beyond. The data will was gathered using an online survey platform, and the results were statistically analyzed using IBM SPSS version 29, and the data was presented in tables and figures, along with a narrative that is segmented by each question in the survey. The results of the analysis are presented in Chapter 5 of the study.

Procedures for Recruitment, Participation, and Data Collection

The techniques for data collection were devised to ensure the data's quality and dependability. The research's data was gathered via an online survey platform (SurveyMonkey) as an efficient and trustworthy method for quickly collecting quantitative data from many people (Wright & Tutz, 2019). Data collection from study participants was obtained using multiple-choice questions and Candi et al.'s (2018) screening question 1 – with the number of social media platforms and their Social Strategy to Gain Knowledge for Innovation survey. All items in the knowledge survey were rated on a 5-point Likert scale (1 = *small extent or disagree* to 5 = *to a large extent or agree*), with survey data from a randomized cross-section of 134 small minority-owned business owners/managers of retail, fitness, personal care, and financial services businesses in the United States with a minimum of 1 year of business operation. Study

participants were allowed to skip any question they felt uncomfortable answering, ensuring that all replies were voluntary and objective.

Data Analysis Plan

This research study will use descriptive statistics, regression analysis, and IBM's SPSS version 29 to organize and analyze the data. The data was summarized using descriptive statistics to provide a detailed analysis of the sample's characteristics. The quantitative study employed Pearson's multiple correlation coefficient and quantitative linear regression to address the RQs and hypotheses. The number of social media platform presences served as the independent variable. The dependent variables consisted of social strategy for the innovation, customer involvement for the innovation, and customer knowledge for the innovation. The conclusions of this research may help minority-owned SMEs in the United States survive their 1st year and beyond.

The study data was gathered via an online survey platform (SurveyMonkey) and included pertinent questions on minority-owned enterprises' social media presence and creative activities. Participants responded using multiple-choice or rating scales. The survey was designed to guarantee that all responses are objective and voluntary. Throughout data analysis, assumptions were made about the data's normality, the variance's homogeneity, and the observations' independence. These assumptions were reviewed to verify that the data analysis methods were appropriate.

The data analysis methodologies used in this study are consistent with the RQs and objectives; these methods aided in testing hypotheses and examining the relationship between the number of social media platform presences and innovation activities.

Regression analysis determined the relationship between variables, while descriptive statistics summarized the data.

Threats to Validity

Variables in quantitative studies must be finely tuned to detect the slightest changes. Researchers use widely accepted measurement methods, which rely on existing past knowledge of the quality of measurement instruments to meet acceptable reliability and validity standards. Threats to validity in a quantitative study consist of internal and external. Internal validity threats such as historical maturation, testing, instrumentation, interaction effects within the observed causal relationship, and biases in research, selection, and statistical regression can be mitigated through randomization (Giannatasio, 1999; Torre & Picho, 2016). I used SurveyMonkey to mitigate internal validity threats by randomly sampling the participants in the study. External threats to validity include population, ecological, and focus on how well the study can be generalized or applied to different groups or how the results of one study can be used to support the hypothesis of another similar study (Giannatasio, 1999; Torre & Picho, 2016). Pearson's multiple correlation coefficient and linear regression were chosen as the most suitable methodologies to adequately address the variables in the research questions and hypothesis statements and to process and analyze the data collected from the study's participants. Randomized sampling was used for generalization, and different groups can use the study findings to support their hypothesis with similar studies, addressing the threat of external validity.

Ethical Consideration

A researcher adheres to ethical standards and protects the participants' rights, privacy, safety, and confidentiality. I ensured that all study participants were informed of all ethical considerations that were associated with the study through informed consent. Walden University requires that all research studies undergo institutional review board (IRB) evaluation and that researchers obtain approval before collecting data. I conducted the study after receiving the Walden University Institutional Review Board approval #12-11-23-1009086. I provided all participants with complete information about the research, including its purpose, data collection methods, and fundamental rights. I offered this information, avoiding jargon and technical phrases. The participants were notified that their participation was voluntary and could quit the study without penalties.

I managed the confidential nature of the information and took stringent precautions to give no personally identifiable information to third parties. Codes are used to preserve the anonymity of the participants instead of their real names. All gathered data will be kept on password-protected systems and encrypted storage media to avoid unwanted access. I have placed all copies of the data received from the study participants in encrypted format in a locked, secure location and will keep the data secure for 5 years. I complied with all relevant data protection standards, including the General Data Protection Regulation, to protect participant data from misuse, unauthorized access, and disclosure. In conclusion, this study strongly respected ethical standards, including informed permission, confidentiality, and data protection. All information the study participants provide is kept private and always secured by me.

Summary

This study employed a rigorous methodology to examine does the number of social media platform presences predicts the social strategy, customer involvement in the innovation, and knowledge gained from customers for the innovation in minority-owned SMEs geographically located in the United States. Ethical concerns were taken into account throughout the research process to guarantee that the rights of participants were safeguarded while sampling and data-gathering procedures handled the study's limits. This chapter comprehensively discussed the study's research design, data-gathering methodology, and data analysis procedures. The chapter described the ethical factors considered throughout the study, including informed consent and confidentiality.

Chapter 4: Results

This quantitative correlation study examined the relationship, if any, between the number of social media platform presences and innovation at minority-owned SMEs in the United States. The independent variable in this study was the number of social media platform presences, and the dependent variables were social strategy, customer involvement in innovation, and knowledge gained from customers for innovation. Three RQs were constructed with the null hypothesis (Ho) for RQ1 was there is no statistically significant relationship between the number of social media platform presences and social strategy at minority-owned SMEs in the United States, and the alternative hypothesis for RQ1 was there is a statistically significant relationship between the number of social media platform presences and social strategy for minority-owned SMEs in the United States. The null hypothesis for RQ2 was there is no statistically significant relationship between the number of social media platform presences and customer involvement for innovation at minority-owned SMEs in the United States, and the alternative hypothesis for RQ2 was that there is a statistically significant relationship between the number of social media platform presences and customer involvement in innovation at minority-owned SMEs in the United States. The last null hypothesis for the last RQs in this study RQ3, was that there is no statistically significant relationship between the number of social medial platform presences and knowledge gained from customers for innovation at minority-owned SMEs in the United States, and the null hypothesis for RQ3 was that there is a statistically significant relationship between the number of social media platform presences and knowledge-gained from customers for

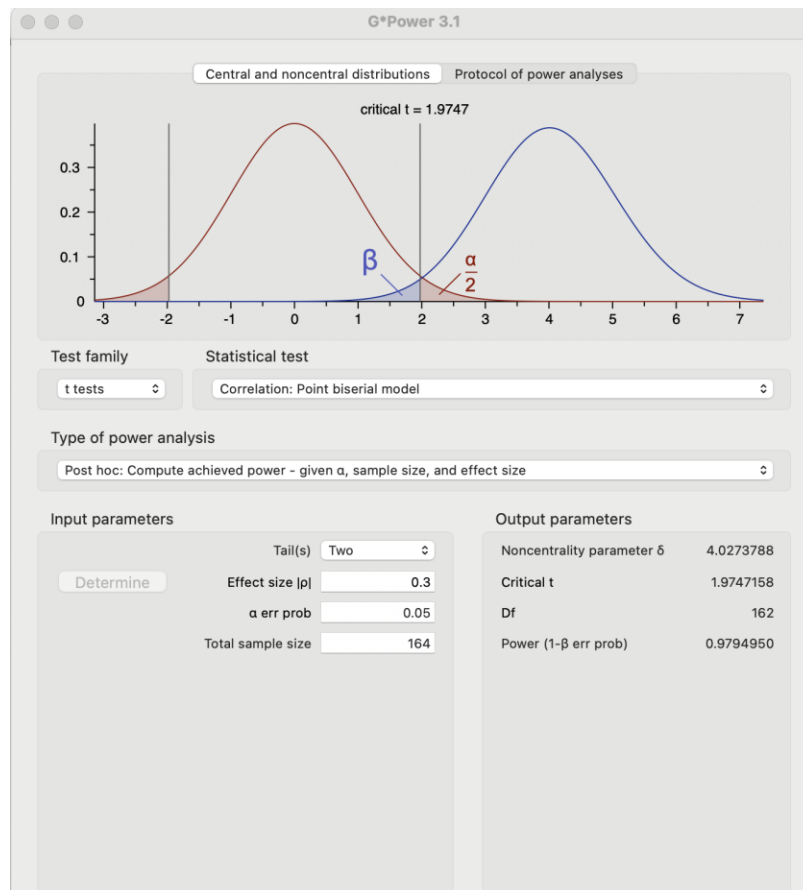
innovation at minority-owned SMEs in the United States. The study population to explore the RQs comprised owners or managers of minority-owned SMEs in the United States.

