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E-Commerce Adoption Strategies for Small Retail Businesses

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Walden University 2022

Abstract

E-Commerce Adoption Strategies for Small Retail Businesses

by

Kellee Adams

MBA, Walden University, 2017

BS, University of Phoenix, 2015

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

Walden University

December 2022

Abstract

A lack of e-commerce adoption strategies can negatively affect the sustainability of traditional small retail businesses. Business leaders of traditional small retail businesses who fail to implement e-commerce strategies can experience a loss of market share to ecommerce small retail companies. Grounded in the technology-organization-environment framework, the purpose of this qualitative multiple case study was to explore strategies traditional small retail business leaders use to adopt e-commerce to foster the sustainability of their business successfully. Participants were five business leaders from small and medium enterprises in Atlanta, Georgia, in the United States, who successfully adopted e-commerce strategies into their traditional business structure. Data were collected from semistructured interviews and a review of company documents. Through thematic data analysis, three themes were identified: (a) strategies to adopt e-commerce, (b) challenges small business leaders face when implementing these strategies, and (c) resolutions found to maintain the sustainability of their business. A key recommendation for business leaders is to understand online consumerism comprehensively and the technology needed to operate their business using an online platform. The implications for positive social change include the potential to create new web-based employment opportunities for the youth in the local community.

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Dedication

I dedicate this study to my late mother and father, Brenda A. Arant and William H. Holland, as well as my late grandmothers, Catherine J. Adams, and Margaretta B. Holland, for whom all passed away during my pursuit for the highest level of education. I also want to dedicate my doctoral journey to my life partner, M. Demetrius Evans, and my sons, K. Jaekwan Adams and K. Channon Adams, who gave love and understanding during times when my education had to come first. I am also grateful for the support from my brothers and stepfather, as well as a host of aunts, uncles, cousins, and friends. All these individuals never stopped believing in me and were my core inspiration for always believing in myself.

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Section 1: Foundation of the Study

The survival and growth of small and medium enterprises (SMEs) mainly depend on leaders who understand the importance of change. The ability to effectively implement strategies for innovation is the definitive component that fosters sustainability for the future of SMEs (Stanujkic et al., 2019). Consumers have transitioned into the era of convenience afforded to them by the presence of online transactions and e-commerce (Ochwat, 2019). Traditional business means have metamorphosized into a virtual platform, where the Internet has become the preferred medium (Stanujkic et al., 2019). The purpose of this qualitative multiple case study was to explore the strategies used by SME business leaders to adopt e-commerce to achieve sustainability in the future.

Background of the Problem

E-commerce has become a rapidly growing structure where more businesses flourish and extend offerings on a global scale. However, reduced overhead and other typical expenses fragment the business leaders experience when operating their business with an online presence and updated business structure (Jain, 2019). More than 99% of businesses in the United States are SMEs. Firms with less than 100 employees account for the largest share of SMEs (US Small Business Administration, 2018).

SME business leaders should consider the impact that e-commerce has on the global economy and the benefits of implementing online capabilities. E-commerce has become more than a fleeting trend; it was a development that may have influenced the traditional economy (Jain, 2019). However, the lack of e-commerce adoption strategies

has contributed to the low level of e-commerce adoption by SME business leaders (Ochwat, 2019).

Problem Statement

The surge in e-commerce has posed a real threat to traditional small retail businesses (Lock & Seele, 2017). The traditional small retail businesses grew less than 50% in revenue than their e-commerce counterparts (Liu et al., 2017). The general business problem was that business leaders of traditional small retail businesses were at high risk of failure due to the loss of market share to e-commerce small retail companies. The specific business problem was that some business leaders of traditional small retail businesses lacked e-commerce adoption strategies to foster the sustainability of their businesses.

Purpose Statement

The purpose of this qualitative multiple case study was to explore the e-commerce adoption strategies used by business leaders of traditional small retail businesses to foster the sustainability of their businesses. The targeted population of this study included business leaders of five traditional small retail businesses in Atlanta, Georgia, who have successfully used e-commerce strategies to foster the sustainability of their businesses. The findings of this study may promote positive social change by implementing e-commerce strategies that support the sustainability of small retail businesses resulting in sustainable employment opportunities in the community.

Nature of the Study

The three research methods are qualitative, quantitative, and mixed methods (Yin, 2017). The qualitative research method is a process used to investigate social or humanistic phenomena in their original setting, such as understanding values, experiences, behavior, and social response of a local population (Yin, 2017). Quantitative research involves collecting numerical data and testing hypotheses to conclude (Yin, 2017). Mixed-method research includes the tangible evidence and social perspective acquired through qualitative research and the numeric components and hypotheses obtained during quantitative research (Angeles et al., 2017). The qualitative research method was the best choice to conduct this research because of the social and humanistic factors of the phenomena expressed in their original setting, such as understanding the values, experiences, behaviors, and social responses of a local population. The quantitative research method does not fit this study because there are no quantifying variables or hypotheses to consider. The mixed-method research study does not fit because of the inclusion of quantitative research.

The qualitative research method should align with three research designs: ethnology, phenomenology, and case studies (Yin, 2017). Ethnology includes analyzing cultures related to development and similarities and differences among the sample populations (Yin, 2017). Ethnology research design would be ineffective in this study because of the lack of cultural significance related to the sustainability of traditional small businesses. Phenomenology research design includes unique or unpredictable events that have affected the usual pattern of a subject (Yin, 2017). Phenomenology was

not a good fit for this study because of the absence of significant unique and unpredictable events in e-commerce adoption strategies. Instead, case studies depicted events for their prevalence in similar situations or circumstances (Yin, 2017). The multiple case study research design was most beneficial to explore the potential benefits and challenges of small business e-commerce adoption strategies to support sustainability. I analyzed recorded events such as interviews and company documents during the data analysis stage of this research.

Research Question

What e-commerce adoption strategies do business leaders of traditional small retail businesses use to foster the sustainability of their businesses?

Interview Questions

- 1. What e-commerce strategies do you use to foster the sustainability of your business?
- 2. What processes, tools, and techniques do you use to develop these strategies?
- 3. How do you measure the success of the implemented strategies to foster the sustainability of your business?
- 4. What challenges or barriers did you face when implementing e-commerce adoption strategies?
- 5. What did you do to overcome these challenges or barriers?
- 6. What other information would you like to share regarding e-commerce adoption strategies?

Conceptual Framework

The conceptual framework for this study was the technology-organization-environment (TOE) framework based on Tornatzky and Fleischer's the processes of technological innovation (1990). The TOE framework is the process in the developmental stage of innovation that focuses on how the organizational context influences the adoption and implementation of technology. The TOE framework enables many aspects of the current situation of a business to be assessed in a reliable manner (Budiono et al., 2020). As an organizational-level theory, the primary components of the TOE framework are technological, organizational, and environmental contexts (Baker, 2012). In the technological context, the organizational leaders must consider their existing technology and the available technology in the marketplace. The organizational context refers to the company's resources and characteristics, including firm size, communication processes, and linking structures (Gengatharen & Standing, 2005). The environmental context pertains to the industry's structure, the absence or presence of technology service providers, and the regulatory environment (Baker, 2012).

The TOE framework applied to this study in exploring how traditional business leaders identify the need for innovation, develop strategies, and adopt new technology. While the TOE model involves using these three contexts to conceptualize the influence of adoption strategies, each component results in unique dynamics from which the research begins to take shape (Baker, 2012). For example, firm size, resources, and global scope are essential elements that contribute to the adoption of e-commerce. Thus, this

conceptual framework was helpful to evaluate e-commerce adoption strategies used in traditional small businesses.

The TOE model outlines a framework for researchers to understand the adoption of technology and innovation as a strategy for the sustainability of their business (Baker, 2012). Assessment of organizational goals and resources was a logical starting point for developing strategies for e-commerce adoption (Vargas-Hernández, 2015). Consideration to commit resources depended on whether e-commerce was a good fit. Companies must develop their strategies and practices to adapt to different cultures, legal frameworks, geographic regions, and industry structures components of e-marketplace platforms (Vargas-Hernández, 2015).

Operational Definitions

Big data analytics: Big data analytics are technology systems capable of converting the data that a firm collects into business value by leveraging it into actionable insight (Mikalef et al., 2019).

E-commerce adoption strategies: The organization of plans and efforts for e-commerce adoption informs managerial decision-making for marketers and e-retailers. In addition, these plans foster the transition and growth of the organization into the electronic commerce platform and the underlying entities that support it (Thompson et al., 2019).

Knowledge management: Knowledge management is the acquiring, creating, and sharing of collective intelligence through online social networks and communities of

knowledge. This knowledge is the precursor of innovation through organizational learning (Popa & Soto-Acosta, 2016).

Market intelligence: Market intelligence is the information relevant to a company's markets, gathered and analyzed specifically for accurate and confident decision-making opportunities, market penetration strategies, and market development metrics (B2B International, 2020).

Organizational goals: Organization goals define and strategize the desired state of profit and success in a firm. General organizational goals are in the firm's mission/vision statement; however, specific goals are in the business plan (Rose, 2016).

Positive social change: Positive social change is the process through which community settings influence their members, the surrounding community, and the larger society. Examples of these community settings include adult well-being, positive youth development, and locality development (Maton, 2008).

Small and medium enterprises: SMEs are a central part of economies worldwide, comprising 99% of enterprises and 60% employment. These businesses maintain revenue, assets, or a specific number of employees below a certain threshold (Henriques & Catarino, 2016).

Socioeconomic factors: Socioeconomic factors are developments or circumstances directly related to social or economic conditions that include employment, education, and income. It can mean the differences between groups of people caused mainly by their financial situation (Saleem, 2017).

Supply chain management: Supply chain management is a network between the company and its suppliers to produce and distribute to the final buyer to maximize customer value and achieve sustainable competitive advantage. This network includes different activities, people, entities, information, and resources (Handfield, 2020).

Telecommunications infrastructure: Telecommunications infrastructure is the shared information resulting in more fluid global markets, as well as the sharing of the world's educational and research resources (Jipguep, 2016).

Assumptions, Limitations, and Delimitations

The assumptions, limitations, and delimitations are the perception of the current economy and the reality of technological integration in commerce. This study was by the participants' perspective, documented data, and my role as the informed researcher. Other factors that contributed to assumptions, limitations, and delimitations of this study included the leadership roles of the participants and the programs and policies of the selected organizations.

Assumptions

Assumptions are an imperative component in a study because they enable the proposed beliefs of the researchers (Simon & Goes, 2016). For example, one of the main assumptions of this study was that the participant would provide honest answers to the interview questions. Another assumption of this study was that the data link to the literature would yield accurate information. Finally, I assumed that the qualitative research method using multiple case studies would reveal the strategies used by

traditional small retail business leaders that implemented successful e-commerce business initiatives.

Limitations

Limitations refer to the constraints found during research beyond the researcher's control and could ultimately affect the study's outcome (Simon & Goes, 2016). The participants' perspectives in this area, including case studies from competing organizations, was the primary sources of data for the study. The authenticity of this study depended mainly on how well the participants recalled the facts and events of their encounters when implementing e-commerce adoption strategies.

Delimitations

Delimitations are the boundaries set by the researcher to identify the inclusions and exclusions as they pertain to the scope of the study (Simon & Goes, 2016). One delimitation was confining my research to five prominent organizations with successful e-commerce provisions in the business district of Atlanta, Georgia. Marshall and Rossman (2016) stated that using a small sample size in qualitative research enables the researcher to perform an in-depth investigation and foster relationships with the participants. Another delimitation of this study was that the participants are from a tiny, however famous, business district in Atlanta, Georgia of the United States of America, and may not represent the perspective of all the United States or abroad.

Significance of the Study

This study could be significant to businesses because it may provide insight into e-commerce adoption strategies used by traditional small retail business leaders of e-

commerce. The integration of e-commerce adoption in business communities established the platform for traditional retail SMEs to thrive in the virtual marketplace (Vargas-Hernández, 2015). Vargas-Hernández (2015) proposed that traditional SME leaders are more likely to pursue e-commerce adoption strategies to measure sustainability for their business.

E-commerce has become a fundamental element in today's business world, playing an essential role in the growth and sustainability of SMEs as competition grows in this platform (Consoli, 2016). The findings in this study may enable SME leaders in and around the Atlanta business district to use e-commerce adoption strategies to foster the sustainability of their businesses. SME leaders that aspire to grow their businesses beyond their physical location and into the global markets should pursue development opportunities that include e-commerce adoption strategies accompanied by clear organizational goals (Consoli, 2016). Although e-commerce adoption has become a staple for gaining a competitive edge in business processes, the adoption rates are slow in development in the Atlanta business district (Donsky, 2019).

The purpose of this qualitative multiple-case study was to explore the strategies used by traditional small retail business leaders in the Atlanta business district in Georgia, to sustain their businesses through e-commerce adoption. While e-commerce fostered the ability for traditional small retail business leaders to project business worldwide, the results of e-commerce adoption may also have created jobs and promote positive social change (Baker, 2012). E-commerce adoption strategies enabled traditional small retail business leaders to achieve optimum business performance through increased revenue,

improved supply chain relations, effective communication, and efficiency in logistics (Lenz et al., 2002). The findings of this study may have contributed to positive social change by increased employment opportunities and training in advanced IT practices, which may have resulted from effective e-commerce adoption strategies. These benefits could transfer into the community to offer competitive prices, add convenience to the shopping experience, and contribute to environmental responsibility initiatives.

A Review of the Professional and Academic Literature

The purpose of this qualitative multiple case study was to explore the e-commerce adoption strategies traditional small retail business leaders used to maintain the future sustainability of their businesses. The literature review included several resources from Walden University Library Databases, with a concentration on journals from ProQuest found in the ABI/INFORM Collection. I also utilized Google and Google Scholar search engines in the discovery of relevant literature. The search for journals and articles became more streamlined as keywords and common terminology refined data to return.

Keywords used in this review included: e-commerce adoption strategies, small and medium enterprises, technology, innovation, sustainability, competitors in e-commerce, and technology-organization-environment framework.

All journal articles in the literature review were peer-reviewed. I used 78 peer-reviewed articles in this literature review. Of the 141 references used to compose this study, 71% were published in 2017-2021, and 89% were peer-reviewed. I have outlined, correlated, and differentiated researchers' views of these materials, providing the

background necessary for explaining the practicalities of small business leaders of successful TOE adoption strategies who have succeeded in sustaining their businesses.

The organization of this literature review was as follows: the review of the TOE framework model used for this study and the considerations of other similar theories, the adoption of information and communication technology, and the drivers and outcomes of information and communication technologies (ICT) using the TOE framework. Next, I compared the perspectives and viewpoints of various authors regarding the conceptual framework for the sustainability of traditional small retail businesses using the TOE framework in IT governance, the adoption of big data analytics, e-supply chains using the TOE framework, and social web knowledge and e-marketing using TOE framework. Finally, this literature review concluded with a discussion on business-to-business e-commerce adoption and e-commerce adoption strategies for small retail businesses.

TOE Framework

The rapid evolution of technological capabilities continues to impact the growth potential of SMEs. Business leaders must focus on adoption strategies that address the organization's needs and how the market responds to these changes. According to Tornatzky and Fleischer (1990), innovation begins with an adoption strategy that focuses on the current technology, the current state of the organization, and the current needs of the environment during the early stages of planning and development. These three factors provided the necessary variables in which business leaders should begin to build their plans (Tornatzky & Fleischer, 1990). Tornatzky and Fleischer's theory provided an appropriate framing for this qualitative multiple case study about sustainability through e-

commerce adoption strategies. TOE framework provided a logical assessment for leaders to consider when developing strategies for change (Baker, 2012).

Tornatzky and Fleischer's (1990) theory claims that effectively implementing innovation results in a higher success rate using the TOE framework. Technology is essential to our economy because of its ability to improve the competitiveness of firms in a country. Chandra and Kumar (2018) researched the adoption of augmented reality (AR) technology in e-commerce for SMEs. The findings in the literature presented factors that must be identified and analyzed before implementing the adoption of AR technology. Chandra and Kumar inferred that the highly technical and innovative concept of AR technology to enhance the consumer's shopping experience limited research during the composition of the study (Chandra & Kumar, 2018). The authors reported that technological, organizational, and environmental factors should decide that the innovation will foster the sustainability of the business (Chandra & Kumar, 2018). As ecommerce continues to double and triple in the number of users and sales, the sophistication of AR technology may be the visual enhancement that SMEs need to stand apart from competitors (Chandra & Kumar, 2018). Rich landscapes and virtual reality capabilities may add exceptional value to a business's online presence. Chandra and Kumar, using a quantitative approach through survey questionnaires, identified the TOE factors that are relevant for further analysis and concluded that most of the AR research focuses on the technological aspects of AR with limited research on the behavioral aspects of the medium.

