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# E-commerce Strategies Small and Medium Enterprises Use to Market Products in Ghana

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Walden University 2020

### Abstract

E-commerce Strategies Small and Medium Enterprises Use to Market Products in Ghana

by

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MS, International Institute of Aerospace and Earth Sciences, 1996

BS, Kwame Nkrumah University of Science and Technology, 1990

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

Walden University

December 2020

#### **Abstract**

Small and medium enterprise (SME) business owners face challenges in adopting ecommerce strategies to market products. By utilizing e-commerce technology and tools, SME business owners could reach more customers and improve their business performance. Grounded in the technology acceptance model, the purpose of this qualitative multiple case study was to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The participants comprised 5 SME business owners from 5 different furniture firms in Ghana who adopted e-commerce strategies to market products. Sources of data included semistructured interviews, interview notes, and company documents: annual financial reports, minutes of meetings, newsletters, and company diaries. From the thematic analysis, 4 themes emerged: use of social media, hosting of website, mode of payment, and efficient infrastructure. A key recommendation is that SME business owners to adopt social media and host websites to market products for improved customer satisfaction and business performance. The implications for positive social change include the potential for SME business owners in furniture firms to create job opportunities, provide social amenities and welfare, and promote the regional communities' economic development.

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#### Dedication

The dedication of this study is to God Almighty. By teaching me to persevere and endure the challenges of this academic journey, He saw me through this doctoral study. To my wife Edem, my children Worlanyo and Akpene, and my twin brother Dr. John for their love, encouragement, sacrifice, and patience throughout this doctoral study, I am grateful. I dedicate this study to the memories of my mother, Philomena Apetsiemu. She urged my siblings and me to take higher education seriously to the point that at one time, she sold her ornaments to pay my tuition fees. I know she is content in heaven, realizing her sacrifices have not been in vain. Thank you so much, Venaa, for the sacrifice in educating me.

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## Section 1: Foundation of the Study

Small and medium enterprises (SMEs) have made significant contributions to economic growth and development (Obi et al., 2018). But in developing countries like Ghana, SMEs are unable to procure goods and services from foreign countries due to a lack of electronic commerce (e-commerce) strategies and solutions (Alyoubi, 2015). Further, lack of proper understanding of the benefits of e-commerce has contributed to the low rate of adoption of e-commerce technology in developing countries (Alyoubi, 2015). A few SME business owners perceive e-commerce as a source of additional cost in doing business (Ahmad, Abu Bakar, Faziharudean, & Mohamad Zaki, 2015). However, the successful adoption of e-commerce by SME business owners in the furniture industry in Ghana may provide an alternative strategy to compete in the global market. E-commerce contributes to the growth of SMEs' revenues and brings economic growth to developing countries (Kwadwo, Martinson, Evans, & Esther, 2016). In this qualitative multiple case study, I used the technology acceptance model (TAM) as a lens to explore the e-commerce strategies that some SME business owners in the furniture industry use to market products in Ghana.

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

The rapid growth of the Internet has led to the increasing adoption of e-commerce among companies worldwide to carry out business transactions, share business information, and sustain business relationships (Marmo, 2018). But in developing countries, SMEs face challenges in using e-commerce strategies to market their products (Agwu & Murray, 2015). SMEs in Ghana have fewer resources and are reluctant to use

e-commerce tools such as websites and blogs, electronic mail, search engines, social media, and virtual communities for their business transactions (Barroso et al., 2019). Many SME business owners lack sufficient knowledge about the benefits of e-commerce like organization competitiveness and business profitability (Ahmad et al., 2015), resulting in the low percentage of e-commerce adoption by SMEs to market their products (Barroso et al., 2019). Most SME business owners also presume that ecommerce adds costs to their businesses (Chen & Zhang, 2015). However, e-commerce adoption might help SMEs to enter the global markets. E-commerce technologies such as electronic data interchange and electronic fund transfer may help to improve customer service, trading partner relationships, cost reduction, supply chain management, and contribute to business profitability (Awiagah, Kang, & Lim, 2016). Some SME business owners who operate e-commerce businesses listen to the needs of consumers and develop strategies to improve business practices and satisfy customers (Thakur, 2018). Thus, SME business owners should understand the strategies of using e-commerce to market products to improve customer satisfaction and business profitability.