Data Collection

The data was collected through the researcher's social network, work contacts, professional network, and SurveyMonkey.com. The research data was collected through an online survey link, an invitation to complete the survey, and a link to the study on SurveyMonkey. A total of 164 surveys were completed and usable, based on the criteria for the study, which were owners and managers of minority-owned SMEs in the United States. Those not owners or managers of a minority-owned SME in the United States did not proceed with the survey. A post hoc G*Power statistical analysis was performed after the survey, which indicated that 162 completed responses were needed for an adequate statistical representation of the population of minority-owned SMEs in the United States (see Figure 2). The 164 completed surveys provided a statistically representative population of minority-owned SMEs in the United States, and data findings from this population were appropriate for statistical analysis, conclusions, and recommendations based on the study's RQs and hypotheses.

Figure 2

*G*Power Sample Size Calculation Postsurvey*



Descriptive Statistics

I used SurveyMonkey and SPSS V. 29 applications to examine all variables, including dependent and independent ones. The first level of review included demographic variables, which asked the respondents about their geographical location, race or ethnicity, gender, age, type of business that they owned or operated, and the social media platforms that their business has a presence on (e.g., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs).

The geographical location of the 164 respondents who completed the survey were East 27.3% ($n = 45$), West 32.3% ($n = 53$), North 14.6% ($n = 24$), and South 25.6% ($n = 42$). The 164 respondents who completed the survey described their racial or ethnicity as American Indian or Alaskan Native (1.2%, $n = 2$), Asian or Pacific Islander (12.2%, $n = 20$), Black or African American (15.9%, $n = 26$), Hispanic or Latino (7.9%, $n = 13$), White (61.0%, $n = 100$), and multiple ethnicity or other (1.8%, $n = 3$). The genders of the 164 respondents who completed the survey were 56.1% female ($n = 92$) and 43.9% male ($n = 72$). The age ranges of the 164 respondents who completed the survey were 18–24 (7.3%, $n = 12$), 25–34 (22.6%, $n = 37$), 35–44 (22.0%, $n = 36$), 45–54 (28.0%, $n = 46$), 55–64 (13.4%, $n = 22$), and 65+ (6.7%, $n = 11$).

Test of Assumptions

Linear regression requires a test of assumptions to ensure that the data being used can be analyzed using a regression technique. The seven assumptions that must be met are (a) a continuous dependent variable (Assumption 1), (b) a continuous independent variable (Assumption 2), (c) a linear relationship between the two variables (Assumption 3), (d) independence observations (Assumption 4), (e) no significant outliers (Assumption 5), (f) homoscedasticity (Assumption 6), and (g) normally distributed residuals (Assumption 7; Laerd, n.d.). The first three assumptions were met.

Regarding Assumption 1, the dependent variables were social strategy, customer involvement in the innovation score, and knowledge gained from customers for the innovation. The variables were ordinal—they were measured using a Likert scale ranging from 1 to 5—and could be treated as continuous. The assumption was met. Assumption 2

was also met. The independent variable, the number of social media platform presences, was a continuous scale variable, ranging from 0 to 25. Regarding Assumption 3, a visual inspection of the scatterplots indicated that a linear relationship was established between the variables and the assumption was met (see Figures 3–5).

Figure 3

Scatterplot of Social Strategy by Number of Platforms

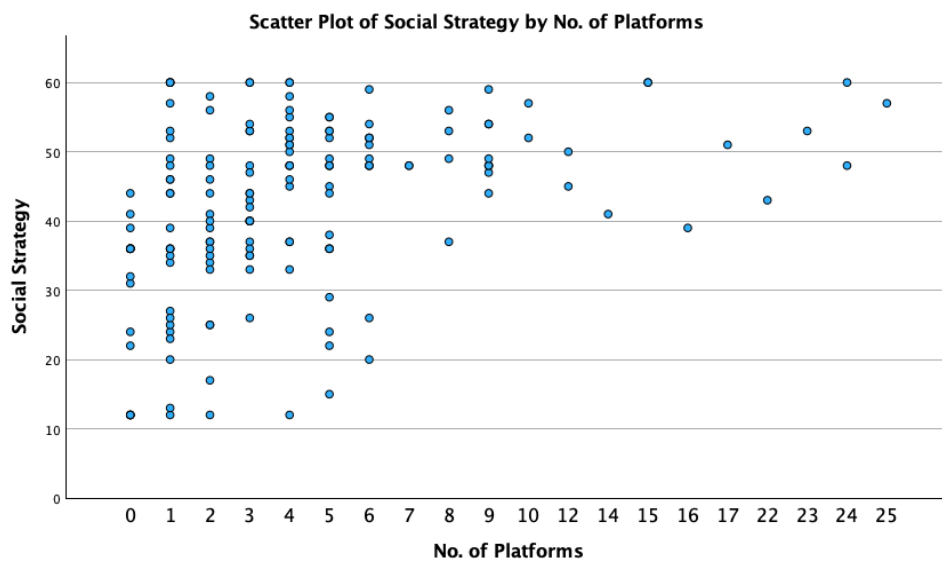
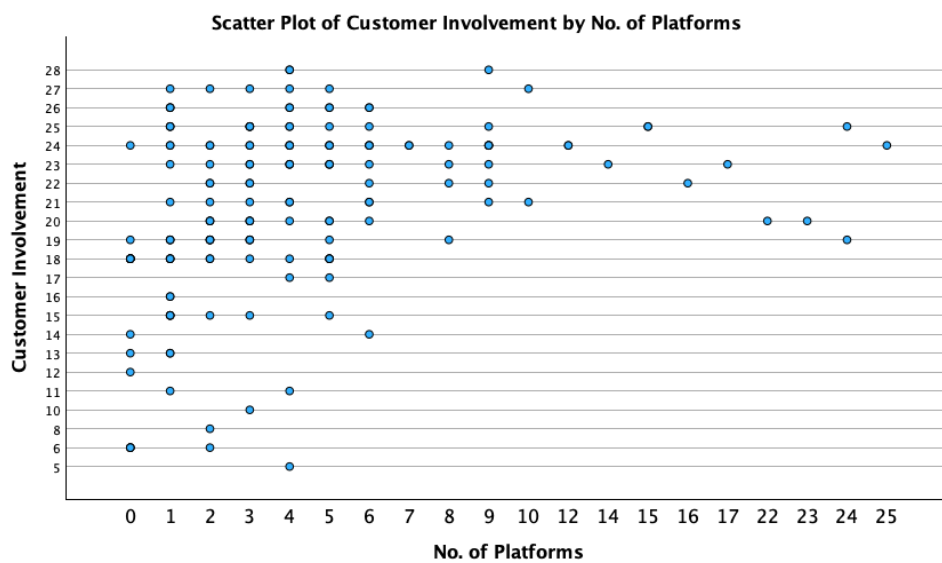
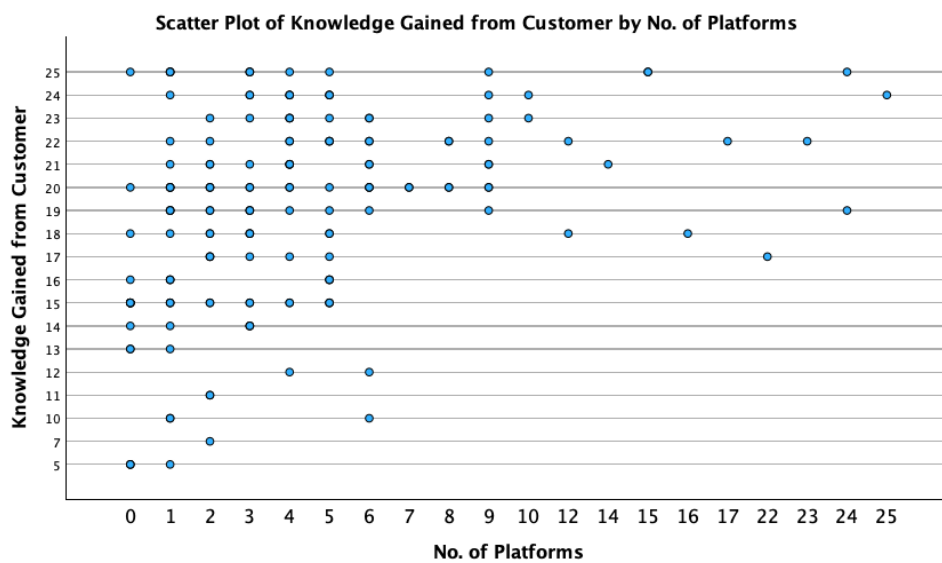


Figure 4

Scatterplot of Customer Involvement by Number of Platforms

**Figure 5**

Scatterplot of Knowledge Gained From Customer by Number of Platforms



I used the Durbin-Watson statistic to evaluate the independence of observations (Assumption 4). The results were 1.773 for RQ1, 1.820 for RQ2, and 1.898 for RQ3. The assumption was met. A visual inspection of the plots of standardized residuals against their respective standardized predictive values found homoscedasticity, and Assumptions 5 and 6 were met, as shown in Figures 6–8.