Considerations for Other Conceptual Frameworks

E-commerce adoption strategy models have become increasingly common as they relate to the factors that outline the risks and opportunities a firm must consider for optimal results. The technology acceptance model (TAM) is a framework that outlines how users come to accept and use new technology (Davis, 1989). TAM is widely used as a general framework for its straightforward application to terms on two levels: the ease of use and the usefulness of the technology (Davis, 1989). While simplicity was a factor when introducing new technology to SMEs, other components must be considered, such as the impact the new technology had on the organization and the environment. TAM is ideal for circumstances such as e-government and online education; however, SME business leaders have a responsibility to their employees and their customers to make informed decisions for introducing e-commerce as an option.

Diffusion of innovation (DOI) is another possible concept for SME leaders to consider as a model for the adoption of e-commerce. Researchers use this framework to explain how, why, and at what rate the innovation or technology will spread (Rogers, 1983). The diffusion occurs with explicit acts of communication between groups who want the information as a part of that social system. The essence of the DOI framework is the underlying communications that support or deny the claims of the innovation until it is no longer considered new, only accepted or denied (Rogers, 1983). DOI conceptual framework was ideal for social media and video or virtual gaming experiences because the rapid exchange of ideas and trends thrive in cycles. However, DOI was not ideal for

e-commerce adoption strategies because the innovations that will replace some business processes will have a lasting impact on the organization and the environment.

TOE conceptual framework considers elements of the business that impact the introduction of the innovation. First, the technology alone must be accessible, applicable, and appropriate to manage specified functions of day-to-day operations intended to fortify the competitive edge, reduce costs, and increase profits. Second, the new technology must present some ease of operation and transferability to benefit the organization. Finally, the new technology should meet some standards that will present positive repercussions from the use of the innovation, such as reduced traveling for consumers that can make online transactions, which is good for the environment.

The Adoption of Information and Communication Technology

The adoption of ICT enhances innovation by increasing the firm's strategic agility, yielding more options for competitive actions (Neirotti & Pesce, 2019). Awa et al. (2017) explored several theoretical frameworks that accommodate the need to gain a competitive advantage, improve technology applications, and reduce costs and time for stakeholders. Hussein et al. (2017) argued that the application of information and communication technology could advance business competitiveness given that the Internet offers many opportunities for SMEs to compete similarly with large companies. Awa et al. determined that the benefits from the TOE framework foster comprehensive and integrative information that explains and predicts the adoption of technology and found prevalent factors in the technological context of this framework that included the

perceived simplicity, the perceived compatibility, and the performance expectancy of the new technology.

Perceived simplicity relates to the minimalization of uncertainties and risks that would otherwise negatively influence the adoption of the technology. Hussein et al. (2017) indicated that ICT adoption is perceived ease of use and perceived usefulness. Therefore, the use of ICT positively influences business performance. Perceived compatibility assesses whether the new technology aligns with the existing structure, values and norms, experiences, and information sharing needs. Raharja and Tresna (2019) recommended training and education on ICT use in the creative industry and other business fields based on its positive influence on business performance. The performance expectancy denotes the degree to which the new technology will build a competitive advantage (Awa et al., 2017). The perception of the benefits of adopting new technology, Abou-Shouk et al. (2013) noted that the adoption process within the individual SMEs and its diffusion across the SME sector is a variable and not so well understood due to gaps in knowledge of the factors affecting e-commerce adoption and how that translates into specific usage. Mbatha and Ngwenya (2018) noted that high costs, lack of funds, and limited technical know-how are some of the barriers to the adoption of e-commerce by SME business leaders.

The perceived compatibility of new technology is essential for a seamless transition into the new business processes and structure. Awa et al. (2017) described factors of the organizational context in the TOE framework, which include top management support, firm size, and scope of business operations. Eze and Chinedu-Eze

(2018) concluded that the coordination of resources and integration involves synthesizing the influence of external knowledge inputs, intangible resources, and tangible capabilities such as organizational structure, culture, processes, and inter-group relationships are essential in shaping an organization's competitive advantages. Awa et al. found that top management's knowledge of technology is vital when introducing new technical processes. Implications are raised for managers to be involved in ICT-enabled innovations and policymakers to build programs to foster innovation (Neirotti & Pesce, 2019). Awa et al. also found that firm size is a significant component, specifically when the firm size increases, impacting task complexity and coordination. The complexity of the modern business environment requires managers to understand the various roles played by diverse actors in the adoption process to develop new ideas and insights that will help their decisions (Eze, Olatunji, et al., 2018).

The indicators for adoption are primarily due to the likelihood of increased investors in the acceptance of new technology. Eze and Chinedu-Eze (2018) observed that competitiveness among firms could adopt sophisticated technology in business operations. Firms with support from top management are more likely to accept new technology than firms that do not provide such support (Awa et al., 2017). In the environmental context, factors such as professional associations, the demands from trading partners and customers, legal framework, policies, and federal laws influence the decision to adopt new technology (Awa et al., 2017).

The use of innovation and ICT is a primary competitive advantage associated with local knowledge and its diffusion. Regional inequalities, the role of competitive

advantage, and the possible synergies between the two validate the cause for research to determine and explain the characteristics of the regional innovation systems (Billon et al., 2017). De Souza et al. (2017) conducted a study on the digital divide in Brazil and the effective use of ICT and found that it relates to the difficulty or impossibility to have access to technology, and alternatively, relates to the difficulty in using the technology that is available and obtaining results from the use to its full capabilities. Eze, Chinedu-Eze et al. (2018) confirmed that technology innovation involves a thorough review of the members of the society that make the technology happen and knowledge about the technology itself and the specific users in specific settings. The digital divide in Brazil is the literal difference between individuals, families, businesses, and geographical locations, which is more complex than the notion of those who "have" and those who "have not" (De Souza et al., 2017). The researchers determined that SME business leaders in Brazil cannot access the benefits of ICTs and e-businesses the same way that business leaders of larger firms are allowed, putting smaller companies at a disadvantage. Indicators for measuring SMEs' performance, such as employee turnover, assets, and profits, including profit growth, market share, productivity growth, improved performance, and firm's competitiveness, are essential to determine organizational growth and success in the adoption of e-commerce (Raharja & Tresna, 2019). Additionally, the digital divide limits access to ICTs and their appropriate use (De Souza et al., 2017). The variance in innovation activities and outcomes at the regional level is due to the differences in regions' attributes, such as the level of available resources, human capital

endowment, the efficiency of scientific institutions, and certain socioeconomic factors and spatial components (Billon et al., 2017).

The digital divide in Brazil among individuals has been steadily decreasing since 2005 because of mass access to ICT goods based on mobile Internet broadband access. De Souza et al. (2017) concluded that the adoption of ICTs by SMEs in Brazil is not a publicized issue; therefore, the first item on the agenda would be to bring the discussion to the national literature to expose and address the current circumstances. The process of identifying the environmental consequences of an ICT solutions' capacity to change existing consumption and production patterns is critical for the success of the launch of new technology in developing regions (Bieser & Hilty, 2018). Essential criteria for these solutions include socio-economic factors, cultural, and human-health impacts to inform decision-makers and the public and mitigate unfavorably or promote favorable environmental consequences to support ICT adaptation. The second item on the agenda is to operationalize a theoretical model to examine the phenomenon to understand better the public policies of social and economic constraints (De Souza et al., 2017). As the economic landscape has rapidly transformed due to innovation and digitization of the economy, the complex dynamics associated with the diffusion of innovation, penetration of ICT, and economic growth have not been adequately researched (Pradhan et al., 2019). Therefore, de Souza et al. proposed that the final action for fostering the adoption of ICTs in promoting the research and use of IT is implementing the TOE framework.

ICT has been fundamental for economies seeking improvements in societal conditions. Socioeconomic restructuring and sociopolitical changes attribute to ICT and

its impacts and nuances in countries with differentiated economic levels (Lee et al., 2018). Martincevic and Kozina (2018) discussed the unpredictable nature of the market and how companies need to respond to the demands promptly and accurately to maintain market competitiveness. The adoption or spread of an innovation or its diffusion into an industry is essential, and faster innovation diffusion leads to higher returns to the society associated with investments in innovation (Muthinja & Chipeta, 2018). Technology in today's market is essential and is precisely the instrument that successful CEOs use to achieve business goals (Martincevic & Kozina, 2018). Business trends are constantly changing, and competitive pressure influences the development, integration, and constant upgrading of technological solutions. Implementation of ICT is the way to foster businesses to compete on a universal level with enhanced effectiveness and nearer to customer and supplier associations (Hussein et al., 2017).

Knowledge about the adoption of ICT in consumer markets is below the typical level of research and comprehension. Fedushko and Ustyianovych (2022) identified ecommerce customer awareness as knowledge skills and experience about the digital retail journey, brand, products and services, and various aspects of online shopping.

Understanding information technology is consistent with the most common system characteristics (Pan et al., 2018). Conducting business on any scale is nearly impossible without applying new technology and analysis of the users (Martincevic & Kozina, 2018). Many relative theories on consumer markets have been developed based on the predictive accuracy of user behavior (Pan et al., 2018). Companies that use the Internet as a business tool can engage in marketing to individuals or small groups of consumers to

fine-tune or personalize offerings according to their specific needs and desires (Martincevic & Kozina, 2018). Rapid technological change is an enabler of economic growth and structural societal changes (Lee et al., 2018). It is common for businesses to perform day-to-day tasks that include communications, marketing, managing the supply chain, and finance (Martincevic & Kozina, 2018).

The benefits and opportunities afforded to SMEs by Internet-based and digital technologies are copious. The ease of access when using new technology has fostered remarkable changes in the marketplace, such as increased quality assurance for products and services, improved customer relations, and higher levels of efficiency overall in business processes (Martincevic & Kozina, 2018). Firms with powerful transformative tools are changing the means of communication and collaborating, within the firm and external stakeholders, to offer user-generated, interactive, fast, and low-cost content (Galati et al., 2019). Social networking has become the fastest-growing method for communicating with consumers and potential alliances for better market coverage (Martincevic & Kozina, 2018). Emerging economies experience outstanding growth rates along with the prospects for market expansion due to significant economic reforms (Apaydin et al., 2018). The most current digital and technological advances have impacted traditional business processes making them practically obsolete. Operations that may have taken hours or even days to complete before the ICT age can now be accomplished within minutes or less (Martincevic & Kozina, 2018). Adopting new technology for any size business is necessary for companies to utilize to gain a competitive advantage.

Drivers and Outcomes of ICT Using TOE Framework

ICT adoption plays a significant role in the dynamics of industrial competition and the successful use of innovation. The realization of the economic gains of ICT grows while business leaders also understand the disruptive effects of digitalization (Neirotti & Pesce, 2019). Molinillo and Japutra (2017) explored how SME business leaders adopted digital innovation and technology to concentrate the drivers and outcomes of the adoption itself. Rapid developments in ICT have dramatically changed the way people live, work, study, communicate and entertain, creating a system of drivers in modern society (Apaydin et al., 2018).

Molinillo and Japutra (2017) analyzed the influences associated with SME business leaders' decision to adopt a specific strategy to integrate new technology and innovation such as e-commerce. New technological advances have made way for user-friendly devices and services, all of which have increased ICT penetration rates among all economic agents (Pradhan et al., 2019). Molinillo and Japutra determined that there were significant differences in the outcomes of adopters and non-adopters. Potential adopters obtain information on new technology as the diffusion process spreads through human interaction (Billon et al., 2017). ICT-led technological change promotes organizational innovation in a knowledge economy and positively impacts firms' efficiency (Molinillo & Japutra, 2017).

E-commerce and ICT adoption have a high potential for positive impacts on the business processes of SMEs. Molinillo and Japutra (2017) identified nine drivers of e-business: reducing operating costs, lowering sales and purchasing costs, improving range

and quality of services to customers, increasing speed in goods dispatch, obtaining a more significant number of suppliers, preventing loss of market share, increasing market share, marketing intelligence, and enhancing relationships with partners and customers. Policymakers should create provisions for the development of financial sectors to benefit from the ICT drivers of economic growth, provide a more convenient and institutional environment, increase economic openness, prioritize the allocation of resources to the development of the ICT infrastructure, and contain the effect of inflation and government consumption (Bahrini & Qaffas, 2019). Increased investments in ICT lead to higher industry concentration, more excellent profit dispersion, and higher competitive turbulence in the sector (Neirotti & Pesce, 2019).

Further investigation into these drivers presented challenges for SME business leaders as well. The non-adoption of e-commerce caused small enterprises to experience a decline in income, which worsened due to restrictions of community activities during the onset of the COVID-19 pandemic, compared to adopters of e-commerce (Lestari et al., 2021). Some of the issues most encountered by SME business leaders include poor awareness of ICT, financial constraints, poor training skills on the use of the technology, and the inability to comprehend the importance of ICT in their business (Eze, Chinedu-Eze, et al., 2018). Additionally, there are issues with safety and security that continue to be a significant barrier to effective adoption (Barroso et al., 2019). Furthermore, while ICT offers cheap but effective communication channels, the lack of resources for ICT adoption and the inability to understand the monetary benefits of ICT inhibit the adoption rate (Primasari et al., 2019). Finally, SME leaders need to acquire new business, access

information and improve their organization between and within firms (Billon et al., 2017).

TOE was validated as an efficient model to predict the adoption of innovations. The core components of the framework outline a system to determine the criteria; however, SME leaders are more concerned with technological and organizational factors rather than the influence of environmental factors (Molinillo & Japutra, 2017). Kossaï et al. (2019) found that human capital, firm size, and exports and imports intensities were significant influencers for ICT adoption. Additionally, the discoveries and technological innovations in the ICT industry exhibit increased computational speed, enhanced sophistication of ICT devices, and the reduced cost of ICT infrastructure and services (Pradhan et al., 2019). According to Molinillo and Japutra (2017), SME business leaders consider the relative advantage, uncertainty, compatibility, trialability, firm size, top management support, prior experience, innovativeness, industry, market scope, supplier efforts, and external computing support.

Understanding business information is essential for business managers because of the changes in technologies markets. This information helps leaders make rational and strategic decisions after investigating the nuances of information technology that follow a rational approach (Eze, Olatunji, et al., 2018). The catalyst for this research stems from the increased interest in drivers for ICT adoption by SMEs as it impacts economic growth, employment, productivity, firm performance, competitiveness, and the low level of adoption in developing countries (Kossaï et al., 2019). While ICT presents the opportunity to manage innovative processes, there is also the possible impact on

company performance, such as introducing information systems supporting operational processes (Ammirato et al., 2019). Kossaï et al. (2019) tested the positive influence of research and development (R&D) activities on ICT adoption and the relationship between competitive pressure and ICT adoption.

Since its independence in 1956, Tunisian government officials concentrated on their education for socio-economic development to foster scientific research and technological innovation. As a result, Tunisia was one of the first countries from the Middle East and North African region to adopt a development plan focused on building a knowledge-based economy through an ICT-based national strategy (Kossaï et al., 2019). The existence of SMEs in the Middle East is reassuring because increased e-commerce adoption leads to the possibility for more significant development for the region (Primasari et al., 2019). More recent efforts include investing in the procurement of highly qualified human resources that specialize in advanced technologies to reinforce scientific, technological, and engineering specializations (Kossaï et al., 2019).

ICT adoption improves performance through staff revitalization, resource mobilization, process restructuring, and the development of current opportunities to serve consumers (Raharja & Tresna, 2019). Additionally, significant reforms and regulatory frameworks for the digital economy support the private sector and foster global corporate competitiveness (Kossaï et al., 2019). Therefore, internal and external support for ICT adoption will significantly improve the productivity and efficiency of SMEs (Chatzoglou & Chatzoudes, 2016). However, despite the fundamental relevance of ICT adoption, SME leaders experience a series of challenges in the adoption of e-commerce, which is

typically the case in most developing countries (Cazabat et al., 2019). Ultimately, Tunisia has been afforded several advantages through regular funding allocated for education and the modernization of telecommunications infrastructure (Kossaï et al., 2019). To research this circumstance further, Kossaï et al. (2019) collected data from 50 SMEs, 70% of the "not exporting" SMEs in Tunisia, using a questionnaire as the research method. The researchers identified five factors as determinants for ICT adoption from the TOE framework. These factors are human capital, firm characteristics, strategic direction, international orientation, and environment. In the ICT adoption, several obstacles exist, such as the lack of managerial time, IT knowledge, and financial resources (Raharja & Tresna, 2019). Kossaï et al. determined that human capital, firm size, and exports and imports intensities were significant influencers for ICT adoption, while R&D activities and importance to market share were not significant positive influencers of ICT adoption.