#### **Problem Statement**

SMEs often do not utilize e-commerce technologies and tools to reach more customers and attract more business opportunities (Choshin & Ghaffari, 2017). A problem facing SMEs is the need to carry out sales and market products successfully using e-commerce (Holland & Gutiérrez-Leefmans, 2018). Despite the benefits e-commerce can offer, the adoption rate is less than 2% of all SMEs in Ghana (International Trade Centre, 2015). The general business problem was that many SMEs

in Ghana avoid the use of e-commerce to market products because it constitutes a source of an additional cost to the business. The specific business problem was that some SME business owners in the furniture industry lack the strategies to adopt e-commerce to market products in Ghana.

#### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore the strategies that some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The target population for this study consisted of five SME business owners in the furniture industry in Southeastern Ghana who had significant success in adopting e-commerce to market products. The implications for social change include increases in employment, income, and living standards in the local community where the business operates as well as improved customer satisfaction through enhanced use of e-commerce.

## **Nature of the Study**

Researchers must determine the appropriate research approach for their study.

Researchers may use the qualitative, quantitative, or mixed-method approach (Yin, 2018). In this study, I used a qualitative approach. Researchers use a qualitative research method to explore phenomena through documents, observations, and in-depth interviews using open-ended questions (Morse, 2015). In contrast, a quantitative research method involves the use of mathematical models to investigate the relationships and differences among variables (Apuke, 2017). Researchers use the quantitative research method when their objective is to test a hypothesis and predict relationships (Haegele & Hodge, 2015).

A quantitative research method was not suitable for this study because the aim was not to test a hypothesis and predict relationships. The mixed-methods approach combines both quantitative and qualitative methods (Bester, Moll, & Simons, 2017; Makrakis & Kostoulas-Makrakis, 2016). The mixed-method approach was also not appropriate for this study because the goal of the study was to explore the experiences of participants. Therefore, the qualitative method was adequate to achieve the purpose of the study, which was exploring the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana.

A qualitative researcher may use any of the following research designs: case study, phenomenological, ethnographic, and narrative (Zoellner & Harris, 2017). I selected the case study for this study. A researcher uses a case study design to draw evidence from multiple sources of data such as interviews, documents, direct observation, participant observation, archival records, and physical artifacts (Yin, 2018). The use of multiple case studies provides more robust analytical findings than single case studies (Yin, 2018). A multiple case study design was most appropriate to enable the collection and analysis of multiple data sources from different organizations and drew conclusions to address the specific business problem. The multiple case study was the most appropriate design to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana.

Phenomenological, ethnographic, and narrative are the other research designs I considered for the study. The use of phenomenological research design helps a researcher to understand the meanings of participants' experiences with a phenomenon

(Sutton & Austin, 2015). But the purpose of this study was not to understand the meanings concerning each participants' experience with a phenomenon but to explore the strategies participants use to adopt e-commerce for product marketing. Ethnographic research is about beliefs, cultural values, and behavior of individuals and groups of people (Schober, Gerrish, & McDonnell, 2016). This study was not about beliefs, cultural values, and behaviors of individuals and groups of people, so the ethnographic research design was not suitable for this study. Finally, a narrative research design is a representation of the participants' written or spoken words to describe and reconstruct individuals' personal experiences (Lewis, 2015). This study did not require explaining and reconstructing the personal experiences of an individual through narration; therefore, the narrative research design was not suitable for this study. My goal was to collect and analyze data from multiple sources, such as interviews and company documents; therefore, the multiple case study design was the most suitable research design for this study.

## **Research Question**

What strategies do some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana?

#### **Interview Questions**

- 1. What strategies did you use to adopt e-commerce to market your products?
- 2. What strategies were most successful in the adoption of e-commerce to market your products?
- 3. What aspect of e-commerce do you frequently use for marketing your products?

- 4. What were the key barriers to adopting e-commerce to market your products?
- 5. How did your company address the key barriers to adopting e-commerce to market your products?
- 6. What innovative ways of adopting e-commerce can help you grow your business?
- 7. What else would you want to share regarding the strategies that SME business owners can use to adopt e-commerce to market their products?