Figure 6

Scatterplot of Regression Standardized Residual vs. Standardized Predicted Value for Dependent Variable Social Strategy

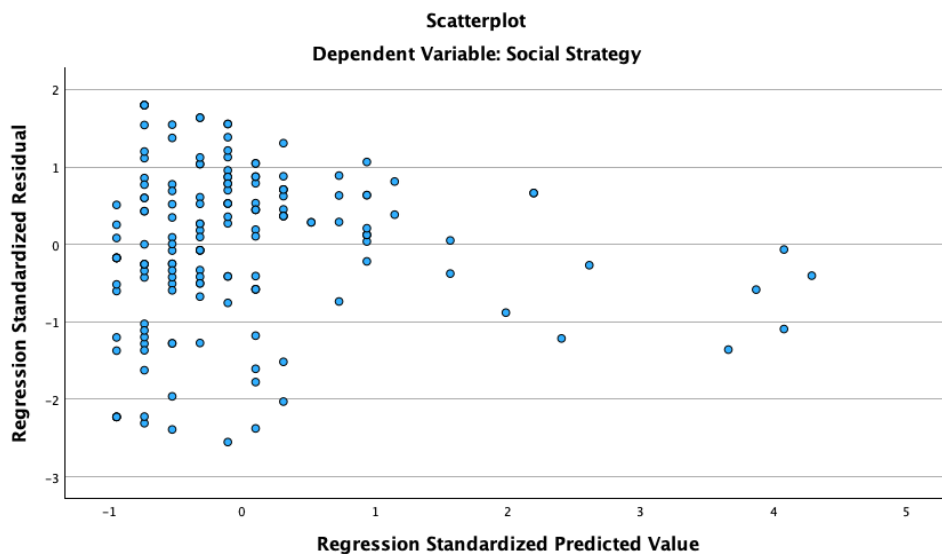


Figure 7

Scatterplot of Regression Standardized Residual vs. Standardized Predicted Value for Dependent Variable Customer Involvement

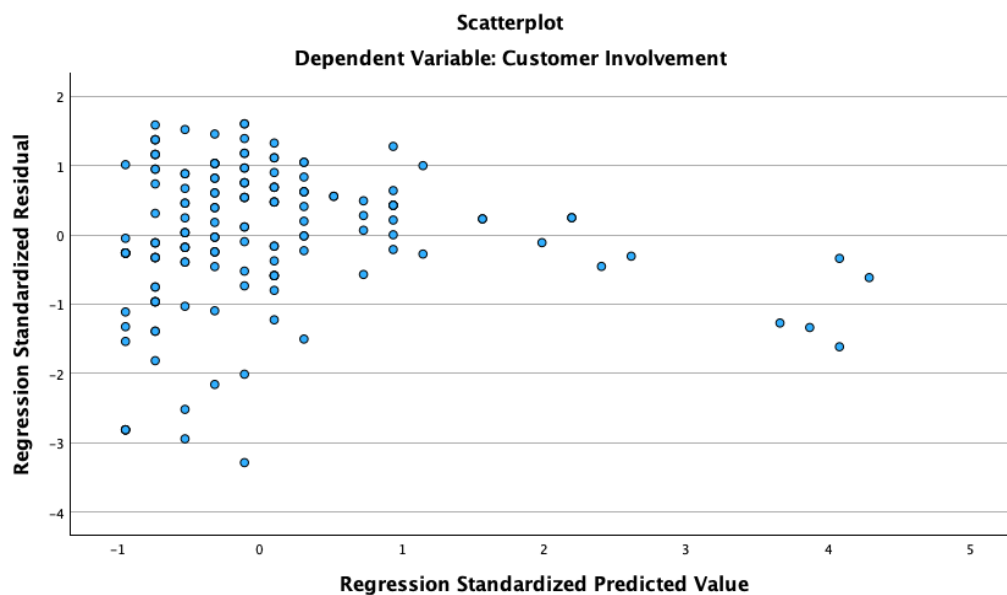
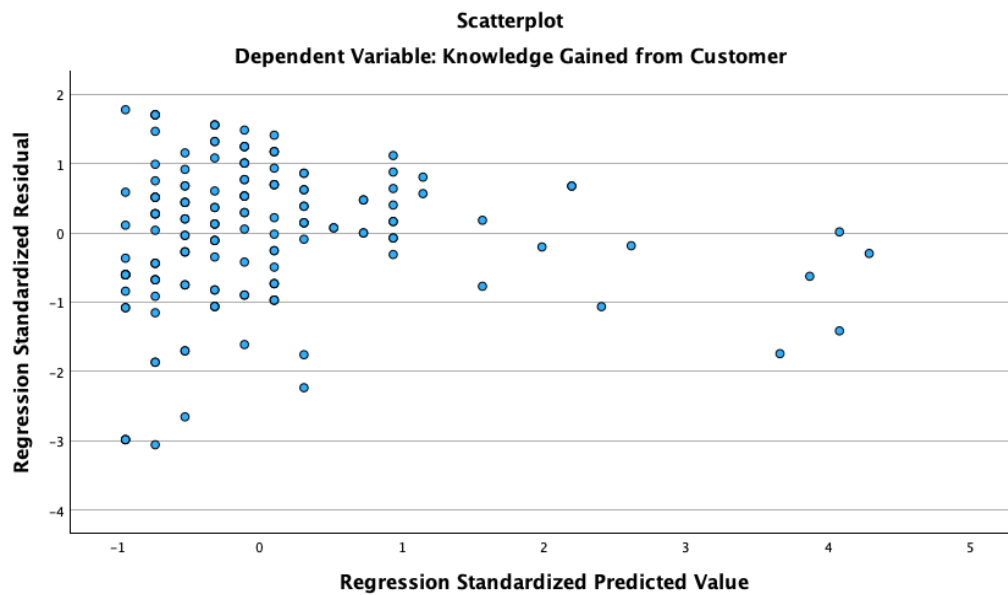


Figure 8

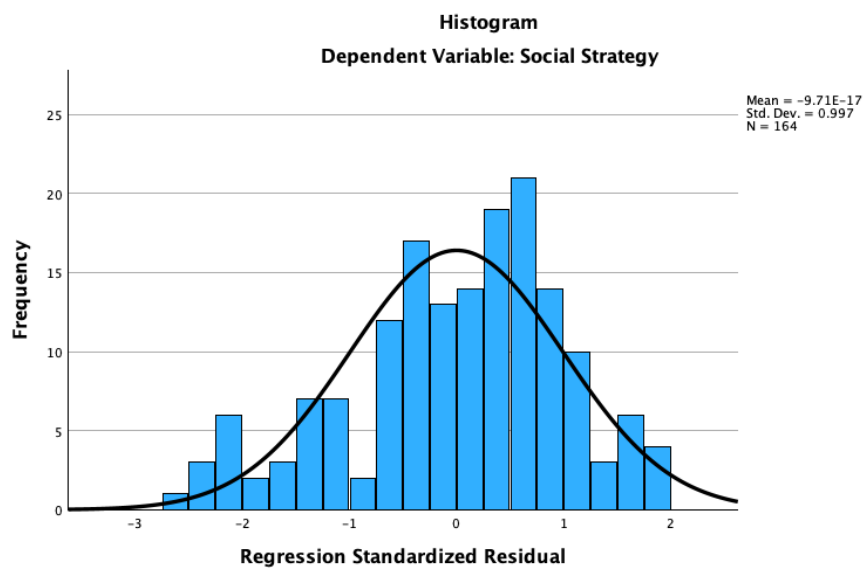
Scatterplot of Regression Standardized Residual vs. Standardized Predicted Value for Dependent Variable Knowledge Gained From Customer



A visual inspection of the plots of histograms displayed a normal distribution (see Figures 9–11), and Assumption 7 was met.