Sustainability for SMEs Using TOE Framework

Penetration of ICT is essential for the knowledge economy and is an effective tool for economic growth and sustainable development. According to Chatzoglou and Chatzoudes (2016), SMEs can achieve sustainability using this basic e-commerce adoption strategy. Molinillo and Japutra (2017) stated that extended use of ICT for market-related functions is critical in making the most of the investment itself while also stimulating renewed increases in marketing, financial, and communication effectiveness. Without the most updated information known of these three realms, a business will not take advantage of its competitors. As the global economy continues to shift towards integration due to ICT progress, SMEs can achieve a higher success rate derived from

their ability to participate in the regional and international markets through the adoption and use (Hussein et al., 2017).

ICT penetration may facilitate and drive innovations in terms of processes as well as products and services. Chatzoglou and Chatzoudes (2016) researched to examine the factors that affect the e-commerce adoption of SMEs. They concluded that the TOE framework consisted of 10 independent factors: *IT infrastructure, IT skills, firm size, firm scope, CEO's knowledge, adoption costs, willingness and capabilities of supply chain partners, competitive pressure, government support,* and *consumer readiness*. These factors are classified within the three main dimensions of the TOE and are either facilitators or inhibitors of success (Chatzoglou & Chatzoudes, 2016). However, because of the unpredictable and complex nature of ICT, coupled with an unsettled market environment, globalization, and irregular technology change, SMEs are constantly under pressure to scan their environment for adequate information during the ICT adoption decision-making process to avoid ICT adoption failure (Eze, Olatunji, et al., 2018).

TOE Framework in IT Governance

Studies have shown that organizations with solid IT governance have more than 20% higher profits than organizations with inadequate governance given the same strategic objectives (Olutoyin & Flowerday, 2016). IT governance involves collaborative relationships between an organization's management, its board, its shareholders, and other stakeholders (Smits & van Hillegersberg, 2018). Olutoyin and Flowerday (2016) conducted a study of relevant literature and concluded that IT governance can be a more efficient construct when using careful analysis of the components of the TOE framework

before implementation of preempted IT governance strategies. IT governance has shifted from the focus of delegation of authority of decision-making regarding what IT to use, how to use it, and who uses it (Ako-Nai & Singh, 2019). Olutoyin and Flowerday's research was very specific to IT governance and the use of the TOE framework; however, the point made held relevance across most aspects of SMEs' more common business models. Contingencies that influence an organization and its IT governance include defining and aligning its IT strategy to its organization's strategy, making IT investment decisions, implementing IT controls, and making overall IT risk-management decisions (Ako-Nai & Singh, 2019).

The focus of IT governance research is to examine the link between strategic planning and measurable successful outcomes. Therefore, accountability for IT governance within an organization resides with the board, as IT is strategically and extensively across all functions of the organization (Ako-Nai & Singh, 2019). Therefore, implementing IT governance strategies should precede a critical analysis of the pillars of the TOE conceptual framework (Olutoyin & Flowerday, 2016). The primary structure of this framework conducts adequate research and analysis of the main factors of a business: technology, organization, and environment (Chatzoglou & Chatzoudes, 2016).

Open government data (OGD) is a set of policies that promote transparency, accountability, and value creation by making government data available to all. Huang et al. (2017) conducted a literature review to identify and understand the barriers that compromise the release of open government data in China. The widespread popularity of OGD is apparent as initiatives have expanded from 2 to 300 in 2009-2013, with more

than a million data sets released by governments globally (Jetzek et al., 2014). This phenomenon accelerates innovative applications globally and promotes economic growth and sustainability (Huang et al., 2017).

The Chinese Central Government committed to releasing OGD (Forstner & Leeiahnke, 2013). It was notated in the 13th Five Year Planning Report (2016-2020) that China should prioritize opening and sharing government data (Forstner & Lee-jahnke, 2013). Implementing the release of OGD is considered a significant step in development for China's democratic government. Obama (2009a) declared this event as an unprecedented level of openness in government by ensuring public trust and establishing a system of transparency, public participation, and collaboration. This declaration is the "Freedom of Information Act" (Obama, 2009b). Since this enactment, 15 major cities in China have launched OGD portals, with some even claiming to provide open data ecosystems where people can freely download, share, use, and build on OGD (Huang et al., 2017). However, contrary to the commitment made by Council in 2009, the country has experienced exceptional difficulty in releasing OGD. Jinping Xi, the Chairman of China in 2009, expressly committed to the concepts of OGD to achieve a more innovative, more effective, and more service-oriented government (Jetzek et al., 2014). Efforts impact political assurance, coordination, and developing OGD portals (Huang et al., 2017).

Adoption of Big Data Analytics

Big data analytics (BDA) plays a significant role in today's e-commerce marketing strategies of four components: technology, organization, environment, and

supply chain characteristics. Since the early 2000s, organizational leaders have had to rethink how they conduct business, such as keeping abreast with the technologically charged societies and tech-savvy communities (Tarofder et al., 2017). Lai et al. (2018) explored the factors of firms considering adopting (BDA) into their daily operations. The functional elements of BDA are volume, velocity, variety, and volume. The adoption, implementation, and management of BDA require companies to acquire new career profiles such as data scientists, a combination of engineering, statistics, and deep knowledge of business (Cabrera-Sánchez & Villarejo-Ramos, 2019). According to Vijay et al. (2018), the shopping experienced has become more subjective and more personalized as the sellers are able to provide tailor-made recommendations to each consumer based on their previous purchases. The increased use of BDA in e-commerce has resulted in active research on the benefits of its adoption. Lai et al. found that integrating an effective e-commerce business strategy such as BDA is most successful when examined under the lens of the TOE framework for its efficiencies and benefits. According to Hussain et al. (2022), entrepreneurial competency is a moderator of TOE factors and the performance of SMEs. Business operations are becoming more effective and competitive in the era of digital technology (Hussain et al., 2022). However, companies considering BDA adoption face several barriers: lack of knowledge, fear, resistance to change, and the technology's limitations (Cabrera-Sánchez & Villarejo-Ramos, 2019). Some SME leaders do not have adequate skills and expertise needed to take advantage of the benefits of ICT; on the other hand, SME leaders who have the

awareness regarding the benefits of BDA solicit the aid of experts to overcoat the ICT capability gap (Nurudeen et al., 2019).

The technological context of the TOE framework focuses on the characteristics of the technology in determining the possibility of a positive or negative impact on decision-making processes. Tornatzky and Fleischer (1990) concluded that compatibility, relative advantage, and complexity were among the most consistent factors when considering adopting new technology. Compatibility in this context refers to the degree that the innovation is consistent with existing values, whereas relative advantage refers to the degree to which the innovation is perceived to be better than the idea it supersedes (Lai et al., 2018). Complexity in this context refers to the degree the innovation is easy to understand and use. The authors also added that observability is the ability to see the visible results of the innovation, and trialability is the extent of an innovation (Lai et al., 2018). Thus, these five factors of a technological dimension play a significant role in the decision-making process for innovation adoption.

The TOE conceptual framework adopts innovation and technology on the organizational level. In an organizational context, readiness factors are the main area for consideration. In terms of organizational readiness, top management (TM) support, information systems (IS) infrastructure and capabilities, as well as financial position are among the most prominent (Lai et al., 2018). TM personnel must understand the importance of the IS functions and must be engaged in IS activities. IS management capabilities must support upgrades and enhanced capacity managed by individuals with knowledge of the current system and understand the new technology. Financial readiness

entails the availability of resources to maintain the current state of the business and support changes made to the business structure (Bi, 2017). Each organizational factor would positively impact the intention to adopt BDA (Lai et al., 2018).

The final component of the TOE conceptual framework, which is environmental factors, may impact processes to adopt innovation. In the environmental context, one must consider the climate in which an organization conducts its operations, also known as environmental variables (Lai et al., 2018). Some extremities of this component include government influences, technology standards, legislation, and consumer readiness (Lai et al., 2018). The authors noted two environmental moderators that may impact innovation adoption: the consideration of other existing competition already using the technology and government policy and regulations.

An additional component relative to the TOE framework is the supply chain (SC) characteristics, which pertain to how the firm shares a variety of relevant confidential information, that is complete and accurate. The significance of developing an e-supply chain is to effectively manage transactional activities such as procurement, online ordering, and post-ordering follow-up, which results in reduced use of resources like time and money (Bi, 2017). Lai et al. (2018) explained that sharing information is goal congruent among SC partners and must be analyzed when considering innovation and technology adoption. Supply chain management enables the balanced flow of information, material, and finance in a network consisting of suppliers, manufacturers, distributors, and customers (Yingxia et al., 2018). The researchers revealed that connectivity provides an essential condition for SC parties to cooperate on a broad scale

by exchanging official messages and data. The researchers concluded that the intention to adopt BDA through increased SC connectivity.

The factors that influence BDA utilization and adoption in emerging economies, such as India, are that some business leaders are reluctant to adopt BDA into their business systems. The business leaders were not aware of the strategic value of the application and the difficulties associated with the technological, organizational, and environmental changes (Verma & Bhattacharyya, 2017). The potential value of BDA is high volumes of fast-moving and diverse data. Using the TOE framework, the technological context, in this case, includes the complexity, compatibility, and IT context. In the organizational context, factors include top management support, organization data environment, and perceived costs. In the environmental context, factors include external pressure and industry type. The coding process is two sub-processes; data management and analytics techniques used to acquire and analyze the big data (Verma & Bhattacharyya, 2017). Additionally, Verma and Bhattacharyya (2017) identified the various formats of analytics to be collected, including text, audio, video, social media, and predictive analytics. In this case, the approval for IT innovation in business firms is on top management perception of e-commerce and the perceived strategic value of the IT.

Adopting an E-Supply Chain Using TOE Framework

Logistics managers emphasize profitability and operational accuracy through cost efficiency. Supply chain and logistics management are interchangeable (Tarofder et al., 2017). The link between e-supply chain coordination and SME success explains the impact of the TOE conceptual framework on developing e-business practices to achieve

business goals (Bi, 2017). E-supply chain coordination can use e-business technologies to complete transactions with supply chain partners (Lai et al., 2018). Logistics services that affect customer satisfaction include availability, delivery time, shipping costs, delivery reliability, product quality and condition, complaints and return policies, and information quality (Vasić et al., 2021). The research in Bi's (2017) study revealed factors that drive SMEs to adopt, implement, and engage in e-commerce by using the TOE conceptual framework to investigate the determinants of adopting e-supply chain coordination capabilities. Bi also compared the TOE framework to the diffusion of innovation conceptual framework by Rogers (1983). E-commerce is enabled by technological development, driven by organizational characteristics, and influenced by environmental factors (Bi, 2017). Disruptive events such as natural calamities, man-made disasters, political and economic upheavals, occurring the last couple of years have impaired supply chains with constant risks and uncertainty (Aslam et al., 2020)

The adoption of Internet technology is gaining more attention in developing countries like Malaysia. Ngah et al. (2017) composed a study based on the research and analysis of the contributing factors of adopting Halal warehousing services among Malaysian Halal manufacturers. Halal logistics and capabilities are directly related to the success of the global Halal food industry to ensure the integrity of the products. Although in Malaysia, where much of the population is Muslim, the need to consume only Halal products is a requirement of the Islamic faith, the growth of Muslim disposable income has increased the demand for Halal products and services. More recently, Halal attributes are not only consumed by Muslims because Halal characterizes the symbol of

wholesomeness, safety, hygiene, and ethical values (Haleem et al., 2018). Thus, Muslim consumers' spending trends have not only impeded the need for more Halal products but have prompted more Halal processes as well, including Halal supply chain activity (Ngah et al., 2017).

Ngah et al. (2017) investigated the challenges of warehousing and manufacturing to identify barriers and inhibitors of the adoption of Halal logistics. Halal products and services must maintain complete integrity throughout the stages of production to delivery, including proper storage, transportation, and shipping and handling within the supply chain until it has reached the point of consumption (Ngah et al., 2017). One primary driver for the marked-up appeal in Halal certified services is the interest from non-Muslim health-conscious consumers who care about the environment and the condition of the products they use and consume. Due to various exceptions made by Halal-certified suppliers and the high expectations of Muslim consumers, the number of these Halal manufacturing organizations is still relatively low (Ngah et al., 2017). Internet technology can transform entire business activities, ranging from data collection to delivering the final product to the end-users (Tarofder et al., 2017). Ngah et al. employed the TOE model to identify the determinants in Halal warehouse service adoption of innovation. TOE is an efficient framework to use due to the indicators of technological, organizational, and environmental factors that are the essence of Halal logistics (Haleem et al., 2018).

Halal warehousing plays a fundamental function in Halal supply chain services for finished goods. As this is a new approach, only a few providers apply the correct

methods certified by the Department of Islamic Development Malaysia (Ngah et al., 2017). As per Halal standards, all things to consider during every step of every process. Halal warehouse structures must be in environmentally sound areas (Malaysia, 2010). Lighting and storage are also aspects that Halal warehouses must maintain to sustain their credibility (Ngah et al., 2017). New and recently acquired technology makes Halal certification through the Department of Islamic Development Malaysia simpler by providing an online application. The administrators respond to online applicants by sending Halal audit teams to audit and inspect the facility (Ngah et al., 2017).

The perceived benefits of the use of information systems are positively related to the adoption of Halal warehousing. Variables such as customer pressure and organizational readiness were positively related to the adoption of Halal warehousing (Haleem et al., 2018). Adopting Internet technology is an integral part of a sustainable supply chain for an organization (Tarofder et al., 2017). Customer demand for Halal supply chain products and services added significant pressure for Halal manufacturers to ensure the integrity of the products. On the other hand, the costs impact the adoption of Halal warehousing (Ngah et al., 2017). Costs, in this case, are the only variable that acts as a barrier to Halal warehousing because of increasing costs to operate and maintain Halal facilities. A similar study by Haleem et al. (2018) stated that the lack of top management and government support, standardization, codification of HL practices impacts the mainstreaming of Halal.

Social Web Knowledge and E-Marketing using TOE Framework

Social media platforms better understand the relationship between consumer behavior and customer supplying processes regarding SMEs' marketing behavior. The different factors of social web knowledge sharing and its effects on innovative performance in manufacturing SMEs' marketing strategies are a part of complex and rapidly changing marketing scenarios (Bocconcelli et al., 2017). The concept of social web knowledge sharing is a product of advanced technology where initially, the social web was a traditional static website in which the user could receive information (Soto-Acosta et al., 2017). Some leaders fail to use social media effectively because of organizational issues relating to lack of knowledge and experience of social media and its uses, and a substandard level of training and support to engage successfully with social media (Social Media Gold Dust, 2020). Social web knowledge sharing encompasses interactive platforms and social networks that exchange information and reconfigure current knowledge synchronously. Social media is a central component of the social web for supply chains and companies to reach out to large pools of potential customers through business-to-business and business-to-customer brand management (Yingxia et al., 2018). Digital communities use Knowledge Management (KM) to acquire, create, and share collective information through these social networks (Soto-Acosta et al., 2017).

The adoption of social media by SME business leaders is a critical process to enhance sales development integrated within the processes of e-commerce adoption in an interactive business landscape. This innovation integrates and supports outside stakeholders' functions, operations, and processes while streamlining them into one

concept (Awa et al., 2017). Soto-Acosta et al. (2017) conducted their research from a sample of 175 manufacturing SMEs using the TOE framework for the basis of their research on KM practices in manufacturing SMEs. These businesses represent more than 80% of the total number of firms in the manufacturing industry and about 60% of the employment in Europe and are of vital importance for economic growth, employment, and wealth creation. The researchers examined how technological innovation increases competitive interaction and incentivizes the adoption of new technology to remain competitive. Furthermore, Bocconcelli et al. (2017) found that organizational capabilities to implement KM were determined by training and transitioning and a fortified relationship within the organizational environment. According to Patma et al. (2021), the application of sustainable operations management, such as social media marketing influences companies' business performance and minimizes side effects on the community and the environment. Finally, the external environment of manufacturing SMEs and the firm create an alliance as one using the other for a mutual benefit (Soto-Acosta et al., 2017).

Business model innovation is a mechanism that organizations use to attain economic effectiveness and explore new opportunities. Matikiti et al. (2018) conducted research to establish factors that influence social media marketing by travel agencies and tourism operations in South Africa. The researchers discussed how social media marketing in South Africa's tourism industry had become a staple among larger firms, while many SMEs have fallen behind in the trend. This marketing strategy is one of the most effective tools utilized by tourists to search for travel information and share their

experience with its services. In addition, websites and applications that typically serve separate operations have capitalized on the opportunity to employ social media functionality into their interfaces (Appel et al., 2020). Matikiti et al. used the TOE framework to determine if adopting the social media marketing strategy would be feasible and beneficial.