# **Conceptual Framework**

The conceptual framework for this study was the TAM. Fred Davis developed the TAM in 1985. The TAM is an information system theory that demonstrates how individuals accept and use a specific technology (Davis, 1989). The TAM originated from the psychology-based theory of reasoned action (TRA) by Ajzen and Fishbein (1980) and later by the theory of planned behavior (TPB) by Ajzen (1985). The TAM suggests that a user's decision to embrace new technology is related to perceived usefulness (PU) and perceived ease of use (PEOU; Davis, 1985). Understanding a users' PU and PEOU is essential in ensuring the effective implementation of strategies for adopting e-commerce in product marketing. Davis (1985) posited that design features directly affect PU and PEOU, influencing the user's attitude toward using the system and determining whether the user will use the system.

Using the TAM as an established theoretical model might help in explaining and predicting user behavior toward e-commerce. The TAM was suitable for exploring the impact of various factors, including culture on PU and PEOU of e-commerce, especially among SME business owners in the furniture industry in Southeast Ghana. The TAM

was appropriate for this study because business owners can use the concept to understand consumers' behavior in the online environment to improve their business strategies to market their products.

#### **Definition of Terms**

*E-business*: E-business is any process that a business organization conducts using information and communications technology (ICT) to enhance the business processes, including the production processes, the management of customer relationships, the management of internal operations, and the provision of after-sales services (Jovarauskienė & Pilinkienė, 2015; Mazzarol, 2015).

*E-commerce*: E-commerce is an abbreviation of electronic commerce, which involves the buying and selling of goods and services online (Marmo, 2018).

*E-commerce technology*: E-commerce technology is the process involving the exchange of information and execution of electronic transactions between businesses in the form of electronic purchase orders and invoices using—for example, electronic data interchange and electronic fund transfer (Kabugumila, Lushakuzi, & Mtui, 2016)

*E-commerce strategy*: An e-commerce strategy refers to how the management of an organization positions its assets to achieve and sustain a competitive advantage in the online market space (Torres, Lisboa, & Yasin, 2014).

*E-marketing*: E-marketing is the use of ICT by businesses to carry out marketing and promotion activities in support of e-commerce and e-business initiatives (Mazzarol, 2015).

Online-store: Online-store is a website that offers products or services for customers (Chen & Teng, 2013).

Small and medium enterprises (SMEs): In Ghana, the National Board for Small Scale Industries defines SME as an enterprise having 10 to 99 employees (Akugri, Bagah, & Wulifan, 2015).

# Assumptions, Limitations, and Delimitations

# **Assumptions**

During the research process, researchers make several assumptions to guide the direction of their study. Assumptions are aspects of a study that a researcher presumes to be true without any concrete evidence (Magruk, 2015). I made five assumptions in this study. The first assumption of this study was the choice of qualitative methodology as the most appropriate method for exploring the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The second assumption was that a case study was a suitable design for the study. The third assumption was that the participants would answer the questions truthfully and provide information based on personal experience concerning the adoption of e-commerce in the business practice. The fourth assumption was that five SME business owners in the furniture industry in Ghana would accept the opportunity to be part of the research and are knowledgeable enough to provide reliable data to answer the research question. The final assumption was that the participants would answer the interview questions truthfully and candidly without bias.

#### Limitations

Researchers may face some challenges that might limit the desired outcome of their study. Limitations represent potential flaws of the study that are beyond the control of the researcher and a potential weakness that can affect the credibility of the study (Morgado, Meireles, Neves, Amaral, & Ferreira, 2018). This study involved five SME business owners in Southeastern Ghana, which might not be a good representation of the number of SMEs in Ghana. The reluctance of participants to divulge information about the success or failure of their business strategies might be another limitation of the study. A significant limitation is also a potential for researcher bias (Simundic, 2013). The bias of a researcher might hinder the interpretation of the research data and might have the potential to influence the outcome of the study. Therefore, I made every effort to remain objective and open throughout the study.

#### **Delimitations**

Researchers should establish the scope of their study. Delimitations are factors that constrain the scope of a study (Marshall & Rossman, 2016). The first delimitation for this study was using multiple case study and limiting the interview responses to only five participants from SME business owners in Southeastern Ghana. Only SME business owners in Southeastern Ghana who had adopted e-commerce strategies to market products participated in the study. Another limitation was restricting the participants to SME business owners in the furniture industry.