Figure 9

Histogram of Dependent Variable Social Strategy

**Figure 10**

Histogram of Dependent Variable Customer Involvement

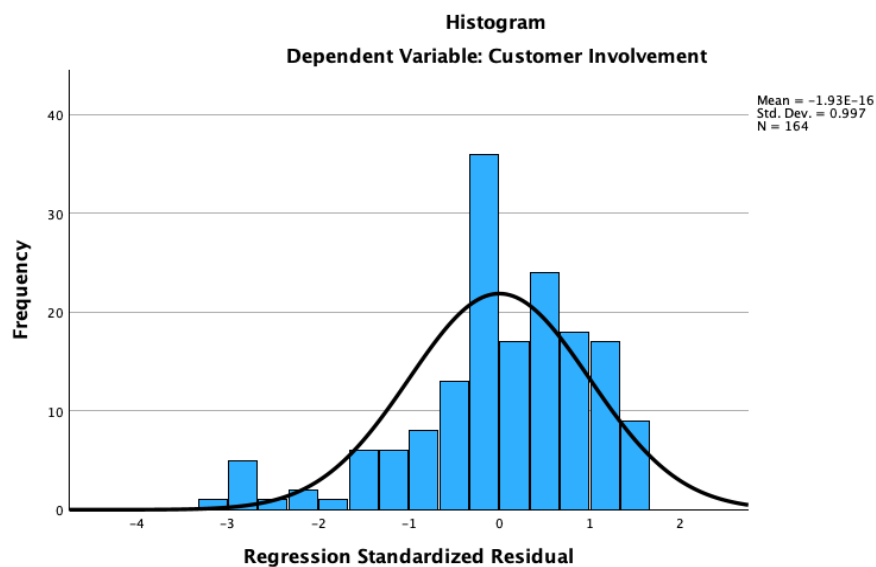
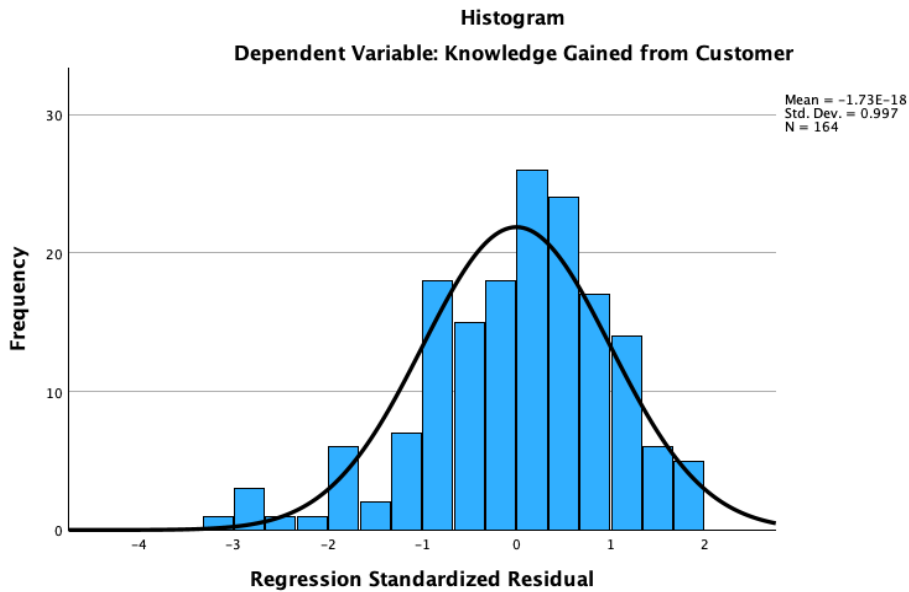


Figure 11

Histogram of Dependent Variable Knowledge Gained From Customer



Data Analysis

Descriptive Statistics

The descriptive statistics for the independent and dependent variables are as follows: number of platform presences ($M = 4.52$, $SD = 4.779$), social strategy ($M = 42.31$, $SD = 12.499$), customer involvement in innovation ($M = 20.61$, $SD = 4.910$), and knowledge gained from customers for innovation ($M = 18.92$, $SD = 4.436$). The population size for the four variables was 164.

Pearson Multiple Correlation Coefficient R

Pearson's multiple correlation coefficient indicates there was a statistically significant moderate positive correlation between number of platform presences and social strategy, $r(160) = .36$, $p < .001$, a statistically significant small positive correlation

between the number of platform presences and customer involvement in innovation for innovation $r(160) = .30, p < .001$, and a statistically significant moderate positive correlation between the number of social medium platform presences and knowledge gained from customers for innovation, $r(160) = .33, p < .001$ (see Table 1).

Table 1

Pearson's Multiple Correlation Coefficient

Variable		No. of platforms	Social strategy	Customer involvement	Knowledge gained from customers
No. of platforms	Pearson r	1	.362**	.299**	.332**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	164	164	164	164
Social strategy	Pearson r	.362**	1	.804**	.736**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	164	164	164	164
Customer involvement	Pearson r	.299**	.804**	1	.727**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	164	164	164	164
Knowledge gained from customers	Pearson r	.332**	.736**	.727**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	164	164	164	164

** Correlation is significant at the 0.01 level (2-tailed).

RQ1 Model Summary

RQ1 was, Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict the social strategy in U.S. minority-owned SMEs? The number of platform presences accounted for 13.1% of the variation in social strategy at minority-owned SMEs in the United States with adjusted $R^2 = 0.126$, a medium-size effect (Cohen, 1988; see Table 2).

Table 2*Research Question 1 Model Summary*

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SE</i> of the estimate	Durbin-Watson statistic
1	.362 ^a	.131	.126	11.686	1.773

The predictor (constant) variable was the number of platforms. The dependent variable was social strategy.

Analysis of Variance Test Statistics. The number of social media platform presences statistically significantly predicted social strategy in minority-owned SMEs in the U.S, $F(1, 3340) = 24.462$; $p < 0.001$. Therefore, the null hypothesis is rejected that the number of social media platform presences does not predict social strategy in minority-owned SMEs in the United States (see Table 3).

Table 3*Research Question 1 Analysis of Variance Test Statistics*

	Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
1	Regression	3340.548	1	3340.548	24.462	<.001 ^a
	Residual	22122.593	162	136.559		
	Total	25463.140	163			

The dependent variable was the social strategy. The predictor (constant) variable was the number of platforms.

Coefficients. The coefficients model shows that the independent variable is significant, with the p-level of less than 0.001 being less than the alpha level of 0.05 (see Table 4). An analysis of the independent variable was as follows:

- unstandardized beta: For every unit increase of the number of social media platform presences, social strategy increases .947 units.
- standardized beta: For every standard deviation increase in the number of social media platform presences of social strategy increases by .362 SD.

Table 4*Research Question 1 Coefficients Model*

Model	Unstandardized coefficients		Standardized coefficients	<i>t</i>	<i>p</i>	95.0% CI for B		Collinearity statistics	
	B	SE	Beta			LL	UL	Tolerance	VIF
1	(Constant)	38.031	1.258	30.241	<.001	35.548	40.514		
	No. of platforms	.947	.192	.362	4.946	<.001	.569	1.325	1.000

Note. CI = confidence interval; VIF = variance inflation factor; *LL* = lower limit; *UL* = upper limit.

The dependent variable was social strategy.

Regression Equation. The equation was as follows: Social Strategy = constant + B1 * (IV); Social Strategy = 38.031 + .947 * (number of platform presences).

RQ2 Model Summary

RQ2 was, Does the number of social media platform presences (e.g., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict customer involvement in innovation in U.S. minority-owned SMEs? The number of platform presences accounted for 8.9% of the variation in social strategy at minority-owned SMEs in the United States with adjusted R² = 0.084, a small size effect (Cohen, 1988; see Table 5).

Table 5*Research Question 2 Model Summary*

Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>SE</i> of the estimate	Durbin-Watson statistic
1	.299 ^a	.089	.084	4.700	1.820

The predictor (constant) variable was the number of platforms. The dependent variable was customer involvement.

Analysis of Variance Test Statistics. The number of social media platform presences statistically significantly predicted social strategy in minority-owned SMEs in the United States, $F(1, 350.409) = 15.863$; $p < 0.001$. Therefore, the null hypothesis is rejected that the number of social media platform presences does not predict customer involvement in innovation in minority-owned SMEs in the United States (see Table 6).

Table 6*Research Question 2 Analysis of Variance Test Statistics*

	Model	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>
1	Regression	350.409	1	350.409	15.863	<.001 ^a
	Residual	3578.615	162	22.090		
	Total	3929.024	163			

The dependent variable was customer involvement. The predictor (constant) variable was the number of platforms.

Coefficients. The coefficients model shows that the independent variable is significant, with the *p* level of < 0.001 being less than the alpha level of 0.05 (see Table 7). An analysis of the independent variable was as follows:

- unstandardized beta: For every unit increase of the number of social media platform presences, customer involvement in innovation increases .307 units.
- standardized beta: For every standard deviation increase in the number of social media platform presences customer involvement for innovation increases by .299 SD.