In the technological context, SMEs need to have technical knowledge of current practices and capable equipment, both internal and external, to be a positive driver for adopting the social media marketing strategy. In the organizational context, the researchers concluded that SMEs would need to assess the firm's resources to initiate and maintain the new technology (Matikiti et al., 2018). In addition, cross-functional collaboration and systems thinking radical institute changes in business processes, products, and organizational forms (Minatogawa et al., 2020). Some other underlying factors of the organizational aspect of this framework are firm size, intra-firm communication processes, linking structures between employees, and the number of slack resources. Finally, the environmental context identifies the influence to adopt by competitors, customers, and the government (Matikiti et al., 2018). Appel et al. (2020) suggested that the "Omni-social" nature of the current environment is prone to social media influence and is a part of every consumer's decision-making process. There are many critical drivers for adopting the latest marketing strategy using the TOE framework, which includes: manager's age and level of education, managerial support, technical knowledge, time, and the pressure from customers as well as competitors.

Businesses that exploit the use of social media as a marketing platform can target a diverse audience and create an effective communication strategy. Furthermore, sustainability is a crucial issue for both global and local organizations; therefore, the opportunity for mass marketing communication is the easiest and cheapest way of advertising (Wael & Mohammed, 2019). Matikiti et al. (2018) conducted their research using the responses from 150 questionnaires distributed to participants from travel agencies found in the Association of South African Travel Agencies (ASATA). The researchers concluded that all identified factors were relevant and positive drivers to influence social media marketing for SME travel agencies in South Africa. Prominent factors in their data analysis included management support and manager's education level as critical components for introducing the new technology in smaller firms.

Increasing globalization has transformed ways of living, and nations are merging into one world. Sheikh et al. (2017) examined the effect of the TOE conceptual framework on textile sector performance in Pakistan to gain a better understanding of marketing managers, SMEs regarding firm performance and e-marketing uses. Social media is a network where the activities shape lives and organizations (Wael & Mohammed, 2019). Firms can adopt e-marketing but propose the more critical question for how these firms will deploy e-marketing to obtain a competitive edge and improve firm performance. This research stems from the growing concern of the policymakers, trading partners, industrialists, customers, and shareholders who are impacted directly or indirectly by the listless performance from this specific sector. On the other hand, regional competitors of Pakistan have accomplished significant growth in areas such as

gaining access to global buyers, expansions due to new and improved technologies, and enhanced communications with trading partners (Sheikh et al., 2017). Additionally, the SME sector plays a significant role in the growth and progress of the country, such as generating employment for the growing population, bringing women into the workforce, as well as to contribute to the Gross Domestic Product (Erum et al., 2017)

The TOE framework examines the relationship between e-marketing and firm performance. The researcher confirms that smaller textile firms will benefit from a relative advantage in growth, financial gain, and competitive edge in the technological context. Organizational factors to consider in the adoption of e-marketing includes enriched resources that include financial reserves, social capital, human resource, business resources, and increased marketing capital. Furthermore, the researchers identified that competitive advantage and competitive strategy impact firm performance (Sheikh et al., 2017). In addition to these findings, Erum et al. (2017) stated that where there is limited availability of finance, e-marketing is the opportunity for global expansions and to maintain relationships with customers, suppliers, and business partners at significantly lower costs.

Social media enables millions of people to network virtually, beyond the confines of geographical proximity; the Internet and networking represent an essential component of success for any business. Sheikh et al. (2017) conducted the research using questionnaires distributed to 257 textile firms in Punjab and Pakistan's Sindh province. The researchers determined that the implementation of e-marketing positively affects firm performance. The organizational context in this analysis provides evidence that top

management support is a primary influencer for adopting e-marketing strategies. In addition, the environmental context of this study showed that competitive pressure and pressure from stakeholders and customers positively drive the decision to adopt new technology.

Business-to-Business E-commerce Adoption

E-commerce is widely known as the online concept of commercial activities via the Internet. Business-to-Business (B2B) e-commerce is an essential pillar to the digital marketplace and has shown significant growth since 2010 (Krishna & Singh, 2018). The factors that affect B2B e-commerce adoption are the external environment, organizational context, decision-makers characteristics, technology contexts, and organizational learning (Gorla et al., 2017). B2B enables firms to perform electronic transactions with increased efficiency, reduced inventories, and increased sales and profits. B2B e-commerce consists of more sophisticated demands between firms and business partners, causing the decision to adopt and continue to use innovative technology as a more detailed process (Krishna & Singh, 2018). However, few researchers conducted further research into how organizational, environmental, and technical contexts of adopting new technology impact adopting new technology. These components include tighter integration of supply chain partners, audit planning, and risk assessment (Gorla et al., 2017). Additionally, Xuhua et al. (2019) presented findings that established that there are different levels of B2B ecommerce and different competitive advantage gained at each level of its adoption.

The organizational context refers to *informal linkages*, while the organizational learning category reveals two variables: perceived operational benefits and perceived

barriers. Gorla et al. (2017) found that the external environment context pertained mainly to *price competition*, while the technological context focused on *IT maturity*. The decision-makers characteristics are closely related to the preference for negative information. Xuhua et al. (2019) concluded that the e-commerce model is a staged progression of usage that begins from simple initial adoption of technology-based activities to an advanced degree of use of more complex and integrated technologies.

Utilizing the Internet for communication is the most efficient method for cultivating closer purchaser-seller relationships. Gorla et al. (2017) collected data using self-administered questionnaires distributed to 97 respondents of two different IT managers from several different companies. The various groups included 76 IT executives and 18 non-IT executives. The study results revealed that more than 50% of the respondents from different companies reported that their company had already adopted or decided to adopt new technology for B2B e-commerce as their primary platform for operational transactions (Gorla et al., 2017). Cost reduction is one of the main advantages achieved by SMEs for adopting and implementing IT (Xuhua et al., 2019). The report also showed the findings in each category of factors. The external environment supports price competition as a B2B e-commerce adoption (Gorla et al., 2017). The organizational context supports a positive presence of informal group linkages, and organizational learning characteristics were positive drivers for B2B ecommerce adoption (Gorla et al., 2017). Xuhua et al. (2019) explained that the adoption of technology assists to differentiate itself not only through price but also through product innovation, customer service, and shorter time to market. On the other hand, IT maturity

was found not to be relevant or significant enough to support B2B e-commerce adoption, just as the decision-makers characteristics did not influence the decision to adopt new technology (Gorla et al., 2017).

SME business leaders have realized the advantages of e-commerce adoption in developed countries. Some of the advantages that are pertinent to the growth and development of Bangladesh include reduction of costs, improved supply for demand, unique customer base, improved product quality, and the creation of efficacy in supply chain distribution (Billal et al., 2019). In addition, the Internet enables users to communicate freely by sharing information with others (Shook & Tih, 2017). Gorla et al. (2017) pointed out that researchers commonly examined the environment and technical context of the decision to adopt; however, few researchers conducted further research into how organizational factors are impacted by adopting new technology in developing countries. Billal et al. (2019) suggested that "doing business electronically" is one of the most critical factors in supporting the development of SMEs in Bangladesh.

Variables that affect the decision to adopt new technology include slow processing of Internet services, the absence of a quick transition system, and frequent payment delays. Additional barriers include poor communications infrastructure combined with managers' and workers' lack of ICT knowledge and awareness, lack of sufficient financial resources, and the perceived lack of relevance of ICTs to SMEs. Therefore, SMEs will benefit from conducting a formal analysis of how the digital upgrade will appeal to the current client base and create opportunities for potential new clientele (Chandra & Kumar, 2018). Through this research, Billal et al. (2019)

determined the challenges Bangladesh faces to adopt e-commerce business strategies using the TOE conceptual framework.

Improved technological capacities are critical for efficient business processing. From the aspect of the technological context, the critical success factors of ICT are customer service and business processing. ICT has transformed the nature of products, processes, companies, industries, and competition (Gamal & Montash, 2019). The time saved by using these technological advances translated into a reduction in costs and improved bottom line (Gorla et al., 2017). Business leaders should capacitate the business processes of the supply chain, partners, stakeholders, and consumers through e-commerce functionality (Billal et al., 2019).

Security and privacy are significant areas for concern, where technological capabilities are essential operative tools for safeguarding all aspects of the organization. Factors of the organizational context include security and privacy, culture, firm size and scope, formalization, and centralization of the organizational structure (Billal et al., 2019). Firm size and scope are directly affected as innovation and technology replace some physical positions. Furthermore, the scope of business operations has indicators for adoption due to the likelihood of increased investors in the acceptance of new technology (Awa et al., 2017). In addition, the diffusion of the Internet among the general population has intensified the ease and knowledge of new technology (Gamal & Montash, 2019).

Business partner affiliation is a practice that typically fosters ties to enable the firms to benefit from each other. Factors of the environmental context include government intervention, business partner affiliation, and value chain (Billal et al., 2019).

Government involvement is apparent in all aspects of a business. For example, in e-business, electronic records management is a core element for public and private organizations (Gamal & Montash, 2019). Finally, the value chain is fundamental through e-commerce, as external parties such as other CEOs and stakeholders add value by facilitating products and services to entail customer satisfaction and exceed expectations (Billal et al., 2019). As a result, customer value grows between customers and suppliers, and even competitors (Gamal & Montash, 2019).

E-Commerce Adoption Strategies for Small Retail Businesses

E-commerce adoption has gained substantial momentum as strides become more environmentally responsible. As a result, small retail businesses face the decision to adopt e-commerce and transform their operations into a more *web-friendly* environment. Seethamraju and Diatha (2019) conducted a study of the impact of e-commerce on small retail businesses using the TOE framework as a guideline for their research. The authors highlighted the traditional business model of small retail convenience stores in India and the low levels of adoption of digital technologies to manage supply-side and customer-side processes and maintain a high volume of low-level transactions of cash and credit. Molinillo and Japutra (2017) proposed that ICT-led technological change promotes organizational innovation in a knowledge economy and positively impacts firms' efficiency.

The primary payment application used in India is considered unreliable by SME leaders and consumers and sufficiently supported by the payment interface system.

Seethamraju and Diatha (2019) identified that the factors that presented challenges for

small retail business leaders when considering e-commerce adoption are primarily related to the digital transaction of funds. In the context of technology, technology presents many challenges in the arena of digital financial transactions. ICT infrastructure must embody tangible resources such as physical assets and intangible resources such as skills (Billal et al., 2019). Digital payment processing is essential for e-commerce adoption and must be fully operational to meet basic organizational expectations (Seethamraju & Diatha, 2019). In the organizational context, factors that impact the decision to adopt e-commerce include the cost of digital payments and the perceived risk of digital transactions. In the environmental context, the physical infrastructure presents slow Internet speeds and inefficiencies that complicate digital transactions. The decisive role of suppliers and the lack of trust and corrupt regulations were also critical factors that impacted the decision to adopt e-commerce (Seethamraju & Diatha, 2019). Seethamraju and Diatha concluded that small retail businesses in India are struggling to adopt new technology and, as a result, threaten the business model in the face of change, consumer habits, and increasing competition from larger firms (Seethamraju & Diatha, 2019).

E-commerce is a popular innovation due to its significant impact on growth from year to year. The shopping behavior of customers in the e-commerce environment is different from customer behavior in traditional settings due to remote access (Bartók, & Matošková, 2022). Rahayu and Day (2017) investigated the relationship between the levels of e-commerce adoption and the postadoption benefits. Their research was composed of 292 surveys of SMEs that had recently adopted e-commerce and reported the benefits of the change. Extended market reach, improved company image, improved

external communication, improved speed of processing, increased employee production, and increased sales were the top six perceived benefits of e-commerce adoption by SMEs participating in the survey (Rahayu & Day, 2017). These accolades are critical advantages for businesses. Barroso et al. (2019) stated that the growing number of firms making the transition from traditional business models to e-commerce results from the evolution of technology.

Some of the primary inhibitors of e-commerce adoption include the lack of human resources, lack of support, security issues, internal resistance, unready customers and unready business partners, internal constraints, and lack of IT resources. Svatosova (2019) also found many inhibiting factors of post-adoption of e-commerce by retail SMEs. Post adoption's positive and negative connotations have led to a slowed and more deliberate response to adopting by retail SMEs (Barroso et al., 2019). Nisar and Prabhakar (2017) pointed out the main differences between traditional business models and commerce; location, absence of a physical store, inability to test products before purchasing, and pre-sale and post-sale moments and face-to-face interactions. In retail, these traditional characteristics are an essential part of consumerism, but the concepts of e-commerce include more flexibility, a wider variety of products, lower cost structures, greater convenience, and customization (Nisar & Prabhakar, 2017).

Most retail SMEs are typically operated by their leaders, requiring them to make all the decisions on many organizational levels. Grandon and Ramirez-Correa (2018) researched to reveal the perceived drivers and obstacles as antecedents of attitude toward e-commerce acceptance by retail SMEs. These authors explained that adoption by SMEs

is much lower than that of large firms for reasons that include difficulty in implementation, security concerns, and unwillingness to change traditional methods of doing business (Grandon & Ramirez-Correa, 2018). Some advantages of this include smaller and multifunctional management teams, lower employee turnover, and reduced operational and transaction costs. On the other hand, establishing a technologically advanced platform can be an expensive endeavor and requires new competencies to support and manage the changes (Svatosova, 2019). Retail SME leaders must be accountable for the implementation of the adoption of e-commerce. Restructure of the business is necessary to accommodate the required constructs of the online shopping experience, such as shipping and handling of goods (Grandon & Ramirez-Correa, 2018) on a small scale; however, they must also consider international transactions which will entail further knowledge of tax regimes as well as shipping through customs across borders (Barroso et al., 2019).

The level of e-commerce adoption and the concept of growth models in that information systems are not a fixed construct but must experience several levels of development. This growth model involves four proposed stages: presence, portal, transaction integration, and enterprise integration. These components illustrate the evolution of e-commerce in an organization, and each stage has different characteristics and problems (Rao et al., 2003). Prananto et al. (2003) devised six stages of e-commerce development described as no presence, static online, interactive online, e-commerce, internal integration, and external integration. Prananto et al. (2003) explained that the characteristics of each stage are different, and businesses can start the adoption at any

level of the stages. The significance of these growth models shows that the higher level of e-commerce adoption will require more significant investment to gain more benefits (Rahayu & Day, 2017).

Business leaders who use the TOE framework to identify the determinants of e-commerce adoption also found that there might be other factors that contribute to their business success. This advantage is a form of over-the-top customer service, efficiency, and speed with orders, being perceived as current and cutting edge, maintaining good communications with customers, efficient information handling and storage, and expanded global reach (Stammerjohan et al., 2017). Earning the satisfaction and loyalty of consumers and sustaining the business is an arduous challenge for e-retailers in this competitive market (Doddahulugappa et al. 2021). This aspect is the force that drives the competitive advantage. The world population is now seeing the digital gap reduced, and e-commerce thrives at the tip of consumers' fingers. Consumerism and competitive advantages are highly regarded as factors for e-commerce adoption by retail SMEs (Stammerjohan et al., 2017).

SME leaders may need to pursue unorthodox measures towards the successful implementation of e-commerce adoption. Corporate social responsibility (CSR) is such measure that will increase the awareness of SMEs in local communities and beyond. Bartok (2018) investigated the benefits of CSR used in e-commerce to increase the competitive attributes of any business. CSR is a self-regulating business model that helps leaders of organizations to be socially accountable to themselves, their stakeholders, and society (Chen et al., 2012). Sometimes referred to as corporate citizenship, CEOs

consider how their operation impacts all aspects of society, including economic, social, and environmental (Chen et al., 2012). The characteristics of CSR support volunteering and philanthropic efforts that build bonds within communities while boosting the image of the company. E-commerce, on the other hand, has cultivated an appeal with consumers as a favorable option for making purchases because of the environmental friendliness factor (Gorla et al., 2017). CSR and e-commerce correlate with the current economic state, as successful companies balance economic and social goals by integrating the concerns of both into their operational frameworks and business strategies (Bartok, 2018). Satisfaction with online environmental factors makes customers significantly more likely to carry out repeat purchases (Febrianti et al., 2022)

The integrity of a business model and the intentions for the leaders to do good in communities occurs through the implementation of CSR in conjunction with e-commerce adoption. Due to the current scientific knowledge in the environmental field, it has become increasingly important that companies procure and maintain a sustainable environment, sustainable development, and social responsibility (Bartok, 2018). The evolution of e-commerce has changed the way consumers make purchases to the extent that it is more desirable to shop online rather than deal with traditional shops. E-commerce has impacted consumers, business partners, and the organizational structure of businesses (Gorla et al., 2017). Online stores must continue to find ways to attract and keep customers interested, and data collection is an essential element and appropriate (Bartok, 2018). Internet stores have resorted to personalization through BDA that focuses on the customers buying trends, likes, dislikes, needs, and wish lists (Selmi & Chaney,

2018). According to Hallikainen and Laukkanen (2018), customers' primary concerns when deciding to visit an online store depend on three factors: price, product quality, and services

SME leaders who consider adopting e-commerce should also implement strategic measures of CSR to send a message of accountability, transparency, and reliability to consumers to gain their patronage and build relationships in the community. CSR facilitates the development of relationships that are formed based on honesty and the belief in promises and actions beyond legalities and contractual arrangements (Bartok, 2018). There are significant predictors and mediators of adopting ICT for business purchasing-related activities among purchasing personnel (Shook & Tih, 2017). Legal, ethical, and philanthropic obligations represent that the company has a vested interest in society's culture and growth and can have a significant social impact (Senay & Landrigan, 2018).