## Significance of the Study

Some SME business owners in Ghana perceive the use of e-commerce as an additional cost and are unable to compete in the global market (Ahmad et al., 2015). Successful adoption of e-commerce technologies could provide SME business owners with an alternative e-commerce strategy to compete in the local and global markets (Alzahrani, 2019). The result of this study might help SME business owners in Ghana to develop strategies that promote the use of e-commerce tools and technologies within their respective companies to market their products to increase profit. The SME implementation of e-commerce may contribute to an increase in revenues and economic growth in developing countries such as Ghana (Kwadwo et al., 2016). The adoption of e-commerce by SME business owners in Ghana might assist in attracting and retaining new customers.

## **Contribution to Business Practice**

SME business owners in Ghana need information and skill on successful e-commerce adoption strategies to help establish an effective supply chain and market their products. Sharing the findings of the study among the SME business owners in Ghana might help improve business processes, resulting in increased competitiveness, customer base, and market share. Adopting e-commerce is beneficial for SMEs to reach more customers and to expand the supply chain network for significant productivity (Kabir & Musibau, 2018). The results of the study might add value to the furniture industry through the dissemination of information regarding the strategies SME business owners

use to adopt e-commerce to market their products and provide a competitive edge in individual furniture firms.

The findings of this study may also provide a practical model for SME business owners to develop strategies for adopting e-commerce to market their products. E-commerce adoption within a company often enables growth and expansion (Agwu & Murray, 2015). Adoption of e-commerce could help consumers to have a wide range selection of products and vendors. Additionally, e-commerce does not have boundary restrictions to make SMEs more competitive (Malkov & Smolyakov, 2015). The potential contribution to business practice might be to fill a gap in business practice by offering a distinct perspective based on interviews with participants. The findings from this study on strategies SME business owners use to adopt e-commerce to market their products could significantly improve business performance and profitability.

#### **Implications for Social Change**

The positive social change contribution involves employment for the local community. By adopting e-commerce, SME business owners will market products, earn revenues to engage more staff, thereby providing job opportunities for the local community where the company is operating. The result of this study might instill a heightened sense of self-worth and respect among the SME business owners in the local market for contributing to the welfare of the local communities. Sharing the findings of the study among SME business owners could encourage the adoption of successful e-commerce strategies by more SMEs, which might increase employment and incomes in regional communities. The increased employment by the SMEs may result in a more

economically empowered local population, which might help reduce poverty in the local communities.

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

The purpose of this qualitative multiple case study was to explore the strategies that some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The objective of this literature review was to explore relevant in-depth information to help answer the overarching research question: What strategies do some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana? In professional and academic research, a literature review provides a researcher with an understanding of previous studies and the opportunity for further research. For this study, I searched the Walden University Online Library for peer-reviewed journals on business and management. Additionally, I conducted a resource search using electronic databases such as the EBSCOHost's Business Source Complete, EBSCOHost's Applied Sciences Complete, ProQuest's ABI/INFORM Complete, Emerald Management Journals, Google Scholar, ScienceDirect, and ProQuest for peer-reviewed full-text articles. I used the following keywords to search: ecommerce, small businesses, small and medium enterprises (SMEs), technology acceptance model(TAM), e-commerce barriers, e-commerce in Ghana, e-commerce adoption, and Ghana small businesses.

In compliance with the Walden University rubric requirement and to ensure rigor in this research, I based my choice of articles and journals on relevance to research content, the currency of publication, and peer-reviewed requirements. Table 1 is a

summary of the literature review references. The total number of resources obtained in this literature search was 280. Of the complete resources, 244 (87%) are peer-reviewed journals published within the last 5 years from the anticipated graduation year.

Table 1

Literature Review Sources

Reference Type	<5 Years	>5 Years	Total
Peer-reviewed Journals and	245	33	277
Dissertations Non-peer reviewed Journals	0	0	0
Books	0	3	3
Government or Corporate Sites	0	0	0
Total	245	36	281

The literature review includes an overview of the TAM, which was the conceptual framework for this study. I discuss two different theories of TAM, which are the diffusion of innovation (DOI) theory and the general systems theory (GST). I organize the literature review by subtopics for a better understanding of the different classifications of e-commerce for SME business owners in the furniture industry. I discuss an overview of e-commerce in Ghana, and it's future and growth, and barriers to e-commerce in developing countries. I also focus on the characteristics of SMEs regarding the increasing exposure to the need for e-commerce strategies to market products in Ghana.