Table 7*Research Question 2 Coefficient Model*

Model		Unstandardized coefficients		Standardized coefficients	t	p	95.0% CI for B		Collinearity Statistics	
		B	SE	Beta			LL	UL	Tolerance	VIF
1	(Constant)	19.224	.506		38.007	<.001	18.225	20.222		
	No. of platforms	.307	.077	.299	3.983	<.001	.155	.459	1.000	1.000

Note. CI = confidence interval; VIF = variance inflation factor; *LL* = lower limit; *UL* = upper limit.

The dependent variable was customer involvement.

Regression Equation. The regression equation was as follows: Customer Involvement in Innovation = constant + (IV); Customer Involvement in Innovation = $19.224 + .307 * (\text{number of platform presences})$.

RQ3 Model Summary

RQ3 was, Does the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predict the knowledge gained from customers for innovation in U.S. minority-owned SMEs? The number of platform presences accounted for 11.0% of the variation in social strategy at minority-

owned SMEs in the United States with adjusted $R^2 = 0.105$, a moderate effect size (Cohen, 1988; see Table 8).

Table 8

Research Question 3 Model Summary

Model	R	R^2	Adjusted R^2	SE of the estimate	Durbin-Watson statistic
1	.332 ^a	.110	.105	4.197	1.898

The predictor (constant) variable was the number of platforms. The dependent variable was knowledge gained from customers.

ANOVA Test Statistics. The number of social media platform presences statistically significantly predicted social strategy in minority-owned SMEs in the United States, $F(1, 354.450) = 20.123$; $p < 0.001$. Therefore, the null hypothesis is rejected that the number of social media platform presences does not predict knowledge gained by customers for innovation in minority-owned SMEs in the United States (see Table 9).

Table 9

Research Question 3 Analysis of Variance Test Statistics

	Model	SS	df	MS	F	p
1	Regression	354.450	1	354.450	20.123	<.001 ^a
	Residual	2853.519	162	17.614		
	Total	3207.970	163			

The dependent variable was knowledge gained from customers, while the predictor (constant) variable was the number of platforms.

Coefficients. The coefficients model shows that the independent variable is significant, with the p level of < 0.001 being less than the alpha level of 0.05 (see Table 10). An analysis of the independent variable was as follows:

- Unstandardized beta: For every unit increase in the number of social media platforms' presence, the knowledge gained from customers for innovation increases by .309 units.
- Standardized beta: For every standard deviation increase in the number of social media platforms present, the knowledge gained from customers for innovation increases by .332 SD.

Table 10

Research Question 3 Coefficients Model

Model	Unstandardized coefficients		Standardized coefficients	<i>t</i>	<i>p</i>	95.0% CI for B		Collinearity statistics	
	B	SE	Beta			LL	UL	Tolerance	VIF
1	(Constant)	17.527	.452	38.805	<.001	16.635	18.418		
	No. of platforms	.309	.069	.332	4.486	<.001	.173	.444	1.000
									1.000

Note. CI = confidence interval; VIF = variance inflation factor; *LL* = lower limit; *UL* = upper limit.

The dependent variable was knowledge gained from customers.

Regression Equation. The regression equation was as follows: Knowledge gained from customers for innovation = constant + (IV); knowledge gained from customers = $17.527 + .309 * (\text{number of platform presences})$.

Study Results

Test for Assumptions

The foundational assumptions for linear regression analysis consist of various criteria that validate this method's appropriateness as a statistical technique to analyze the study's data. The dependent variables in this study, social strategy, customer involvement in innovation, and knowledge gained from customers for innovation, are considered continuous despite their ordinal nature (i.e., a Likert scale ranging from 1 to 5). This treatment aligns with academic conventions that allow for linear regression analysis. Additionally, the independent variable, the number of social media platform presences, is a continuous variable ranging from 0 to 25, meeting the requirement for continuous independent variables. One of the critical assumptions for linear regression is the linear relationship between the dependent and independent variables. Visual inspection of scatterplots confirmed linear relationships across all variables of interest, satisfying this assumption. Linearity is not just a requirement but a crucial aspect as it forms the basis of the regression model's ability to predict the dependent variable based on changes in the independent variable(s). The independence of observations was also confirmed using the Durbin-Watson statistic, with values ranging from 1.773 to 1.898 across three RQs, indicating that the observations are independent. This independence is necessary to avoid autocorrelation that could potentially skew the analysis.

During regression analysis, it is crucial to examine outliers and homoscedasticity, which indicates the consistency of variance among the residuals for ensuring the reliability of regression coefficients. I visually inspected plots of standardized residuals

against standardized predicted values to ensure homoscedasticity, which means that the variance remains constant across all levels of independent variables.

Additionally, I scrutinized the distribution of residuals to ensure normality, which was met, as evidenced by the histograms. Normal distribution of residuals is necessary for generalizing the regression results to the population. I used Pearson's multiple correlation coefficients to elucidate the relationships among variables.

Descriptive statistics offer a foundational understanding of the data's central tendency and variability, setting the stage for deeper analysis. In this study, the mean values and standard deviations for the number of platform presences and the dependent variables indicated a varied usage of social media platforms among the SMEs and differences in their reported social strategy, customer involvement, and knowledge gained from customers for innovation. Such variability is critical for regression analysis as it allows for exploring relationships between variables.

Pearson's multiple correlation coefficients revealed statistically significant correlations that suggest a positive relationship between the number of social media platform presences and each dependent variable. These findings highlight the potential impact of social media engagement on SMEs' innovation strategies and customer engagement efforts. These correlations' statistical significance and strength provide a quantitative basis for further investigating the predictive power of social media platform presences on various aspects of SME performance and innovation. In conclusion, the results from the testing of assumptions and detailed Pearson's multiple correlation coefficients statistical analysis provide the justification and the appropriateness of

employing linear regression to explore the relationship between social media presence and innovation-related outcomes in minority-owned SMEs.

Research Question 1

The statistical analysis of the model summary indicates that the number of platform presences accounts for 13.1% of the variation in customer involvement in innovation, with an adjusted R^2 of .126. The data suggests a positive moderate effect size and a statistically significant relationship between the number of social media platform presences and social strategy.

The analysis of variance (ANOVA) test statistics indicate that the number of social media platform presences statistically significantly predicts social strategy in innovation within minority-owned SMEs in the United States, with an F-statistic of 24.462 and a p-value of less than 0.001. The coefficient model confirms the statistical significance of the relationship and provides actionable insights. For every additional social media platform presence that a minority-owned SME utilizes, social strategy increases by .947 units. Minority-owned SMEs can enhance their social strategy in their innovation efforts by strategically expanding their social media platform presence.

The standardized beta coefficient (.362) offers another perspective, showing that for every standard deviation increase in the number of social media platform presence, social strategy increases by .362 standard deviations. This standardization helps to understand the medium effect size in a way that is independent of the units of measurement, allowing for a more intuitive grasp of the strength of the relationship between the number of social media platform presences and social strategy in innovation.

It highlights the relative impact of expanding an SME's social media presence within the context of other factors influencing social strategy.

The regression equation provides a model for predicting social strategy based on the presence of social media platforms. With the constant of 38.031 representing the baseline when the number of platform presences is zero, each additional platform presence contributes an increase of 0.947 units to social strategy. This equation provides a tool for SMEs to forecast the potential impact of their social media strategies on their social strategy, offering relationship insight between social media platforms and innovation outcomes.

Research Question 2

The statistical analysis of the model summary shows that the number of social media platforms being used accounts for only 8.9% of the variation in customer involvement in innovation, with an adjusted R^2 of 0.084. The adjusted R^2 of 0.084 indicates a positive small effect size between the number of social media platform presences and the degree to which customers are involved in innovation activities. Even though the effect size is small, it is still significant in SME innovation strategies' complex and multifaceted world. It underscores the importance of social media as a tool for engaging customers in the innovation process.

The results of the ANOVA test indicated that the number of social media platform presences statistically significantly predicts customer involvement in innovation in minority-owned SMEs in the United States, with an F-statistic of 15.863 and a p-value of less than 0.001. The coefficient model provides a deeper insight into the nature of this

relationship. With every additional social media platform presence a minority-owned SME utilizes, customer involvement in innovation increases by 0.307 units. This unstandardized beta coefficient translates to a tangible and actionable strategy for SMEs aiming to enhance customer participation in their innovation efforts. The significance of this relationship, with a p-value of less than 0.001, reaffirms the critical role of diverse social media engagement in driving customer-centric innovation efforts.

The standardized beta coefficient (.299) offers another perspective, showing that for every standard deviation increase in the number of social media platform presences, customer involvement in innovation increases by .299 standard deviations. This standardization helps to understand the positive medium effect size in a way that is independent of the units of measurement, allowing for a more intuitive grasp of the strength of the relationship between social media diversity and customer involvement in innovation. It highlights the relative impact of expanding an SME's social media presence with other factors influencing customer involvement.