Managers have a more powerful corporate brand when they apply CSR, and along with e-commerce adoption, they will position their business on a better competitive footing. CSR is primarily due to company employees' high commitment and coordination using these principles (Hallikainen & Laukkanen, 2018). Senay and Landrigan (2018) also determined that e-commerce adoption has a moderate impact on financial performance from company size and ethical standards on customer loyalty in the retail industry. CSR supports appropriate activities and contributes to more favorable impacts on consumers (Hallikainen & Laukkanen, 2018). Additionally, CSR has a positive impact on social capital and the positive perception of consumers (Senay & Landrigan, 2018).

On the other hand, Selmi and Chaney noted the weaknesses of CSR include increased costs at the time of the launch and while using CSR principles. Managers showed concern for the possible misuse of CSR and that because CSR is a long-term commitment, it may not be suitable for all e-commerce businesses (Selmi & Chaney, 2018). SME leaders with formally accepted CSR principles can feature a logo with CSR on their website to attract customers as a motivational tool to inspire customer loyalty (Bartok, 2018).

Transition

In Section 1, I provided an overview of the background of the problem, the problem statement, and the purpose statement. This study aims to explore the strategies that traditional small retail business leaders use to adopt e-commerce capabilities.

Additionally, other topics in this section included the nature of the study, the research question, interview questions, and the conceptual framework that applies to this study. Finally, section 1 concludes with an explanation of the significance of the study and a review of professional and academic literature. The literature review covered topics: TOE framework, Big-Data Analytics (BDA), e-supply chain adoption, social web knowledge, and e-marketing, business-to-business (B2B) e-commerce, and the e-commerce adoption strategies used by SME business leaders.

In Section 2, I discussed my role as the researcher in the data collection process, planning for participant recruitment, and other details that justify the research method and design. Additional topics in Section 2 included population and sampling, strategies that ensure ethical research, data collection instruments and techniques, data analysis, and

research validation. In Section 3, I presented the findings and explained the applications for professional practice. I also included the implications for social change and my recommendations for action and future research. Finally, I concluded this section with reflections made on this study.

Section 2: The Project

In Section 2, I discussed the role of the researcher in the data collection process and the criteria and strategies for recruiting participants. Additionally, I discussed the research method and design, population and sampling, and implications for ethical research. Finally, I described the data collection instruments, data collection techniques, data collection processes, data organization, data analysis, and implications for the reliability and validity of the study.

Purpose Statement

The purpose of this qualitative multiple case study was to explore the e-commerce adoption strategies used by business leaders of traditional small retail businesses to foster the sustainability of their businesses. The targeted population of this study included business leaders of five traditional small retail businesses in Georgia who have successfully used e-commerce strategies to foster the sustainability of their businesses. The findings of this study may promote positive social change by implementing e-commerce strategies that support the sustainability of small retail businesses resulting in sustainable employment opportunities in the community.

Role of the Researcher

The role of the qualitative researcher is to function as the data collection instrument (Marshall & Rossman, 2016). As the researcher of this qualitative study, I am the primary data collection instrument. My role as the data collection instrument included: (a) selection of qualifying participants to complete the interview questions, (b) interviewing the participants according to an interview protocol to ensure consistency, (c)

presenting accurate accounts of the participants' views using member checking, (d) acquiring documents that authenticate the evidence from the interview processes, and (e) ensuring that the data collection processes result in data saturation.

I have no relationship with the participants in this study. While there was an apparent assumption that multiple perspectives exist in qualitative research, the researcher was obligated to report the views of the participants verbatim (Yilmaz, 2013). I had a basic theoretical knowledge of e-commerce; however, no working knowledge of the intricacies of this industry. My current knowledge of e-commerce had no bias as I collected, analyzed, and interpreted data. During data collection, interpretation, and analysis, my position was neutral, as advised by Simon and Goes (2016).

The researcher must operate under the strictest ethical parameters during the research process, executing procedures that do not violate the human rights of the participants and not exposing the participants to any physical, mental, or social harm (Yin, 2017). In the *Belmont Report*, published by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979), these fundamental ethical principles are the guidelines that researchers must observe when conducting studies on human subjects. In addition, the fundamental ethical doctrine in the *Belmont Report* includes exhibiting respect to the participants by engaging them in a non-coercive manner and by acknowledging their rights to express personal opinions, maximizing benefits from the research while minimizing harm to the participants, and ensuring justice and fairness in the distribution of benefits and burden of the research. My research aligned with these ethical principles and guidelines as expressed in the Belmont

Report and per the requirements of Walden University Institutional Review Board (IRB) ethical standards for research. Furthermore, in compliance with the principles of informed consent, clear and relevant information about the research and voluntary participation was obtained with the assurance of confidentiality, as advised by Simon and Goes (2016).

Bias in research can commonly occur during data collection, analysis, and interpretation stages, which will lead to false conclusions (Yin, 2017). No research process is value-free, as researchers' values and personal biases sometimes influence the outcome of their research (Yilmaz, 2013). According to Simon and Goes (2016), one promising strategy for mitigating bias in research is reflexivity, which requires the researcher to be aware of biases, values, and motivations. Reflexivity means that the researcher reflects on the personal inclinations that could influence the data collection processes and takes preemptive measures to prevent biases as a mitigation strategy (Simon & Goes, 2016). I used reflexivity to mitigate any biases by implementing strategies to achieve self-control during the research process. I was an avid listener and accurate recorder of events as the participants explained them. One key component was that the participant did not feel pressured to alter the answers during the interview process (Yin, 2017).

The data collection process was a series of videoconferencing interviews with selected participants. The interview style was semistructured, and the questions were open-ended. The semistructured interview means that the researcher used predetermined questions; however, they may ask follow-up questions for clarification (Yin, 2017). The

interviews I conducted in this study followed an interview protocol (Appendix B), and I used the same steps and processes with each participant. Interview protocols maintain consistency in the data collection and fortify reliability (Yin, 2017).

Participants

The criteria for eligible participants for this study included traditional small business leaders in Atlanta, Georgia, who have successfully used e-commerce adoption strategies to foster the sustainability of their business. Case studies involved comprehensive investigations of an existent phenomenon within its real-world context (Yin, 2017). The researcher was responsible for selecting qualified participants to respond to the research questions (Simundic, 2013); therefore, the criteria for eligibility aligned with the research objectives.

Recruiting research participants required meticulous planning, collaboration, and affability (Yilmaz, 2013). A researcher may enlist potential participants through face-to-face engagements, printed advertisements, or online means using a three-stage process for recruiting; prepare, contact, and follow-up (Yin, 2017). The preparation stage involved obtaining the information for sources and critical contacts; the contact stage involved connecting with prospective participants; and the follow-up stage required the researcher to maintain a relationship with the contacts (Yilmaz, 2013). I conducted an online search using Google for traditional small retail business leaders in Atlanta with functional e-commerce systems. Leaders or managers from this selected group of people engaged via email, explaining this research study, an invitation to participate in this

study, and a consent form. Contact information of these business leaders was available through company websites and visits to some organizations in the business district.

Strategies that promote a working relationship include communications via email and phone and visits to the retail stores from time to time (Yilmaz, 2013). I established a working relationship with the participants and maintained close contact with the individuals during pre-and post-interview sessions by implementing a feedback mechanism, as advised by Yilmaz (2013). Face-to-face interviews can be an effective method for compiling and cataloging information from participants (Simundic, 2013). I performed video conferencing meetings with the participants to reduce the issues associated with the social media platforms, such as identity fraud, while building trust between the researcher and the participant, as suggested by Simundic (2013).

Research Method and Design

Research methods are used as different courses of action to study an empirical reality (Yin, 2017). The research design refers to the chosen strategy to effectively address the research problem in the blueprint for collecting, measurement, and data analysis (Yin, 2017). This section provides information and justification of the research method and design.

Research Method

The three research methods are quantitative, qualitative, and mixed-methods (Yin, 2017). Researchers use these methods to identify, process, and analyze information about a topic (Yin, 2017). A quantitative research method involves mathematical calculations, econometrics, simulations, and surveys (House, 2018). The analysis and measurement of

the data, quantities, amounts and the relationship between variables are critical factors in quantitative research methodology (Yin, 2017). Quantitative researchers use closed-ended questions to gather and analyze numeric data to test hypotheses and the significance of the relationship between variables (Venkatesh et al., 2013).

The following research method used in empirical research is qualitative methodology. Qualitative research explores the phenomenon by discovering participants' experiences, practices, strategies, and perceptions (Van & Struwig, 2017). This type of research is an interactive process for researchers to collect data through interviews with people that give their perspectives (Yin, 2017). Qualitative research aims to understand the experience of others as nearly as possible (Van & Struwig, 2017). Researchers who use the qualitative research method view the social phenomenon as complex and adopt holistic, iterative reasoning in interpreting reality (Marshall & Rossman, 2016). Ultimately, researchers use this type of methodology to describe approaches that analyze data in the form of language, words, or expressions of experiences gained from interactions (Levitt et al., 2018).

Mixed-methods research combines both quantitative elements and qualitative elements during the research process. The decision to use the mixed-methods mitigates the limitations of using either a quantitative or qualitative approach (Venkatesh et al., 2013). In addition, this method can answer a broader range of research questions because numbers can illustrate words better, and words can add meaning to numbers (Alcón-Soler & Safont, 2018).

I did not collect numeric data or using closed-ended questions to test hypotheses to understand the relationship between variables; therefore, a quantitative or mixed-methods approach was not applicable for this study. Instead, I chose the qualitative research method to explore the phenomenon through interviews with participants to understand better experiences, business practices, and strategies used to sustain the business of traditional small retail business. I conducted video conferencing interviews with traditional small retail business leaders using open-ended research questions to identify patterns and similarities in responses.

Research Design

Research methods focus on the way data are collected, while research designs outline the framework for obtaining and analyzing research data (Yin, 2017). I considered three research designs: phenomenology, ethnography, and case study. The phenomenological approach can delve into the participants' experiences and feelings about those experiences (Yin, 2017). Researchers who use this design aim to interpret the lived human experience of participants (Adams & van Manen, 2017). Due to the nature of the implications of this research design, I precluded that this design may not be helpful when analyzing the strategies for successful e-commerce adoption that traditional small retail business leaders use to sustain their businesses.

Ethnological research design explores a group of people's business culture or social world (Yin, 2017). This design focuses on understanding and interpreting shared behavioral patterns, experiences, and beliefs in a cultural or social environment (Hill O'Connor & Baker, 2017). Overall, the ethnographic research approach includes

observing phenomena in their natural environments to arrive at objective research outcomes (Hill O'Connor & Baker, 2017). However, this research design was not helpful for this study because there are no social or cultural components in e-commerce adoption that require observation.

Case study research design is an in-depth analysis of a specific, real-life business problem with a contextual, bounding setting (Yin, 2017). There are two dimensions of the case study research design: single case study and multiple case studies (Yin, 2017). Many researchers choose to employ the multiple-case study approach to compose a more robust interpretive outcome (Yazam, 2015). However, the main advantage of conducting research using multiple-case studies was the extensive amount of data collected and analyzed to develop a staunch report (Yin, 2017). Therefore, the multiple-case study research design was an appropriate approach for collecting and analyzing the information on strategies used by traditional small retail businesses to adopt e-commerce to sustain their businesses.

Data saturation occurs when participants provide repetitive information and data that do not lead to new findings (Malterud et al., 2016). Researchers using qualitative methodology and multiple case study approach specify the sample size when reaching data saturation (Levitt et al., 2018). To reach data saturation, I used the methodological triangulation technique. The methodological triangulation technique collects data using different methods (Malterud et al., 2016). For this study, I conducted interviews, elect member checking, and inspect documents until no new data emerges to reach data saturation. I specified the specific sample size once I reach data saturation.

Data saturation will only occur when no new information is apparent, emergent themes, and possible duplication results (Birt et al., 2016). Therefore, after the final interview with the fifth participant, I would have facilitated additional interviews with additional sources to gather and analyze supplementary data from specific participants until the data becomes repetitive. Finally, I inspected the data from various points of view and ensured that the research was sufficient and verifiably adequate to sustain replication in subsequent studies.

Population and Sampling

The study population consisted of traditional small retail business leaders in Atlanta, Georgia, in the United States. First, I acquired business information by searching Google Internet search engine databases for traditional retail small business leaders located in Atlanta, Georgia. Then, I contacted these individuals through email, social media sites, phone calls, and visits to the businesses. I used the purposive sampling technique for this study. With this method, the researcher purposefully chooses participants from a specific population to conduct interviews, gather information about individual experiences, and analyze the data about the phenomenon (Yin, 2017). In addition, researchers use the purposive sampling technique to engage with participants and collect data through interactions (Levitt et al., 2018).

Researchers conducting qualitative multiple case studies could achieve data saturation with a sample size between four to six participants (Malterud et al., 2016).

Therefore, I initially used a sample size of five participants but was prepared to conduct more interviews if I did not reach data saturation with the original sample. The initial five

participants were knowledgeable about successful e-commerce adoption strategies used to sustain their businesses. The eligibility criteria for selecting five participants from traditional small retail business leaders were: (a) business leaders in Atlanta, Georgia, and (b) business leaders must have successfully used e-commerce adoption strategies to foster the sustainability of their business operations.

I informed the selected participants of this qualitative multiple case study that I would be using the Zoom application, an online video conference software, to conduct the interviews. The participants confirmed the date and time via email for their convenience. First, I expressed and reassured the participants of their confidentiality and confirm that their participation was voluntary and that they could withdraw from the study at any time. I also retrieved their signed consent forms and discussed the ethical guidelines, privacy, and confidentiality outlined in the agreement. Researchers need to protect the privacy and confidentiality of their participants' involvement in the study by establishing a secured location for the interview process to take place (Arsel, 2017). Therefore, I asked participants to select a secure location for the video conferencing to be quiet and allow for optimum confidentiality. Next, I proceeded with the interview process, made detailed notes, and recorded the session for accuracy during transcription, following the formal introductions. Finally, I performed member checking to ensure my interpretations of the participants' responses are correct. Member checking is a process in which participants check the interpretations of their responses (Birt et al., 2016). The participants had 10 days to review my interpretations of their responses, so they were able to make changes, revisit narratives, and clarify to meet their expectations.

Ethical Research

Researchers who conduct studies involving human subjects must adhere to ethical research principles that protect the participants (Robson & McCartan, 2016).

Additionally, researchers should develop and practice ethical standards throughout the study to maintain integrity. In this study, I adhered to the guidelines for ethical research as they are in the *Belmont Report* (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). Per the *Belmont Report*, the researcher should follow three ethical principles: (a) respect participants, (b) not harm the participants and maximize the research benefits, and (c) treat participants fairly and ensure justice in distributing the study's benefits and burdens (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979).

Researchers should ensure the privacy and confidentiality of the participants to gain their trust and cooperation. Researchers could use an informed consent form to protect participants' privacy and confidentiality (Yin, 2017). An informed consent form is an official policy and an implied agreement between the researcher and individuals participating in a study (Grady et al., 2017). I invited participants via email (Appendix A) to prospective participants to brief them about the study. The invitational email (Appendix A) included an introduction about me and of the study as well as for instructions for the consent form. Individuals who agreed to participate in the study responded to the email stating "I consent" and sent it back to me within ten business days. I also informed these individuals that I intended to record the interview and collect some documents from their websites. I informed the individuals that participation will not

conclude with compensation or incentives. They could withdraw from participation, without penalty, at any time before or during the interview by notifying me verbally or via telephone or email. I would destroy any collected content because of withdrawal.