## **Overview of the Technology Acceptance Model**

Davis developed the TAM in 1985, which originated from multiple sources: the TRA and the TPB (Marangunić & Granić, 2015). Researchers use the TAM to

understand that a user's decision to accept new technology is based upon its PU and PEOU (Wunnava, 2015). Some of the tenets of TAM include the relationship between PU, PEOU, attitudes toward computer usage, and intentions to use technology (Wunnava, 2015; Yeh, 2015). Users of information technology (IT) often quantify a system as acceptable based on the ease of using the system rather than its functionality (Zhao, Fang, & Jin, 2018). Understanding the tenets of the TAM is essential in exploring the strategies that some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. To better understand user acceptance related to IT systems, I examined several conceptual and theoretical models. But I used the TAM as the conceptual framework because business owners can apply the concept behind the behavior of consumers in the online environment to improve their business strategies to market products.

Scholars have used several approaches to explore the adoption of e-commerce in the marketing of products. Researchers use the TRA to explore behavioral intentions, rather than attitudes as the main predictors of behaviors (Ajzen, 1991). A fundamental limitation of the TRA occurs when individuals have limited power over their behaviors and attitudes (Marangunić & Granić, 2015; Rahayu & Day, 2015). But the TPB depends on an individual having limited power over their behaviors, as an individual's intention to perform a given behavior is central to the TPB (Ajzen, 1991). However, a significant limitation of the TPB is that the theory only works when some aspect of the behavior is not under total voluntary control (Zhang, 2018). The independent use of TRA or TPB to explain the acceptance or rejection of an IT system does not produce reliable results

(Marangunić & Granić, 2015). Consequently, the TAM is a significant extension of Ajzen and Fishbein's TRA and Ajzen's TPB (Durodolu, 2016; Hailu, Mammo, & Ketema, 2016; Rahayu & Day, 2015). The TAM has roots in the TPB, which is a modification of TRA and emphasizes the measure of intention to use technology (Piabuo, Piendiah, Njamnshi, & Tieguhong, 2017; Wunnava, 2015; Yeh, 2015). Davis (1985) modified the TRA and TPB and created the TAM to predict the acceptance and rejection of modern technology (Durodolu, 2016; Marangunić & Granić, 2015; Peiris, Kulkarni, & Mawatha, 2015). The TAM is a conceptual framework that researchers can use to explore the adoption of technology in businesses, as it is used to explain how external variables influence the belief, attitude, and intention in the use of IT systems (Awiagah et al., 2016).

Several researchers have conducted studies on the usefulness of the TAM.

Sondakh (2017) applied the TAM to predict the interest of taxpayers in using electronic tax returns and found that the PEOU has a significant positive effect on the PU and attitudes users have toward electronic tax services. Researchers have also used the TAM to explain the adoption of mobile digital libraries with results showing that attitudes toward using mobile technology-based services were influenced by comparative benefit, compatibility, organizational competence, PU, and PEOU (Gholami, Abdekhoda, & Gavgani, 2018). In another study, Abdekhoda, Ahmadi, Dehnad, Noruzi, and Gohari (2016) provided evidence that PU, PEOU, relative advantage, compatibility, complicatedness, and trainability have a direct and significant effect on physicians' attitudes toward using and accepting electronic medical records. Further, Alalwan,

Dwivedi, Rana, and Williams (2016) showed that PU, PEOU, and perceived risk significantly influenced behavioral intention in adopting mobile banking. Finally, Liébana-Cabanillas, Muñoz-Leiva, and Sánchez-Fernández (2018) analyzed users' acceptance of mobile payment systems on social networks by integrating trust and perceived risk into the traditional TAM. The results demonstrated that PU is directly related to user attitude and the intention of the user to utilize the technology.

Many researchers have successfully applied the TAM to understand why and how individuals decide to use a particular technology (Faqih, 2016; Peng, Ratan, & Khan, 2015; Rahman, Qi, & Islam, 2016; Saprikis, Markos, Zarmpou, & Vlachopoulou, 2018). Therefore, SME business owners can use the TAM model to improve e-commerce adoption to market products in Ghana.

#### **Contrasting Theories to the Technology Acceptance Model**

There are alternative theories to the TAM that may apply as a conceptual framework for this study. Two of the theories are the DOI theory and GST. Everett Rogers proposed DOI in 1995, and Ludwig von Bertalanffy proposed GST in 1930. In the subsequent subsections, I examine how SME business owners can apply the tenets of these theories to improve e-commerce strategies to market their products.