The regression equation provides a powerful tool for predicting customer involvement in innovation based on the number of social media platforms an SME is active on. With the constant of 19.224 representing the baseline customer involvement in innovation when the number of platform presences is zero, each additional platform presence contributes an increase of 0.307 units to customer involvement. This equation quantifies the relationship and provides a tool for SMEs to forecast the potential impact of the number of their social media platform presences strategies on customer

involvement in innovation, offering relationship insight between social media activity and innovation outcomes.

Research Question 3

The statistical analysis of the model summary shows that the number of social media platform presences accounts for 11.0% of the variation in customer knowledge gained, with an adjusted R^2 of .105. The adjusted R^2 of .105 is a positive moderate effect size, suggesting that while the number of social media platforms used predicts the knowledge gained from customers for innovation, other factors influence this outcome. The results of the ANOVA test conclude that the number of social media platform presences statistically significantly predicts the knowledge gained from customers in innovation in minority-owned SMEs in the United States, with an F statistic of 20.123 and a p -value of < 0.001 . The coefficients model indicates that for each additional social media platform used by minority-owned SMEs, there is a .309 unit increase in the knowledge gained from customers for innovation. This finding highlights the incremental benefits of utilizing diverse social media platforms to gather innovative insights from customers. The standardized beta coefficient (.332) further emphasizes the positive medium effect size, showing that for every standard deviation increase in the number of social media platforms, there is a corresponding .332 standard deviation increase in the knowledge gained from customers.

The regression equation offers owners and managers of minority-owned SMEs a tool to understand how customer engagement in innovation is influenced by the number of social media platforms used by the SME. The constant of 17.527 represents the

baseline level of customer involvement in innovation when the SME has no presence on any platform. Additionally, each additional platform presence contributes an increase of 0.309 units to the knowledge gained from customers. This equation quantifies the relationship and provides a tool for SMEs to forecast the potential impact of the number of their social media platform presence strategies on gaining knowledge from customers in innovation, offering relationship insight between social media activity and innovation outcomes.

The significance of these findings for minority-owned SMEs should be considered. In a landscape where innovation is critical to competitive advantage and growth, understanding the role of social media in facilitating knowledge exchange with customers offers a tangible strategy for enhancing innovation capabilities. The direct relationship between the number of platforms used and the knowledge gained suggests that a more is better approach to social media engagement can be beneficial, particularly for businesses looking to maximize their innovative potential through customer insights. While social media serves as a valuable channel for gathering insights, it's evident that other factors also have significant roles in how SMEs learn from their customers and utilize this knowledge for innovation. Expanding their social media presence is a promising strategy for enhancing innovation through customer knowledge. Minority-owned SMEs should also explore other avenues for engaging with customers and incorporating their feedback into the innovation process.

RQ3's analysis provides compelling evidence for the value of social media as a tool for innovation in minority-owned SMEs. By leveraging a more comprehensive array

of platforms, these businesses can enhance their understanding of customer needs and preferences, fueling innovation responsive to market demands. This finding underscores the importance of strategic social media use in the broader context of innovation management and customer engagement strategies within the SME sector.

Summary

The methodology employed in this study was meticulously crafted, instilling confidence in the analysis and findings presented in this chapter. By utilizing a quantitative correlational research design, the study aimed to explore the relationship between the number of social media platforms used by minority-owned SMEs and three key outcomes: social strategy, customer involvement in innovation, and knowledge gained from customers for innovation. This choice of methodology was not arbitrary; instead, it was carefully selected with the study's objectives to provide a robust framework for examining the predicted correlations.

The quantitative approach facilitated the collection of numerical data through an online survey, ensuring a precise measurement of the variables of interest. This methodological decision assured that the data could be analyzed statistically to determine the strength and direction of the relationships between the independent variable (number of social media platform presences) and the dependent variables (social strategy, customer involvement in innovation, and knowledge gained from customers for innovation). Statistical software (SPSS v. 29) for data analysis in this chapter directly flowed from this methodological approach, enabling the application of Pearson's multiple correlation coefficient and linear regression analysis to test the study's hypotheses.

The research methodology's design included operationalizing variables, where the independent and dependent variables were clearly defined and measured on scales that allowed for quantitative analysis. This operationalization was critical for the tests of assumptions necessary for linear regression analysis, as discussed in Chapter 4. The methodological rigor in defining and measuring these variables facilitated a clear assessment of the assumptions, such as linearity, independence of observations, homoscedasticity, and normality of residuals, which are foundational for the validity of linear regression results.

The sampling strategy and data collection methods outlined in the methodology were also essential to obtaining a representative sample of minority-owned SMEs in the United States. By targeting SME owners and managers of minority-owned SMEs in the United States through SurveyMonkey, the study ensured that the respondents had the requisite knowledge and experience to provide accurate information regarding their use of social media and its impact on their businesses. This approach was crucial for gathering relevant data that could be generalized to the broader population of minority-owned SMEs, enhancing the study's external validity.

The methodology's emphasis on ethical considerations and protecting participants' confidentiality underpinned the integrity of the data collection process. This ethical stance ensured compliance with research standards. It likely contributed to a higher response rate and more honest responses from participants, enhancing the quality and reliability of the data analyzed. The methodology laid a solid foundation for the analyses presented by articulating a transparent, logical, and systematic approach to investigating

the RQs and hypotheses. The congruence between the methodology and the findings underscores the appropriateness of the research design and analytical techniques, providing a solid basis for the study's conclusions and recommendations. Through this methodological rigor, this chapter effectively translated the collected data into meaningful insights regarding the role of social media in fostering innovation and engagement within minority-owned SMEs.

The data analysis and findings may have significant implications for minority-owned SMEs. Innovation is crucial in staying competitive and achieving growth in today's business environment. Understanding how the number of social media platform presences can facilitate customer knowledge exchange is essential to enhance innovation capabilities. The study suggests that a more comprehensive social media approach can benefit SMEs by allowing them to gain customer insights and maximize their innovative potential. The study also highlights the need for a balanced innovation and customer engagement approach. While social media can be a valuable channel for gathering insights, it is not the only factor in how SMEs learn from their customers and use that knowledge for innovation. Minority-owned SMEs should explore other avenues for engaging with customers, incorporating their feedback into the innovation process, and expanding their social media presence. The findings from this study may provide compelling evidence for the value of social media as a tool for innovation in minority-owned SMEs. Through leveraging a more comprehensive array of platforms, businesses may better understand customer needs and preferences, leading to more responsive innovation to market demands and emphasizing the importance of strategic social media

use in the broader context of innovation management and customer engagement strategies within the minority-owned SME sector in the United States.

Chapter 5: Discussion, Conclusions, and Recommendations

This research study aimed to determine whether SMEs owned by minorities in the United States who use multiple social media platforms are more likely to innovate. The study aimed to identify whether the presence of SMEs on social media platforms such as Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs could predict their social strategy, customer engagement in innovation, and knowledge obtained from customers for innovation. The study was based on the theoretical frameworks of the TAM and absorptive capacity theory, primarily focusing on determining whether the number of social media platform presences could predict social strategy, customer involvement in innovation, and knowledge gained from customers for innovation. The findings from this study may be beneficial in helping minority-owned businesses improve their performance, competitiveness, and marketplace presence beyond the first 18 months of operation.

Chapter 4 presented the research findings that showed significant correlations emphasizing the statistically significant role of social media platform presences in shaping innovation in minority-owned SMEs in the United States. That chapter described the relationship between the variables in this study, highlighting the importance of social media presence in predicting social strategy, involving customers in innovation, and gaining knowledge from them for innovation. This chapter examined these findings within the broader context of existing literature, theoretical underpinnings, and the real-world challenges minority-owned SMEs face. Chapter 5 discussed the implications of these findings for business practice and highlights the potential for minority-owned

SMEs to leverage the number of their social media platform presences to drive innovation as strategic assets in involving customer engagement in innovation and knowledge acquisition from their customers for innovation. The discussion aimed to provide valuable insight for business owners and managers and guide them towards adopting more informed and strategic approaches to social media platform presences use (such as Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs), which could ultimately contribute to their enterprises' long-term success and resilience.

In Chapter 5, I discussed the limitations encountered during the research process and synthesized the critical insights. Acknowledging these limitations is essential to understanding the context in which the findings were interpreted and could provide a mechanism for future research to explore new areas within social media and business innovation. The chapter concludes with recommendations for both practitioners and future researchers. The recommendations for practitioners, especially those leading minority-owned SMEs, aim to offer actionable strategies for optimizing social media use that could be used to achieve more significant innovation and customer engagement. For scholars and researchers, the recommendations provide promising paths for further investigation. The goal is to continue to unravel the complex dynamics at the intersection of technology, business, and society. Through this comprehensive discussion, conclusions, and recommendations, Chapter 5 aimed to significantly contribute to the ongoing discourse on leveraging digital platforms for business innovation and growth, particularly within the context of minority-owned SMEs.