Researchers are responsible for keeping the identities of their participants confidential (Turcotte-Tremblay & McSween-Cadieux, 2018). To accomplish this, I assigned alphanumeric codes to refer to the participants and their businesses. For participants, I used code PX, where the P represented the participant, and X will represent a number used to identify each participant, such as P1 and P2. For businesses, I used BX, where B represented a business, and the X was a number used to identify a specific business, such as B1 and B2. The number portion of this code correlates with the number of participants. Finally, I informed the participants that would store their information and recordings on a secure digital storage device.

Additionally, I informed the participants that I would store all written data, findings, and documents in a locked file cabinet. I stated in the consent form that after five years from the doctoral study publication date, I will destroy the digital recordings, shred all documents, and delete all electronic data collected during the study. Before collecting data and conducting interviews, I applied to and obtained permission from the Walden University Institution Review Board (IRB) to conduct the study. The IRB approval number for this project is # is 12-22-21-0629632.

Data Collection Instruments

Researchers are the primary data collection instrument (Gorlin et al., 2016).

Marshall and Rossman (2016) stated that researchers are the primary data collection

instrument because they interact directly with participants through hearing, seeing, and interpreting the data. Therefore, I was the primary data collection instrument in this qualitative multiple case study. For data collection, I conducted semistructured interviews with the participants using Zoom, an online audio-visual application. I asked open-ended questions during the interview and recorded the sessions while taking notes for transcription, analysis, and data coding purposes. In addition, I used the member checking technique to reinforce the reliability and validity of the participant's responses to the interview questions. Member checking technique included verifying with the participant that the transcripts on the interviews are accurate and the interpretation of the participants' feedback was perceived as intended and includes any corrections or clarifications they may have (Galdas, 2017).

Researchers could collect data using different approaches such as interviews, questionnaires, surveys, and observation (Silverman, 2019). Ridder (2017) stated that using semistructured interviews enables the researcher to gain in-depth knowledge about the study's topic. In addition, researchers can enhance the relationship and trust with participants through flexible bidirectional communication using semistructured interviews (Silverman, 2019). Silverman (2019) also stated that using semistructured interviews enables participants to ask questions to understand better, share additional information, and elaborate on their responses.

Researchers use open-ended questions to allow the participants to respond openly and to ask questions for clarification (O'Keeffe et al., 2016). To use semistructured interviews, researchers develop a protocol that is a guideline for the interview process

(Arsel, 2017). O'Keeffe et al. (2016) stated that the interview protocol is a guideline that allows participants to exchange their knowledge with researchers during interviews. Therefore, I used a semistructured interview to ask six open-ended questions to collect data for this study. Bundy (2017) stated that researchers could classify questions into these, focusing on the study's subject. By using a semistructured interview protocol to mitigate and limit personal bias, I developed and used an interview protocol (Appendix B) that followed these principles: (a) staying focused on the subject, (b) following participants, rather than leading them, and (c) asking participants to review notes and interpretations.

There are various techniques that researchers use to elevate the reliability and validity of data collection instruments. Some examples of these include: (a) an expert panel to validate the interview questions, (b) member checking follow-up interviews after semistructured interviews (c) triangulation of multiple data collection techniques (Galdas, 2017). In addition, many qualitative researchers use methodological triangulation to certify the credibility of the research (Marshall & Rossman, 2016). Researchers have indicated that methodological triangulation improves data credibility by showing concurrence between two sources (Birt et al., 2016; Marshall & Rossman, 2016; Yin, 2017). The data sources for my research included audio recordings from the Zoom online application to collect primary data, interview notes, and the review of publicly available documents on sales data through e-commerce from the five case organizations. Using the data from the recorded interview, notes, and the documents, methodological triangulation was achieved through the member checking technique, thereby improving the reliability

and validity of the research findings.

Data Collection Technique

Researchers could use various data collection techniques, such as observations or semistructured interviews (Marshall & Rossman, 2016). To collect data for this study, I was the primary collection instrument, and I used semistructured interviews as my primary collection technique. I conducted these interviews using a predefined interview protocol (Appendix B). The primary purpose of the interview protocol was to stay focused on the study's objective and conduct interviews methodically (Bundy, 2017).

I sent invitational emails (Appendix A) to all prospective participants before conducting any interviews. The invitational email included the study's objective, interview questions, confidentiality protection affirmation, a statement about the voluntary nature of the participation, withdrawal instructions, and an informed consent form. The email also contained provisions to set a time and date for the interview to place and a statement to ensure the participant understood that the location of their interview should be quiet and secure for confidentiality purposes.

Before I begun to interview each participant, I explained the purpose of the study. I also expressed my commitment to confidentiality and privacy to build trust in my process for the participants. Next, I discussed with each participant the consent form, interview protocols, ethical research guidelines, and their right to withdraw at any time. Once I established a comfortable atmosphere with the participants, I began the official interview process adhering to the protocols in Appendix B. I recorded the conversations with the participants using the Zoom application throughout each interview to capture all

exchanges with each individual. I also made notes when asking the interview questions to notate any subsequent information observed during the interview. After conducting all the interviews, I converted the virtual conferences into written transcripts, including notes, onto Microsoft Word documents. Then I sent emails to each participant, including my interpretations of the interviews, and requested them to review my interpretations and provide feedback. This process of member checking fortified the reliability and validity of the data and reach data saturation (Galdas, 2017). I repeated this process until no new themes emerged and data saturation was reached.

Qualitative researchers use one-on-one semistructured interviews, where openended interview questions foster the data collection and gain insight into the study's subject (Ridder, 2017). In addition, semistructured interviews are a platform to cultivate trust through the flexibility of bidirectional communication (Silverman, 2019).

Researchers use open-ended questions to allow the participants to answer openly and retort for clarification (O'Keeffe et al., 2016).

While semistructured interviews are ideal for qualitative research, there are advantages and disadvantages (Young et al., 2018). For example, an advantage of using semistructured interviews as the data collection technique in qualitative research is the use of open-ended questions (Silverman, 2019). The use of this type of questioning will result in rich and expressive responses that enhance the data with depth in the details (O'Keeffe, 201). On the other hand, a disadvantage to using semistructured interviews in qualitative research could be that the technique is time-consuming (Young et al., 2018). To minimize the impact of this disadvantage, I gathered any related information to the

study from the participants' company websites and any other physical documentation before the interviews. Another disadvantage is limited access to participants (Young et al., 2018). If I had experienced limited access to participants, I would have expanded my research to business districts surrounding my targeted area. I also extended an offer to provide copies of the finished study to participants as an incentive.

In addition to conducting interviews, document review is also a helpful data collection tool (Yin, 2017). Document review is a systematic collection, documentation, analysis, organization, and interpretation of information and insight into the research question (Bretschneider et al., 2017). Some advantages of document review are obtaining descriptive data that enable the researcher to evaluate reports and view planning documents that provide details on organizational change and how innovation implementation impacts the business structure (Bowen, 2009). However, a disadvantage of document review could be incomplete or lack of information, either intentional or unintentional, alluding to sensitive or confidential data (Bowen, 2009). Therefore, I used document review in correlation with the interviews and other data collections methods for data triangulation to enhance the reliability of the research.

I conducted five semistructured interviews with business leaders of traditional small retail businesses in Atlanta, Georgia of the United States. I also used my interview notes and documents collected from the company's websites for other sources of data. I conducted the interviews via the Zoom conferencing application. The interviews were recorded using the audio-only function.

Data Organization Technique

Researchers use an applicable data organization technique to access information effectively and after the data collection process (Marshall & Rossman, 2016). They also use data collection techniques to: (a) classify data, (b) identify emerging patterns, (c) present study findings, (d) generate study-related reports, and (e) retrieve related information for data analysis (Marshall & Rossman, 2016). In the data organization techniques, researchers will protect the privacy and confidentiality of the participants by referring to them and their organizations through preestablished codes (Turcotte-Tremblay & McSween-Cadieux, 2018). I assigned alphanumeric codes to refer to the participants and their companies. For participants, I used the letter "P," indicating a reference to a participant, followed by a number representing the order in which the participant appeared in the study. For businesses, I used the letter "B" to indicate a reference to a business followed by the corresponding number related to the participant. For example, the first participant was P1, and their business was known as B1, creating a pattern. The participants' names were changed using a coding system (P1, P2, P3, P4, and P5) to conceal their identity, just as their businesses' names were coded using the coinciding system (B1, B2, B3, B4, and B5) to maintain confidentiality.

Researchers use various tools to develop an effective data organization technique (Marshall & Rossman, 2016). I used reflective journals, Microsoft Word document application, and the NVivo application for this study. Reflective journals are the recorded notes written by the researcher during and after the interviews (Arsel, 2017). The Microsoft Word document application is a digital writing tool used to generate reports.

The NVivo application collects, classifies, and analyzes interview content (Paulus et al., 2017). NVivo is also used to identify emerging themes and for data coding.

I conducted my interviews using the Zoom Virtual Conferencing application while taking notes to create reflective journals. The virtual conference interviews were audio-recorded. The reflective journals consisted of notes taken during the interview, the participant's name, business name, and date and time. Once I completed all the interviews, I converted the audio records into electronic text using the Grain application. Through this application and NVivo, I coded the data, identified the emerging themes, and identified and deleted irrelevant information that did not align with the study's objectives. Researchers may use member checking as an interview follow-up technique to enhance the reliability and validity of the data collection instruments (Birt et al., 2016). I sent my interpretations of participants' responses to the interview questions for their review and corrections. Per Walden's research requirement for retaining data, I saved interviews and electronic data on a digital storage device and locked it in a safe, along with written data about the study. I will delete electronic data, destroy the audio recordings, and shred written data after 5 years from the doctoral study's publication date.

Data Analysis

Qualitative data analysis is the process of classifying, correlating, and investigating collected information to find patterns in the data collected during the interviews (Yin, 2017). Researchers study patterns to transform them into valuable interpretations (Gorän, 2019). For qualitative research, there are a variety of data analysis techniques. The methodological triangulation technique is a data analysis process in

which the researcher uses more than one data source to study a phenomenon (Noble & Heale, 2019). Many researchers use open-ended interview questions and review business and marketing plans as effective data collection methods, to gather data from experiences (Ridder, 2017). Researchers use methodological triangulation to enhance data analysis reliability and validity (Birt et al., 2016; Marshall & Rossman, 2016; Yin, 2017). For this study, I used methodological triangulation to collect and analyze data from various sources such as interviews, business websites, and documents.

I used a logical and sequential process when conducting data analysis for my study. Data analysis is the process of examining, categorizing, tabulating, testing, and recombining evidence (Yin, 2017). Lester et al. (2020) listed standard practices used in qualitative data analysis as follows: preparing and organizing the data, becoming familiar with the data corpus, notating the data, coding the data, producing categories and themes, and making the analysis process transparent. For the first step, I saved the digital files using the naming convention and secure the data. Next, I reviewed the interview transcripts using Microsoft Word and review the documents provided to me by the companies and their websites. Following this review, I created codes by categorizing the various data sources and reducing these codes into themes. Themes are broad units of data made of several codes and then grouped by similarities to form a broader interpretation (Lester et al., 2020)

Data coding helps to identify patterns and themes in information (Baškarada, 2014). During the data analysis stage, researchers use the NVivo software application to analyze and review work in progress, identify common themes, present the insights noted

during the coding process and work with data in other applications such as Microsoft Word and Excel (Oliveira et al., 2016). To expedite the identification of similarities in the data, I used the NVivo application. The recorded interviews were transcribed and then uploaded into the NVivo application. I began by determining the significant themes by classifying and coding the data collected during the interviews. Then, I used the research question and conceptual framework to model the data analysis process. Management of the interviews included: transcription via the Grain transcription application, summaries of my interpretation of each interview, and emailed summaries to the participants to ensure accuracy. Participants reviewed the summaries of their interviews and responded via email that they accepted the interpretations as they were presented. No further interviews were necessary, and member checking was concluded.

After I collected the data and transcribed the interviews, I connected the information with existing literature on traditional small retail business leaders who successfully adapt e-commerce as a means for sustaining their business. According to Yin (2017), it is critical to determine if the data obtained during the interviews relate to other data sources. I related all emerging themes to the conceptual framework. Once the data had been cross-referenced and reviewed, I concluded my research based on the findings. The documents review provided information on how traditional small retail business leaders understand the relative advantage of adopting e-commerce into their business strategy for sustainability.

Reliability and Validity

Reliability and validity are essential components of qualitative research as they are benchmarks for the quality of research (Yin, 2017). Researchers implement various strategies to produce a dependable, credible, confirmable, and transferable study to achieve data saturation through methodological rigor, reliability, and qualitative case study research (Hadi & José Closs, 2016). In addition, qualitative researchers utilize interview protocols to attain commonality and strengthen validity, consistency, and reliability (Yin, 2017). Therefore, I used the concepts of reliability and validity to enhance the quality of my research.

Reliability

Reliability in qualitative research means that the same results will be consistent when using the same methods under the same circumstances (Mohajan, 2017). Leung (2015) described reliability as the reproducibility and consistency of the outcome. Researchers exhibit reliability or dependability by implementing inclusion, comprehensive data, and performing constant data comparison (Leung, 2015). The dependability of a study relies on the rigor applied, transparency displayed, and the level of documentation (Nowell et al., 2017). To ensure reliability and dependability in this study, I conducted audio-recorded interviews, transcribed the interview, and entered the information into the NVivo application for data analysis. Member checking is also an excellent tool to improve dependability (Birt et al., 2016). Therefore, I utilized member checking to increase the reliability of this study.

Validity

Validity in qualitative research concerns what an instrument measures and how well it does so (Mohajan, 2017). Validity is essential to the quality of research and the accuracy and truthfulness of data collection, analysis, and interpretation of the findings (Dennis, 2018). Research is valid when the data from the study is credible, transferable, and confirmable (Mohajan, 2017).

Credibility is the trustworthiness of the findings (Saunders et al., 2017). The researcher conducts extensive engagement ad observation of the participants to foster credibility (Korstjens & Moser, 2018). Therefore, I made observations during the interview process and engaged the participants afterward to interpret the interviews by using member checking to obtain their feedback to enhance the credibility of my research.

Transferability is the usability of research findings in different circumstances (Saunders et al., 2017). Transferability involves providing a detailed description of the research process, including the research method, process, and raw data (Casey et al., 2013). I provided details of the participants' situations, populations, and thick data descriptions allow readers to transfer the results of my study to different settings.

Confirmability is the level to which the research findings receive support and approval from other researchers (Saunders et al., 2017). To guarantee confirmability, a researcher must provide evidence that depicts the participants' responses, omitting any researcher bias and perspective (Korstjens & Moser, 2018). To ensure the confirmability of my research, I used methodological triangulation to certify my findings from various

sources. To provide trustworthy, quality research, I relied on audit trails and reflectivity and included detailed information to ensure that the study is transferable to similar studies. To reach data saturation, I used methodological triangulation by collecting data from interviews and document reviews. Data saturation occurs when the information becomes redundant, and no new themes emerge from the data analysis. I stopped collecting data when there was enough information to replicate the study and when no new themes emerged.

Each participant shared company documents that were mainly supply chain management Terms and Conditions policies. These contracts stipulate the acceptable business practices for the use of their supplier services. This information was an essential part of understanding how the traditional small retail business leaders would need to incorporate an outside entity to facilitate the distribution of their products to accommodate a much larger client base. My interview notes contained reflections of the statements made during the interviews and the data collection process, which aided in my understanding of the phenomenon and confirmation of the data collected. During the conversations with the participants, common terms used were websites, brick and mortar, social media, Etsy and Shopify, customer satisfaction, shipping, marketing, promotions, Facebook and Instagram, and pandemic.

Transition and Summary

In Section 2, I provided an overview of my role as the researcher in the data collection process, planning for participant recruitment, and the decisions I made in my study. Additionally, I discussed the method and design, population and sampling, and the

implications for ethical research. In conclusion, I described the data collection instruments, data collection techniques, data organization, data analysis, and implications for reliability and validity for the study. Finally, in Section 3, I presented the findings, application to professional practice, implications for social change, and recommendations.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore e-commerce adoption strategies used by business leaders of traditional small retail businesses to foster the sustainability of their businesses. I collected data by conducting semistructured interviews of five traditional small retail businesses in Atlanta, Georgia of the United States. Participants shared their experiences as business leaders tasked with incorporating e-commerce into their traditional business operations. The three themes that emerged from the data analysis were: strategies used to adopt e-commerce, challenges traditional small retail businesses experienced when implementing e-commerce strategies, and the resolutions found to maintain sustainability.

Presentation of the Findings

The research question for this qualitative multiple case study was: What e-commerce adoption strategies do business leaders use to foster the sustainability of their businesses? The participants in this study were composed of business leaders from diverse business structures. The three themes that emerged from the data analysis were:

(a) strategies used to adopt e-commerce, (b) challenges traditional small retail businesses face when implementing e-commerce strategies, and (c) resolutions found to maintain the sustainability of their businesses.