**Diffusion of innovation theory.** Rogers (1995) introduced DOI theory to explain how innovation propagates over time among a segment of society. Rogers (2003) classified DOI theory into four categories: (a) innovation, (b) communication channels, (c) adoption time, and (d) a social system. DOI theory also consists of several technological factors: (a) comparative advantage, (b) complexity, (c) capability, (d)

compatibility, and (e) trialability, which can affect SME business owner's decision to adopt new technology (Khan, Liang, & Shahzad, 2014; Sila & Dobni, 2012). Rogers stressed that an innovative idea does not have to be new to the marketplace but should be new for a company or an individual. More specifically, a business manager in an organization or an individual may be familiar with a specific innovation with or without having a positive or negative opinion about adopting or rejecting it (Rogers, 1995).

Researchers can use the concepts of DOI to determine the probability of SME business owners adopting new technology. The DOI theory deals with how, why, and at what speed new technologically fueled ideas can spread through cultures and affect organizations (Sedem, Twum, Hayfron-Acquah, & Panford, 2015). Perceived compatibility, risks, costs, and innovativeness are determinants of small business owners' decision making regarding the adoption of e-commerce (Molinillo & Japutra, 2017). The tenets of DOI theory suggests that newer technology such as e-commerce has a higher chance of adoption by SMEs if it offers more appealing advantages than traditional technology of brick and mortar (Rogers, 2003). SME business owners are most likely to adopt new technology when they understand the compatibility of the new application with their existing environment (Ainin, Parveen, Moghavvemi, Jaafar, & Mohd Shuib, 2015).

DOI theory could apply to this study because it provides a framework for highlighting SME business owners' perception of e-commerce platform adoption initiatives. The DOI theory can provide insights into the SME business owner's likelihood of adopting the technology. The use of Rogers's theory of DOI can enable a

scientific understanding of why some technologies are quickly adopted and used whereas others are not. SME business owners in Ghana can apply DOI theory to assess the internal and external characteristics of their businesses and adopt e-commerce platforms to market their products. However, one of the limitations of the DOI theory is its lack in exploring the e-commerce strategies from management's strategic perspective, which makes it inappropriate as a conceptual framework for this study.

Ludwig von Bertalanffy's general systems theory. Von Bertalanffy (1950) proposed the GST, emphasizing the use of multiple perceptions to research the interactions of all the elements of a company to understand the dynamics that occur. According to Von Bertalanffy, a system consists of a set of elements that interact among themselves and with the environment. The GST encompasses the principles of open systems and wholeness of systems (Tretter, 2019). The fundamental propositions of the GST are that systems are composed of subsystems, engage in an exchange of matter with the environment, and what affects a subsystem has some effect on other subsystems and the system as a whole (Bridgen, 2017). From a social perspective, GST is useful in describing how humans react and evolve to changes in their external environment to survive. The GST was the foundation of the click-and-mortar model, which researchers devised to explain SME business owners who integrate e-commerce into their business to reduce a growing competitive disadvantage (Mishra, 2009). Thus, the GST concept could provide a framework on the use of e-commerce to gain competitive advantage.

Using GST to investigate the performance of a system would entail a holistic investigation of the contributions of the subsystems. Consequently, using GST to

investigate organizational performance would entail a holistic investigation of the various organizational subsystems such as the contributions of various departments. Researchers have posited that GST has a broad and unrestricted domain of applicability, making it a general approach that can aid researchers and practitioners in understanding the behavior of systems (Adams, Hester, Bradley, Meyers, & Keating, 2014).

Many researchers have used the GST to examine business performance and profitability. Gandy (2015) used the GST as a conceptual framework to explore small business strategies for profitability and sustainability. According to Gandy, the key strategies that small business owners use include passion and commitment, recruitment of the right employees, and understanding the seasons of the business. Johnson (2015) used the GST as a conceptual framework to explore the strategies small business owners in the salon industry to sustain their businesses. Johnson identified education and training, customer service, business owner's passion and dedication, and professionalism as core strategies to ensure business sustainability. But oe limitation of the GST was that it does not address the issues of firm-level strategies or managerial capabilities necessary to achieve successful e-commerce implementation. Therefore, the GST was not an ideal conceptual framework to explore the strategies that SME business owners use to adopt e-commerce to markets products.