Interpretation of Findings

The impact of the number of social media platform presences in U.S. minority-owned SMEs has been explored, and the results are insightful across three critical dimensions: social strategy, customer involvement in innovation, and knowledge gained from customers for innovation. The study was guided by specific RQs and hypotheses to uncover the predictive power of the number of social media platforms utilized in these areas. Linear regression was used to answer the RQs and provide data analysis. This study aimed to understand the predictive relationship between the utilization of social media platform presences and their impact on social strategy, customer involvement in innovation, and the acquisition of customer knowledge for innovation in minority-owned SMEs in the United States.

The analysis revealed statistically significant correlations across all variables, indicating a positive relationship between the extent of social media platform presences, social strategy, customer involvement in innovation, and knowledge gained from customers for innovation. Chapter 4 of the study revealed a correlation between the number of social media platform presences used by minority-owned SMEs and their social strategy. The analysis found a statistically significant moderate positive correlation between the number of platform presences used and the social strategy. The results suggest that as minority-owned SMEs increase their social media platform presences, they develop and implement more sophisticated social strategies. This finding aligns with existing literature emphasizing the importance of a diversified social media presence in enabling businesses to reach a broader audience, engage with customers on multiple

fronts, and tailor their communication strategies to different platform dynamics (Candi et al., 2018; Kwon et al., 2021; Nguyen et al., 2015).

The identified correlation between social media platform usage and social strategy is moderately positive, suggesting that SMEs will likely develop more robust social strategies as they diversify their social media footprint. This insight is instrumental in understanding the foundational role that social media plays in enabling SMEs to engage more effectively with their audience and tailor their business strategies accordingly. Adopting a multifaceted social media approach is a critical driver in the strategic planning and execution of minority-owned SMEs, emphasizing the value of an extensive online presence in today's digital marketplace.

This study further explained that the number of social media platform presences (i.e., Twitter, LinkedIn, Instagram, Facebook, Pinterest, Yammer, and blogs) predicted customer involvement in innovation in U.S. minority-owned SMEs. 'Customer involvement in innovation' refers to the extent to which customers are actively engaged in the innovation processes of these SMEs, such as providing feedback, suggesting improvements, or even co-creating new products or services. This relationship was identified as a statistically significant small positive correlation, suggesting that while the impact is not as strong as in other areas, it is nonetheless meaningful. This outcome points to the role of social media as a facilitator of customer engagement and involvement in the innovation processes of minority-owned SMEs. By leveraging multiple platforms, these businesses can harness diverse customer insights and feedback, integral to driving innovation. This customer-centric approach to innovation, facilitated

by social media, not only aligns with the principles of open innovation but also underscores the importance of active and varied social media engagement in cultivating a culture of innovation responsive to customer needs and preferences.

The findings also emphasized the outcomes regarding the predictability of the knowledge gained from customers for innovation in U.S. minority-owned SMEs and indicated that the number of social media platforms used by minority-owned SMEs predicts the extent of knowledge gained from customers for innovation. A moderate positive correlation underscored the significant role that social media plays in the knowledge acquisition process, a cornerstone for innovation. The results highlighted how a robust social media presence can serve as a vital conduit for capturing customer insights, trends, and feedback, which are instrumental in informing innovation efforts. The ability of minority-owned SMEs to tap into the collective intelligence of their customer base through social media platforms presents a strategic advantage, enabling these businesses to adapt, evolve, and innovate in ways deeply rooted in customer value and market relevance and is supported by the studies performed by Roberts et al. (2017) and Roberts and Candi (2014), emphasizing that minority-owned SMEs may solicit ideas and comments from their consumers to include them in the production of new goods and services, highlighting the relevance of social media to gathering knowledge about innovation and development. The research findings demonstrated the significance of minority-owned SMEs in leveraging social media platforms to connect with customers, drive business growth, and ensure marketplace sustainability. The study suggests that

businesses should optimize the number of their social media platform presences and harness the power of digital platforms to obtain insights for innovation.

Limitations of the Study

It is essential to recognize the study's limitations and the factors not included in the investigation as they may affect the interpretation of the data findings and their generalizability. One of the primary limitations is the accuracy of the responses provided by the 164 participants in the survey. Although measures were taken to ensure that all survey questions required a response, there was no way to guarantee that all questions were answered truthfully or that participants had sufficient knowledge regarding the utility of social media platforms or innovativeness. Another limitation was the inherent biases in the selection process of participants. The study's design may have attracted only successful, digitally savvy, or willing businesses to participate in the research, leading to skewed results. The study's findings are context-specific and may not be readily generalizable to other minority-owned SMEs who are not using social media platforms or do not have a social strategy to engage customers in innovation or gain knowledge from customers for innovation.

Furthermore, the study's findings may not be readily generalizable to other minority-owned SMEs operating outside the United States, with different cultural contexts, social media platforms, and access to their social media platforms for involvement in innovation. Despite these limitations, conducting rigorous research and investigating the relationship between social media presence and innovation in minority-owned SMEs provides significant contributions to the field. To enhance the study's

validity and reliability of the outcomes for innovation and growth in minority-owned SMEs, researchers can acknowledge and address these limitations through methodological approaches, proper scrutinization of the data, and sensitivity to contextual matters.

Implications

The data analysis findings have significant implications for the academic community and practitioners, especially managers and owners of minority-owned SMEs. Chapter 5 discussed these implications, drawing on the results presented in Chapter 4, highlighting the strategic importance of social media in fostering innovation, enhancing customer involvement, and facilitating knowledge acquisition. These insights contributed to the theoretical understanding of social media technology and innovation management and may offer practical guidelines for leveraging social media for sustainable business growth. This study's findings add to the existing literature on the role of social media in business innovation and strategy. The research addressed a gap in the literature by highlighting the predictive power of social media platform usage on essential business outcomes, demonstrating how the number of social media platform presence engagements impacts innovation at minority-owned SMEs. The findings of this study add to the existing literature on the technology acceptance model (TAM) and absorptive capacity theory in SMEs. The findings demonstrate how these theories can be practically applied in using social media for innovation by small and medium-sized enterprises (SMEs) and minority-owned SMEs. According to Cohen and Levinthal's (1989) absorptive capacity theory, organizations and individuals need prior knowledge to absorb

and use new knowledge effectively. TAM (Davis, 1986) highlights the importance of technology's usefulness and ease of use. The study's findings provide an understanding of the influence of social media platform presence on social strategy and customer engagement in innovation. This understanding could be linked to the organization's ability to recognize the value of technology for its operations, the ease of implementation required to use social media data for driving innovation, and the ability to absorb knowledge from its platform presence and leverage it to integrate external knowledge with internal knowledge to fuel innovative initiatives and innovativeness. Future research can build on these findings by exploring the qualitative aspects of social media platform presence and its impact on social strategy and customer engagement in innovation among minority-owned SMEs.

The study provided management practitioners, owners, and managers of minority-owned SMEs with compelling evidence of the value of a comprehensive social media platform presence and the correlation between the number of social media platform presences, social strategy, customer involvement in innovation, and knowledge gained from customers for innovation underscores the potential for businesses to adopt a strategic approach to their digital presence and drive significant growth. Owners and managers of minority-owned SMEs are encouraged to diversify their social media platforms to enhance their reach and engagement with different customer segments. Implementing a more dynamic social media strategy that integrates customer feedback into the innovation process could lead to more customer-centric products and services, ultimately driving business growth.

The findings suggest that minority-owned SMEs should increase their presence across multiple social media platforms and actively engage with their customers on these platforms. This engagement could include interactive content, customer surveys, and innovation challenges that invite customer input for innovation. SMEs could leverage social media platforms to gain valuable knowledge and insights into customer preferences and behaviors, allowing minority-owned SMEs in the United States to tailor their innovation efforts to meet customer needs more effectively. This customer-centric approach is critical to the success of their business. The study also highlights social media's role in facilitating customer knowledge acquisition, which is crucial for innovation. Minority-owned SMEs can optimize their social media platform presence as an interactive business tool better to understand customer challenges, experiences, and expectations. This information may be invaluable in developing new products or services and improving existing offerings, which could increase their marketplace survival within the first 18 months of operation. Training staff to analyze social media interactions and feedback can transform anecdotal customer insights into actionable intelligence for product development and innovation strategies.