Documents that were obtained from the websites of the participants' online business' included Etsy's Marketplace House Rules, Shoptify's Terms of Service, and Instagram's Marketplace Commerce Eligibility Requirements. Each of these

marketplace's official documents were aligned with Standard Operation Procedures practiced by businesses. They each have similar terms that sellers must operate by. Some common stipulations included details of their rules and polices for sellers as well as buyers. There are also rights and obligations for buyers and sellers in the documents provided by each marketplace service.

Documents obtained from Etsy included Account Terms, Activation, Rights and Responsibilities, Privacy Clauses, and more. The document, Etsy's Terms of Use, also known as "Our House Rules", outline specific terms of use, account information, use of their services, warranties and limitations, termination, and indemnification. Shoptify Terms of Service included Account Activation, Shopify Rights, Your Responsibilities, Payment of Fees and Taxes, Confidentiality, Limitation of Liability and Indemnification, and Intellectual Property and Your Materials. Instagram Marketplace's Commerce Eligibility Requirements described the terms for which members of this service must meet for following best practices as well as compliance with the policies described in the document. These documents supported the methods for which the traditional small retail business leaders conduct their online business. These e-commerce marketplaces allow the seller to market and promote their unique offerings, while reserving the right to advertise similar products on the behalf of other sellers. This feature works to the advantage of each business owner under the "umbrella" of the global marketplace because each traditional small retail business is promoted by the larger entity to help close the sale of products to customers.

Theme 1: Strategies Used to Adopt E-Commerce

Theme 1 focuses on the traditional small retail businesses realization of the initial need to develop strategies for incorporating e-commerce into their business structure.

Table 1 depicts the subthemes that were derived from the responses given by the participants in this study as well as the document reviews. The participants explained the strategies they used to adopt e-commerce into the traditional business processes.

Acknowledging the need to develop strategies to sustain their small business was apparent. Participants described similar strategies for e-commerce adoption that included the consideration of the TOE framework. Technology, organization, and environment were all contributing factors when developing e-commerce adoption strategies.

Table 1
Strategies Used to Adopt E-Commerce

Subthemes	Frequency	Percent
Business Strategies	280	49%
Understanding Online Commerce	148	26%
Supply Chain	78	13%
New Technology	62	12%
Total	568	100%

The first subtheme, business strategies emerged when the participants were asked about the business strategies they used when developing their plan to incorporate e-commerce into their business strategy. The business strategy included defining what business the business leaders already had and deciding where one wants the business to

be. These business leaders stated that they included a timeline for action planning and gathering resources was necessary for acquiring the new capabilities. According to Fedushko and Ustyianovych (2022), business informatics focuses on developing the framework for a successful operations, equipment, and program management for efficient business growth. These strategies also included research of the new business process, acquiring technological and logistical resources, as well as training courses for business leaders as well as employees. P1 mentioned that "you could gain an advantage by assessing the business strategies of other e-commerce companies" for what would make a new small business become successful.

Understanding online commerce was a challenge for some participants initially. The concepts were new, and the options were plentiful. E-commerce is a unique marketplace for consumerism, as online shoppers have expectations according to how the business is represented online. P1 mentioned that they had to "gain a complete understanding of what expectations they must meet to be successful." P2 and P4 confirmed that they also needed to better understand how to utilize e-commerce before implementing it into their business structure. Utilizing the capabilities of the Internet as a method of providing goods and services is an essential competency for traditional small retail business leaders to possess to forge successful online business practices. Business leaders usually employ specific performance indicators such as sales increment, increased market return, investment growth, and return on investment on a year-to-year basis to measure financial performance (Hussain et al., 2022).

The next subtheme emerged when the participants explained the procedures for acquiring and developing their supply chain for their new business structure. The supply chain is a crucial component of e-commerce capabilities. According to Aslam et al. (2020) supply chain capabilities are the organizational mechanisms that continuously anticipate and adjust to constant changes impairing the earning potential of an organization's businesses. P3 stated that they had to "adjust what they ordered and when they ordered to maintain inventory levels to meet the demands of their customers." Establishing an effective line of communication with the supply chain will create a relationship that supports reliability as well as flexibility (Aslam et al., 2020). Aslam et al. concluded that it is imperative for firms to develop capabilities that are aligned with their supply chain partners to overcome both anticipated and sudden changes.

Finally, implementing new technology emerged as a subtheme when participants explained the importance of implementing and understanding new technology.

Understanding the options that are available when using this new technology is a crucial competency for the success of the online business. Participants viewed the process of adopting e-commerce as a realization for the need to do so to sustain their business. P1 stated that "the traditional methods of shopping drastically changed with the emergence of e-commerce giants such as Amazon." P3 and P4 also mentioned that they recognized the shift in business and the new demands from existing customers. P2 confirmed how they "realized critical need to transition or implement alternative methods for access to their products and services." Business and strategies were some terms used most frequently in this regard. P2 stated that "their business structure needed new strategic

system to support the changes." They looked at other business strategies used by ecommerce providers and mimicked some of their processes. P5 performed "specific research to assess the options for successfully launching their business online."

All participants in my study stated that they needed to better understand online commerce. That was the first step in developing a strategy for adopting e-commerce. They had specific needs that were necessary to run their business via the Internet. They looked at their business in the current position and began to take in account what would be necessary to implement an adoption strategy. According to Mbatha and Ngwneya (2018), e-commerce adoption can be "motivated by pressure from customers, and by a belief that e-commerce would produce revenues or reduce costs and would provide access to new markets and information about competitors' activity." Some leaders realized that they would need to understand the capabilities that were available and that employees needed to be trained to understand and use the new technology. Building a website came easily for P3 and P5 due to their backgrounds in technology; however, P4 stated that they "needed to hire an outside person to create the website and explain how to manage it." P1 and P2 both were able to find tutorials on how to create websites and used website creator applications to get them started.

Another facet of e-commerce adoption strategies is understanding and using the mechanisms for running an online business. These items include procuring sources for creating and maintaining inventory and supply, and the logistics for fillings orders, shipping, and delivery. P1 stated that they "found that their online business operations got much traction when they incorporated the support from global online marketplaces." P2

and P4 also use global marketplaces to simplify their e-commerce business. These global online marketplaces allow individuals to sell their products to consumers using their logistics program. Etsy and Shopify are large platforms that organize a small business owner's online shop, including receiving and filling orders to shipping the orders. The participants using these marketplace platforms stated they found the application easy to use and manipulate and the convenience of a dashboard for tracking sales and breakdowns for other useful information. P3 and P5 found it easy to manage their business without the aid of the online marketplace, because they have had many years of experience in IT, prior to starting their online business.

Theme 2: Challenges Traditional Small Retail Businesses Face When Implementing These Strategies

Theme 2 depicts the challenges traditional small retail businesses face when implementing e-commerce adoption strategies. Many companies face challenges, such as high-competition, gradual market saturation, and development (Bartók & Matošková, 2022). Table 2 includes the subthemes that emerged from responses given by the participants in this study as well as the documents reviewed. Participants explain the challenges they face when pursuing their plans to implement e-commerce into their traditional business practices. Each of these participants expressed similar challenges that contributed to this theme.

 Table 2

 Challenges Traditional Small Retail Business Face when Adopting E-Commerce

Subthemes	Frequency	Percent
New and Existing Customers	172	82%
Analyzing and Tracking Traffic	24	11%
Competition	15	7%
Total	211	100%

The first subtheme that emerged was new and existing customers. Participants in this study explained how the transition of implementing ecommerce into their traditional business strategies impacted their ability to generate new customers and retain existing clientele. P3 described this as a "challenge because their existing customers were accustomed to visiting the store for to make purchases." Customer loyalty is the main determinant of firm performance in the long term, as the increase of loyalty can substantially increase profits (Febrianti et al., 2022).

P1 stated that the "COVID-19 pandemic of 2020 made this a more difficult process as most businesses had to close or change their method of doing business." P2, P4, and P5 confirmed that adopting e-commerce was a measure to sustain their businesses during the tumultuous time. Gaining new customers also proved to be a challenge as many of these participants were new to social media networks and online marketing. Social media platforms provide a wealth of potential clientele. These participants explained the challenges they faced when becoming an active member of these platforms and introducing their small business to the online communities.

Once these traditional small retail business leaders established their online business and generated a consistent flow of business, they each stated that tracking the activity on their website was a necessary task, but also presented a challenge. For some, their business was managed by an online global marketplace that provided a dashboard that depicted the activity. P2, who manages an Etsy shop, stated that "the analytics dashboard includes graphs that are easy to understand." Other participants explained the challenge of viewing the activity that occurred. Tracking activity is important because it allows the seller to see who has visited the site and what items were viewed the most. This information allows the seller to promote their products according to most frequently viewed, as well as to adjust how to promote items that are not viewed as frequently. P4 stated that they "keep track of their sales manually on their phone and computer." By offering quality customer service in the form of specially crafted product recommendations, discounts. And tailor-made prices, sellers can make their customers happier (Vijay et al., 2018). They all expressed the importance of tracking and analyzing traffic data.

Finally, each participant expressed the challenges they faced with the existing competition. As a tradition traditional small retail business leader, they were very familiar with competition in the traditional sense. In an online marketplace, the competition is exponential in comparison to traditional small retail businesses. The participants explained how challenging it was to launch their online business in a saturated marketplace. Building a repute in social media platforms and maintaining an active presence in these circles was extremely vital to promoting their unique business

offerings. P3 mentioned "advertising via Instagram and Facebook." Some participants stated that they were able to compete with the competition by imitating some to the business practices of the competition. The main challenge for adopting e-commerce is "maintaining current clientele and increasing one's client base" as stated by P3. All participants stated that they had many repeat customers that visited their storefront business; however, it was a challenge to get them to visit and use the website. The transition from solely brick-and-mortar to having an e-commerce presence was slow and took much effort to gain more activity. P1 stated that "the biggest difference between a physical storefront and the online business is that customers are used to coming inside the store and getting the product at the point of sale." P5 confirmed that they were also challenged to influence customers to visit the website. P2 stated that one major challenge, in the beginning, was "the limitations imposed by Etsy's "closed system" policy that does not allow direct communication with the customers." They stated that Etsy's "House Rules" had several limitations that were stipulations to honor the contract. P3 had a similar response to P1 and P5, where they experienced issues getting existing customer visit the website. P4 mentioned "how frustrating it was, in the beginning, to see that people have visited the site but chose not to purchase anything." P4 added that it is "a different feeling than when customers browse in your physical store and choose not to buy that day."

All participants agreed that website traffic tracking and utilizing the analytics were new and challenging practices. Tracking traffic on an online business is an important measure to source traffic, audit market, evaluate website, identify any issues,

and identify customers (Di Pasquale et al., 2020). All participants stated that paying attention to traffic tracking was easier than they anticipated, once the process was implemented and the metrics were in place. P1 mentioned that "Etsy and Shopify provided online business analytics for the convenience of understanding how business is doing on various platforms." P2 and P4 also utilize the analytic dashboard to view the position of their business from different perspectives. E-marketplace platforms provide services such as customer relationship management, internal business process management, supply chain management, and electronic payment (Budiono et al., 2020). P3 stated that they had "implemented a system that tracks their website traffic and uses a separate program to view that analytics for how their business is doing on various platforms." Much like P4, P5 had also implemented a dashboard system that provided current metrics for how the business was doing during a given period.

According to all the participants, competition was a major factor to consider when launching their online business. With so many e-commerce giants that are already established and successful, the participants agreed that the competition as an e-commerce business leader would take a great amount of strategy and effort. The development of new online businesses, especially when accompanying an offline store, will likely bring about several main concepts: establishing a solid digital presence, testing market trends, delivering excellent customer service, and making improvements based on customer feedback (Wang & Ng, 2020). P1 mentioned "studying the business structure and practices of larger companies like Amazon to implement similar strategies to grow the

business." P3, P4, and P5 were discouraged by the loss of customers in the beginning. P2 found that the "uniqueness of their products did not leave much room for competition."

Theme 3: Resolutions Found to Maintain the Sustainability of Their Business

Theme 3 is composed of the resolutions traditional small retail business leaders found to maintain the sustainability of their businesses. Table 3 includes the subthemes that emerged from responses given by the participants in the study as well as the documents reviewed. Participants explained the process of resolutions for the challenges that they faced when they implemented e-commerce adoptions strategies. The participants provided similar responses to how they managed to remain successful and sustain their business through e-commerce as an option for conducting their businesses.

Table 3 *Resolutions*

Subthemes	Frequency	Percent
Social Media	114	43%
Customer Service	60	23%
Availability and Fast Shipping	58	22%
Marketing	32	12%
Total	264	100%

The first subtheme to emerge when recalling the resolutions for the challenges that these traditional small retail business leaders face was establishing themselves in social media circles and promoting their business within these groups. They all mentioned finding specific groups that had the potential to become new customers for

their business. The discussions for products and services within these group provided a demand that could be satisfied by these business leaders. P2 explained that "being a part of the social groups lead to new ideas for products as well as new ways to promote their existing products." Social media should not be used as another advertising platform, but rather a place to cultivate a loyal following of customers and an area for reviews and user-generated content can be collected and presented (Social Media Gold Dust, 2020).

The next subtheme to emerge was customer service. Each participant explained the importance of providing exceptional customer service virtually. Online business leaders must accommodate the questions and concerns of their customers just as they would in a tradition business setting. According to Doddahulugappa et al. (2021), satisfying customers becomes one of the fundamental goals of e-retailers. P4 explained how they "met the needs of their customers through following up after purchases were made as well as requesting feedback in surveys." They also addressed the concerns of the customers that reached out to them in their customer service link. Doddahulugappa et al. proposed website service quality, privacy, product quality, price, and timely delivery as predominant determinants of e-satisfaction and e-loyalty.

The participants mentioned that the most common concerns of customers were the availability of the products and fast shipping options. P1 stated that "fast shipping can satisfy customers' expectations so that they become repeat buyers and a solid source for referrals for new customers." Customer satisfaction in e-commerce directly depends on diverse dimensions of logistics services (Vasić et al., 2021). These business leaders needed to fulfill these orders and ship in a timely manner. Each participant stated that

they needed to maintain inventory and supplies by using multiple suppliers. They also used different shipping methods to provide fast deliver to their customers.

The final subtheme to emerge was marketing their business and products. The participants in this study explained how their marketing strategies changed when implementing their online business presence. P2 mentioned that they would "like to join webinar instructors." Social media platforms fostered the largest return for advertising their products and services. The effective use of social media can perform a better accomplishment and revenue (Patma et al., 2021). The participants explained how they would advise promotions and discount codes to increase sales and gain new members to their websites. Tong et al. (2022) suggested that standard and monetary promotions have a positive impact of sales and repeat business. Buying advertising space on various sites was also a successful method used to promote their business. Each of these traditional small retail business leaders increased their online presence by placing ads in the social media platforms where people expressed some interest in products that were closely related to the offerings of their businesses. All the participants agreed that the most productive method for sustaining their business was through a dedicated presence on social media platforms such as Facebook and Instagram. Each participant stated that they utilize social media platforms to engage with existing customers, read reviews, and post new content. Nearly all e-commerce stores use social media to build brand awareness, attract online followers, and generate online sales (Yadav & Rahman, 2018). According to Mikolajczyk (2022), 76.8% of global internet users purchased a product online in 2020, and 44.8% of global internet users use social media to search for brand-related

information. Each participant stated that they have experienced growth in both sales and repeat customers through their diligence in social media engagement.

Participants agreed that engaging, posting, and responding every day was essential for continued success. P2 added that they "joined specific niche groups Facebook and gained insight for new products just by engaging in the social circle with potential customers; they eventually became a part of their client base." P3 noted an increase in sales and new customers when they "began using catchphrases and hashtags on their posts, to get more attention for their unique products and services." P4 explained how they "used social media to gather new ideas for new products." They utilized the content on the YouTube application to perfect their new ideas and bring thing to market. They immediately saw an uptick in sales and new clientele. P5 also "relied on social media, to an extent, for acquiring new customers, sharing their success, and reviewing feedback."

Customer service was also a major aspect of sustaining an online business. Due to e-commerce being totally virtual, customer service was likely to be a virtual experience as well. This platform may produce some setbacks when a customer needs to speak to someone about an issue. According to Cao et al. (2018). maintaining close communication with customers is vital for repeat patronage. Increasing customer satisfaction and retention can lead to increased profits, positive word of mouth, and lowering marketing spending (Febrianti et al., 2022). Poor customer service may result in negative feedback about one's products and services and loss of business (Cao et al., 2018). All participants agreed that providing exceptional customer service had a major

impact on repeat customers and gaining new customers. P1 expressed how they "encouraged frequent reviews and feedback." They used this feedback to improve their quality of service. P2 and P3 confirmed that responding to reviews and comments on their website increased visits to the business. Quick responses to questions and requests were the goals of these participants. P4 and P5 were equally involved in their customer service processes. Swift resolutions and total support were the goals of these participants. P5 stated that she "continued to work closely with customers until they had reached their goals and were completely satisfied with her products and services."

Another resolution for the challenges faced by traditional small retail businesses to sustain their business was availability of products and fast shipping. Each participant agreed that availability and speed of service was extremely important when maintaining a client base. P1 noted that their business "relied on these aspects and that they have increased their product line and increased their inventory to accommodate the amount of business that they received." They also had to ensure fast shipping by using different services to keep customers satisfied. According to Ayman et al. (2021), supply chain quality management plays a key role across the entire supply chain network in facilitating and developing supply chain agility capabilities. P2 provided a similar response by noting that they "built inventory on a consistent basis, because the products they sell were handmade." P3 stated that their "products are custom made to order and required some time to create and expedite the items, based on the quantity." They also stated that "fast shipping was a key component to the success of their business." P4 stated that their "product also required time to produce." Their products cannot be made in advance; they

keep certain non-perishable items in stock. Their shipping needs are unique to their business, therefore immediate shipping was a must.

Finally, all participants agreed that successful e-commerce business strategies include marketing and advertising the business. In many ways, this can be done through social media, as stated by the participants. However, P5 noted that there are "other ways to promote your business such as using third party advertising." According to Cai and Chen (2011), third-party advertising places the advertisement or content on media or social media sites that earn money through advertising. This was an effective method to advertise; however, obtaining consumer data had been investigated and may have violated third-party privacy policies (Cai & Chen, 2011). P3 stated that they "did not release many advertisements in the beginning; however, once they began using social media platforms to advertise, they saw the increase in traffic." P1 and P2 also did marketing and advertising using their social media platforms. In addition to advertising the website, P4 expressed "the success in increased sales due to discounts and promotions." This selling technique was one used by e-commerce giants. P1, P2, and P3 agreed with this method to increase traffic and sales on their websites.

Applications to Professional Practice

The results of this study revealed that traditional small retail businesses that successfully adopted e-commerce into their business structure were able to sustain business. Factors that contributed to developing the strategies to adopt e-commerce included technology, organization, and environment, among others. The findings in this study may contribute to the professional practice in many ways.

First, leaders need to develop a strategy for adopting e-commerce in their business structure. During a time when traditional businesses were challenged to compete with ecommerce giants such as Amazon and Ebay dating back to the early 2000s; traditional small retail businesses needed to develop a strategy to remain sustainable. The technology age of consumerism, convenience, and the looming COVID-19 pandemic of 2020 proved to be the turning point for brick-and-mortar businesses. Incorporating new technology would be the foremost concern of business leaders who desire to adopt ecommerce. It is important to understand what technology will be most useful, how to acquire it, how to use it, and how to train others to use it. Technology is an ever-evolving science that will require ongoing learning and upgrades to the programs and processes. Business leaders may consider this and be prepared to stay current on new technological advances to be successful when adopting e-commerce. Using the right applications may take some trial and error, however, according to the findings in this study, it is the primary factor of e-commerce operations, and is detrimental to the success of online capabilities.

Traditional small retail business leaders will be faced with many challenges during the initial implementation of e-commerce. These leaders may consider various aspects of their organization such as organization size, employees, products and inventory, supply chain, and logistics. The factors will likely need to be adjusted as e-commerce business processes are implemented. The organization may need to become larger or smaller to accommodate the needs of the business. As e-commerce can expand to a global scale, business leaders may decide if they wish to accommodate the increased

demands of their business. Technology can also simplify business processes; therefore, traditional small retail business leaders may assess the staffing needs and adjust accordingly. E-commerce can be unpredictable due to the unlimited reach of online capabilities. Traditional small retail business leaders could be prepared to supply the demand to sustain the standards of their business. Factors such as product availability and inventory should be managed with great care to maintain the online client base. Supply chain and logistics play an equally important role as they should meet quality standards as well as to be reliable. Establishing business expectations and maintaining communication with suppliers and distributors are essential for meeting the needs of the customers.

Finally, traditional small retail business leaders work to find resolutions to the challenges that accompany e-commerce adoption. The environment is a factor to be considered, as a responsible business leader, to maintain respect in the community that they serve. Being environmentally responsible is a factor that will impact e-commerce as well as the brick-and-mortar business. Communities support local businesses when businesses maintain conscientious business practices. The environmental responsibility must be apparent when adopting e-commerce into the business structure. Processes such as packaging, delivery methods, production, and waste disposal have an impact on the environment if not properly managed. While these factors are physical components, social components also exist in e-commerce. Customers that engage in e-commerce depend on the information and feedback of others to help them make buying decisions. Traditional small retail business leaders should be careful when sourcing and producing

their products, as this information must reflect the environmentally responsible standards that matter to consumers.

Implications for Social Change

The results of this study may contribute to positive social change as traditional small retail business leaders adopt e-commerce. Business leaders should consider the best methods to incorporate e-commerce into their business structure to foster sustainability of their business in the wake of changing consumer habits. Products are now more assessable by way of the internet, e-commerce, and expedited delivery. Traditional small retail businesses make up the largest portion of commerce, and the services provided are essential to the communities that they serve.

When traditional small retail business leaders incorporate e-commerce into the business structure, they are poised to increase sales and a growing business that serves individuals beyond their local communities. The positive social impact growth that traditional small retail businesses will incur may lead to increased employment opportunities for the business as well as delivery expeditors which, in turn, increases tax revenues in local governments. Increased tax revenues can be used to sponsor local activities, develop local infrastructure, contribute to welfare projects, and improve educational programs. Positive social changes such as these will also improve the quality of life as higher standards of living are implemented.

Recommendations for Action

The traditional small retail business leaders who participated in this study successfully implemented e-commerce adoption strategies to foster the sustainability of

the businesses. The results of this study could provide traditional small retail business leaders with successful e-commerce adoption strategies that will be helpful during the implementation and transition of the new business structure. Overall, traditional small retail business leaders could benefit from the adoption strategies presented in this study. The TOE conceptual framework can provide a structure for traditional small retail business leaders to consider during the developmental stages of the adoption process. Alignment with this framework includes consideration for the technology, the organization, and the environment. Taking these components into forethought aids in making sound decisions for how to implement and operate using the new online system to conduct business

E-commerce adoption strategies can be unique to the needs of various types of traditional small retail businesses. The traditional methods of commerce have evolved with the advances made in technology and during the era of convenience. Traditional businesses must compete with the capabilities and their ability to reach of consumers worldwide. My first recommendation is that traditional small retail business leaders gain a comprehensive understanding of e-commerce to develop strategies for adopting the process into their business structure. Technology is a necessary component of e-commerce operations. Traditional small retail business leaders would need to discover what type of technology is available to support the functions of their business. They would need to be able to incorporate the new technology into their business structure, as well as to gain an understanding for how to use it. Traditional small retail business leaders will also need to train others to use the technology properly. Additionally, the

new technology will present opportunities to engage in social media interactions as well as access to digital advertising platforms.

My next recommendation is that traditional small retail business leaders assess the capabilities of their staff to manage the operations of e-commerce transactions. Logistics, product availability, and customer service would be some of the main functions to be evaluated. Other areas of efficient functionality would be supply chain management and business administration. The organizational structure may need to be flexible to accommodate the new processes and to build repute with online communities.

Additionally, employees may require training to effectively operate new systems.

Research on the business procedures of other successful e-commerce businesses may provide an outline for what to expect as well as how to get started. Traditional small retail business leaders and their employees should actively engage in social media outlets which will present adequate opportunities to represent traditional small retail business and their offerings. It will be necessary to become familiar with these platforms for optimum online exposure.

My final recommendation for traditional small retail business leaders is to be environmentally responsible for the operations of their business processes. Environmental responsibilities are considered critical when managing a business. Many factors will need to be considered, such as methods of packaging and delivery. Responsible packaging of items being shipped my require research on recycled cardboard and plastics. Efficiency in delivery may require traditional small retail business leaders to seek parcel delivery services that use fuel efficient vehicles. Another factor is production of products and

waste management. Licensing and permits may need to be acquired to operate at an accelerated rate due to increased business. This will produce increased levels of packaging, deliveries, and waste. Traditional small retail business leaders may become more aware of environmental responsibility by reviewing content published by the Environmental Protection Agency (EPA). The EPA is an organization that pursues sustainability to create and maintain conditions under which humans and nature can exist to support present and future generations (EPA, 2022). Consumers are interested to know that they are supporting businesses that are responsible for their production and distribution beyond just closing a sale.

To disseminate the results of this research, I will provide a summary of my findings to the participants of this study, once it has been published and made available to the public. I will share an abridged summary of my findings with traditional small retail business leaders in Atlanta, Georgia and abroad about the benefits of e-commerce adoption strategies via social media outlets as well as brick and mortar businesses. I will publish a comprehensive summary of my findings and submit it to the Office of Small Business Development Centers. I will also submit a portion of my research to academic and business journals and entrepreneurial periodicals published in Georgia.

Recommendations for Future Research

The findings in this study may provide insight for traditional small retail business leaders to successfully adopt e-commerce in their business to foster sustainability. The scope of this study, however, does present opportunities for further research. The main limitation of this study is that data collection included the case studies of five traditional

small retail business leaders from Atlanta, Georgia. There is the potential to observe different outcomes from a larger population of business leaders that provide various other products and services.

Another limitation in this study is that the participants used the adoption strategies that aligned with the TOE framework to incorporate e-commerce into their business structure. Future research can be conducted using a range of conceptual frameworks that have fostered the successful adoption of e-commerce. Future research may also reveal how traditional small retail business leaders determine if they should continue to operate a traditional brick and mortar business in addition to their online business or to transition to an online-only business.

The authenticity of this study relied on the participants' ability to recall the facts and events of their encounters when implementing e-commerce adoption strategies. A recommendation for future research in this regard would be to conduct a study that follows the participants as they begin the process of e-commerce adoption through to fruition. Real-time case studies may reveal additional strategies, challenges, resolution, and subsequent outcomes.

Finally, data collection of this study was conducted during the COVID-19 pandemic in 2022, which presented the limitation of conducting face-to-face interviews. One benefit of conducting face-to-face interviews is that participants can become comfortable with the interviewer and the questions (Sharma, 2022). They are afforded more time to consider the questions and expand on their responses with feeling rushed to answer. Another benefit of face-to-face interviews are the presence of verbal and

nonverbal cues, as well as emotional and behavioral cues (Sharma, 2022). According to Sharma (2022), these cues allow the interviewer to probe deeper when it appears that the participant may have more information to share. Finally, face-to-face interviews keep the participant focused and engaged. Virtual interviews may be competing with other distractions that can impede the quality of the interview (Sharma, 2022). It is my recommendation that further research on e-commerce adoption strategies be conducted via face-to-face interviews.

Reflections

The Doctorate of Business Administration (DBA) at Walden University is an insightful experience because it challenged me to concentrate on what I wanted to contribute to society. When I began this program, I had competed the MBA program and was inspired by the faculty to continue this course. I had not yet found a concentration, because there are many paths that this degree can lead one to. After more counseling, it finally occurred to me that human resources would be the perfect fit for me. I have worked in many fields in my life and in various positions of both employee and management. I have an understanding for what workers need as well as what expectations managers want. This program has helped me combine my interest into a career choice that will be both challenging and satisfying.

Walden University has capable staff and faculty that assist students understanding the curriculum and are available to answer any questions. They provide adequate attention to each student while guiding the class through the structured courses. The professionalism and active support system rendered by the Walden staff was essential for

me to reach my personal and professional goals. I have gained capabilities in utilizing IT programs for research and new technology that aids in expanding critical thinking skills. I look forward to moving into a prominent career that enables me to help others achieve their business goals.

I chose the topic for my research, e-commerce adoption strategies, because it is a business strategy that will impact traditional small retail businesses as they move through the technological era. When I was developing my literature review, it became clear that older research has dated information and strategies for determining whether e-commerce would be a good fit for traditional business owners. In recent studies, it is apparent that e-commerce adoption may be the more lucrative option to foster the sustainability of their business. When conducting the interviews with the participants in this study, I could identify the processes these business leaders took in adopting new technology, building a supply chain and logistics, and maintaining an online presence. I began the journey of constructing this doctoral study in 2019, and having completed it in 2022, the COVID-19 pandemic has played a major part in the need for traditional small retail businesses to adopt e-commerce into the business structure.

If I were to perform this study again, I would reach out to traditional business owners to get an alternative perspective on e-commerce adoption strategies. I feel that some business owners may not be compelled to extend their offerings online, I would include the experience of the traditional business owner to my new study. I would also seek the participation of various geographical locations to expand the scope of experiences of traditional small retail business leaders who successfully adopted e-

commerce into their business structure. Ultimately, I have a great sense of accomplishment and growth as I complete my degree despite all the challenges. I am grateful for the faith I have within myself and the unflinching support from my family and friends as I embarked on this prodigious journey.

Conclusion

In conclusion, the findings of this study revealed that traditional small retail business leader who successfully adopted e-commerce into their business structure has been able to foster the sustainability of their businesses. They have found more capabilities through their online services, and they have been able to reach far more potential customers through their social media platforms. The participants in this study offered advice for traditional small retail business leaders that are developing strategies to adopt e-commerce. According to these participants, a successful online traditional small retail business must continue to have an online presence because there is so much competition with e-tailers with small businesses. There is always something new happening, and to be successful, one will need to stay current with trends. Also, logistics with supplies and shipping are major factors in building patronage from customers. This research can be helpful to small business leaders who are looking to expand their business capabilities online.

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Appendix A: Invitation to Participate

Hello, my name is Kellee Shenee Adams. I am a doctoral student at Walden

University, conducting a study on e-commerce adoption strategies used by SME business

leaders to sustain their business. I selected you as a potential participant in my study by

means of searching Google Internet Search Engine Databases. The eligibility criteria to

participate in this study are (a) business leaders in Atlanta, Georgia, and (b) business

leaders must have successfully used e-commerce adoption strategies to foster

sustainability of their business operations. I am formally requesting your participation in

my study. I will review the company website to obtain some company documents, such

as business licenses, operational manuals, and online procedure policies.

An informed consent form is attached within this email that explains in more

detail the purpose of this study, your rights to privacy, and a sample of the interview

questions. After reviewing the consent, if you agree to participate in this study, please

reply to this email by stating "I consent". If you decline this invitation to participate, no

further action will be necessary. Thank you for taking the time to consider my request. If

you have any questions, please contact me.

Best regards,

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Appendix B: Interview Protocol

1) Participant Selection Process:

- a) Contact prospective participants via telephone. Cold calls will commence as follows:
 - i) Greet the potential Participant.
 - ii) Introduce myself and a summary of the purpose for the call.
 - iii) Discuss tentative interview dates and times.
 - iv) Obtain an email address where the official invitation email and consent form can be delivered.
- b) Interested individuals will receive the invitation email and Informed Consent Form.

2) Interview Process:

- a) Using the Zoom application, begin the video conference
- b) Begin the meeting with formal introductions and gratitude for their participation in the study.
- c) Briefly review the consent form and answer any questions of concerns prior to stating the interview. Points to reemphasize include:
 - i) Voluntary participation
 - ii) Confidentiality
 - iii) No compensation for participation
 - iv) May withdraw from participation at any time
 - v) Interview will not exceed allotted time

- d) Inform the participant that the company's website will be used as an additional resource to mitigate bias.
- e) Inform the participant that the interview will be audio recorded for accuracy.

 Video recording will not be used.
- f) Begin recording the interview by indicating the participant's assigned sequential code.
- g) Ask each interview question in order and allow the participant to respond fully.
- h) Upon completion of each interview, advise the participants that they will receive, via email, a transcript of the interview, a summary of any notes taken during the interview, and any other data collected about the company. The participants will be asked to review all the information and provide their feedback to ensure accuracy.
- Close each interview by thanking the participant for their time and contribution to the study.

3) After the Interview:

- a) I will send an email containing a note of appreciation to each participant. The email will also contain the transcript of the interview, summarized notes, and any data collected from the company's website, as well as a request to review the information and provide feedback.
- b) I will conduct a member checking process by contacting each participant by phone or email to ensure accuracy of the collected data and my clear understanding of their feedback.

c) Electronic data collected from participants will be password-protected. Nonelectronic data will be locked in a home safe. I will maintain the protection of these documents for a minimum of 5 years, and then destroy them.