Recommendations

Research findings from this study on the impact of the number of social media platform presences on minority-owned SMEs' social strategy, customer involvement in innovation, and knowledge gained from customers for innovation have opened up numerous avenues for future exploration. While this study has provided valuable insights into the positive correlation between the number of social media platform presence use

and innovativeness, further investigation is needed to deepen our understanding of these dynamics. A strong correlation has been found between social strategy, customer involvement in innovation, and knowledge gained from customers for innovation. Future research could examine this relationship to increase innovativeness, leading to greater organizational performance, competitiveness, and marketplace survival.

Chapter 4's findings highlight the potential for future research to expand knowledge in this area, identifying several vital areas for exploration. Future research could benefit from incorporating qualitative methodologies to gain deeper insights into how minority-owned SMEs develop and implement their social strategies. Interviews, focus groups, and case studies could reveal the nuances of decision-making processes, challenges faced in engaging with diverse customer bases, and innovative ways businesses adapt their strategies in response to customer feedback on social media platforms. Such studies complement the quantitative findings of the current research, offering a more holistic understanding of the strategic use of social media in business.

Another valuable direction for future research is conducting longitudinal studies to assess the long-term impact of social media engagement on business outcomes. Tracking changes in social strategy, customer involvement in innovation, and knowledge acquisition over time could provide insights into the evolving nature of social media's role in business growth and innovation. Given the diversity within the category of minority-owned SMEs, future studies could explore the impact of social media across different industries and cultural contexts. Comparative research could uncover how industry-specific factors and cultural nuances influence the adoption and effectiveness of

social media strategies. New social media technologies and platforms are constantly emerging, and future research should explore the impact of these platforms on business innovation and customer engagement. Studies could investigate how businesses adapt to incorporate new technologies and platforms into their social media portfolios and the effects on customer interaction and innovation processes.

An area ripe for further exploration is using social media analytics to measure social media activities' return on investment (ROI). Future studies could further develop and test models to quantify the impact of social media engagement on business performance metrics, such as sales growth, customer retention rates, and innovation success. Research could give businesses the tools to make data-driven decisions about their social media strategies and allocate resources more effectively. The findings of this research provide various possibilities for knowledge expansion with the data collected and analyzed for the future of the business field, which is relevant to technological advancements and social media use.

Conclusions

Chapter 5 concludes by synthesizing the insights gained from research on the impact of social media presence on minority-owned SMEs. The study focuses on the role of social media in promoting innovation, customer involvement in innovation, and knowledge acquisition. The findings from a quantitative analysis show that a diversified social media presence significantly contributes to achieving these objectives and can drive innovation and competitive advantage. The study highlights the importance of social media as a strategic tool for minority-owned SMEs. Utilizing multiple social media

platforms is linked to improvements in social strategy, customer involvement in innovation, and knowledge acquisition.

The study also provides actionable insights for business owners and managers. It encourages them to expand their social media presence and engage with their audience in meaningful ways that promote innovation and knowledge sharing. The study's implications suggest that minority-owned SMEs must remain agile and continuously explore new platforms and technologies to enhance their engagement strategies and innovation processes. This approach underscores the importance of staying attuned to digital trends and customer preferences. Future research directions proposed in this chapter can build on this research to offer deeper, more nuanced insights into social media's strategic role.

This study contributes to the digital engagement and innovation discourse in minority-owned SMEs. It highlights social media's strategic value in driving business growth, enhancing customer involvement, and facilitating innovation. As digital platforms continue to evolve, the insights gained from this research provide a foundation for minority-owned SMEs to leverage social media effectively and could potentially ensure their competitiveness and marketplace sustainability. The results of this study may offer valuable insights to owners and managers of minority-owned small and medium-sized enterprises (SMEs) regarding the relationship between the number of social media platform presences, social strategy, customer engagement, and knowledge gained from customers for innovation. This understanding may enhance their chances of survival beyond the first 18 months of operation, which is crucial to the U.S. economy. These

businesses play a crucial role in providing jobs, products, services, and opportunities, bringing about positive social change in the communities they serve.

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Appendix A: Permission to Use Survey

Re: Social Strategy to Gain Knowledge for Innovation. British Journal of Management, 29(4), 731–749. <https://doi.org/10.1111/1467-8551.12280>

Marina Candi <Marina@ru.is>

Sat 10/15/2022 6:38 AM

To:

Of course you are welcome to use the survey questions. Please do cite the paper.
Marina

On 14 Oct 2022, at 20:44, Lionel Edlam <lionel.edlam@waldenu.edu> wrote:

Dr. Candi,

Thank you, do I have your permission to use the survey?

Respectfully,

Lionel A. Edlam Jr.

Ph.D. candidate Walden University

From: Marina Candi <Marina@ru.is>

Sent: Friday, October 14, 2022 3:36 PM

To: Lionel Edlam <lionel.edlam@waldenu.edu>

Subject: Re: Social Strategy to Gain Knowledge for Innovation. British Journal of Management, 29(4), 731–749. <https://doi.org/10.1111/1467-8551.12280>

Table 2 on the paper lists the survey items used.

Marina

On 14 Oct 2022, at 17:28, Lionel Edlam <lionel.edlam@waldenu.edu> wrote:

Hello Dr. Candi,

My name is Lionel A. Edlam Jr., and I am a Ph.D. student at Walden University working on my dissertation prospectus. My research is a quantitative correlation study to understand the relationship between social media presence and innovation at minority-owned small and medium-sized enterprises in the United States. My study's theoretical underpinning is Cohen and Levinthal's (1989) Absorptive Capacity theory and Davis's (1986) technology acceptance model. I need a research instrument to measure my RQ variables, social media presence, and innovation, and I was wondering if you could assist

me with sharing the survey/research instrument you develop to measure social strategy.

Candi, M., Roberts, D. L., Marion, T., & Barczak, G. (2018). Social Strategy to Gain Knowledge for Innovation. *British Journal of Management*, 29(4), 731–749. <https://doi.org/10.1111/1467-8551.12280>

Thank you, and I would greatly appreciate your help.

Respectfully,

Lionel A. Edlam Jr.

Appendix B: Survey Instrument

738

M. Candi et al.

Table 2. Variables and survey items; all survey items had possible answers ranging from 1 to 5, where 1 indicated to a small extent or disagree, and 5 indicated to a large extent or agree

Variables	Survey items
Screening question 1	<p>From the list below, please check all the social media platforms on which your company has a presence. (If your company does not have a presence on any of these social media platforms, please leave all the options unchecked.)</p> <p>[List of 16 social media platforms in common use at the time of data collection, plus an option to enter the names of other social media platforms]</p>
Screening question 2	<p>Please indicate which one of the social media platforms that you selected above you believe is MOST important for your company's new product/service development activities:</p> <p>[List of those social media platforms checked in screening question 1]</p>
Social strategy (new scale developed based on Dholakia, Bagozzi and Pearo, 2004; Nambisan, 2002; Porter and Donthu, 2008)	<p>Please indicate the extent to which your company puts effort into the following on X [X is the social media platform identified as most important for NPD]:</p> <p>Enabling customers to communicate with each other</p> <p>Enabling customers to get to know each other</p> <p>Enabling customers to strengthen existing relationships with each other</p> <p>Enabling customers to assist each other</p> <p>Facilitating interaction among customers</p> <p>Enhancing customers' sense of connection with other customers</p> <p>Enabling customers to get a positive impression of other customers</p> <p>Enabling customers to stay in touch with each other</p> <p>Enabling customers to identify themselves with a group of customers</p> <p>Enabling customers to easily contact each other</p> <p>Enabling spontaneous informal conversations among customers</p>
Customer involvement in innovation on social media (adapted from Feng, Sun and Zhang, 2010)	<p>Please indicate the degree to which you agree or disagree with the following statements: [X is the social media platform identified as most important for NPD]:</p> <p>Our customers often propose ways to improve our products/services on X</p> <p>We hear customers' opinions on prototypes of our new products/services during development on X</p> <p>We involve customers in the design and development of our new products/services on X</p> <p>Our customers strongly influence the design of our new products/services on X</p> <p>There is a strong consensus in our company that customer involvement on X is important for the development of new products/services</p> <p>We leverage on X to include our customers in continuous improvement of our products/services</p>
Knowledge gained from customers for innovation (adapted from; Cooper 2001, 2005, 2008; Nonaka 1994; Nonaka and Takeuchi 1995; Thomke and Fujimoto, 2000; Ulrich and Eppinger, 2011)	<p>Please indicate the extent to which you believe your company gains the following through its interaction with customers in the new product/service development process:</p> <p>New concepts and product/service ideas</p> <p>Opportunities to enter new markets</p> <p>Ideas for new business models</p> <p>Ideas about potential future customer needs</p> <p>Insights on the competition</p>