#### **Classification of E-Commerce**

E-commerce refers to the use of telecommunication networks by business entities to carry out business transactions, share business information, and sustain business relationships. E-commerce is an online business interaction between a business entity

and its customers or as an interaction between a business entity and its suppliers for the placement of orders (Abiso, 2017). E-commerce is a technological innovation that enables SMEs to compete with their larger counterparts on the same level allowing for more equality and access in business dealings (Agwu & Murray, 2015). Although many businesses have access to e-commerce, SMEs in developing countries, including Ghana, experience slow growth in the adoption of e-commerce attributed to a lack of awareness on e-commerce applications (Agwu & Murray, 2015). SME business owners can use e-commerce to market product for improved business performance and profitability.

E-commerce differs based on the geographic context. Trends in e-commerce differ among countries, and each nation faces different challenges because no two countries have the same level of infrastructure and human resources to facilitate the adoption of IT and e-commerce on an equal basis in all areas (Yoboue, Yi, & Antwi, 2018). Because competitiveness has risen as a form of technology application via e-commerce, SME business owners are now able to market products and services to a broader spectrum of consumers across geographical limits (Sawmy & Damar-Ladkoo, 2015). Thus, SME business owners should adopt e-commerce to market products.

The availability of infrastructures is essential in the effective adoption of ecommerce to market products. The current e-commerce trend in developing countries demonstrates that companies and governments make efforts to improve their relationships with customers and trading partners for convenience and organizational performance (Agwu & Carter, 2014). By determining the existence and needed level of appropriate infrastructure on technological, physical, financial, and institutional levels, business leaders in developing countries such as Ghana can manipulate e-commerce successfully (Alyoubi, 2015). Exploring e-commerce classifications, an overview of e-commerce in Ghana, and e-commerce in developing countries may give a deeper understanding of the phenomenon.

There are many classifications of e-commerce. The most significant categories of e-commerce include transactions between businesses, transactions between businesses and their customers, transactions between customers, and the transactions between the government and corporations (Manzoor, 2017). Each of the distinct e-commerce classifications involves a specific interaction between buyers and sellers, all of which have a potential role to play in encouraging future new kinds of international trade for products and services transactions (Xing, 2018). In the next subsections, I discuss the different classifications of e-commerce.

Consumer-to-consumer. Consumer-to-consumer is a form of e-commerce transaction that involves a customer conducting business with another customer through a third party (Yoboue et al., 2018). This e-commerce business model eliminates the need for an intermediary in the business process and covers online marketplace platforms and sales within online communities, consumer blogs, and chat rooms (United Nations Conference on Trade and Development [UNCTAD], 2015). This type of e-commerce involves direct transactions between people using online platforms that facilitate the sales process, including personal services, advertising, and purchasing support (Manzoor, 2017). An example of this type of model is apparent in companies like eBay.com and is commonly known as the peer-to-peer model. Other good examples include social

networking sites such as Twitter, Facebook, and online sales platforms such as MSN.com.

Business-to-consumer. Business-to-business model is another form of e-commerce transaction that individual consumers experience the convenience of purchasing a company's products or services online through the business's website (Mangiaracina, Marchet, Perotti, & Tumino, 2015). According to Mangiaracina et al. (2015), a business's website is where all transactions take place between the organization and the consumer directly. In the model, the company holds its entire inventory on-site and allows the consumer to select items, order them, and wait for the direct shipment to customers' desired location (Mangiaracina et al., 2015). Apart from maximizing sales, this type of transaction promotes the company's brand and its relationship with consumers (Nica, 2015). Huseynov and Yildirim (2016) stated that online trading or auctions, Internet banking, and online travel services are examples of B2C activities. Good examples of companies that conduct B2C transactions include Amazon, Priceline, and AliExpress (Ta, Esper, & Hofer, 2015). Each of these companies is examples of highly successful B2C models.

Consumer-to-business. Consumer-to-business is the type of e-commerce transaction that individual customers use their preferred online platforms to sell services and products to companies. This model is the most recent e-commerce business model for selling products and providing services to companies (Thirumalai & Senthilkumar, 2017). According to Thirumalai and Senthilkumar, using this approach, an individual makes a product or service offer to companies through an online post, allowing the

companies to make purchases according to suitability and need. An instance of this model is when a customer provides online advertising to businesses on their blogs, websites, or other social media networks.

Business-to-business. This transaction is the largest category of e-commerce that involves business organizations purchasing products and services or selling products and services to other business organizations (Bolumole, Closs, & Rodammer, 2015).

Business-to-business refers to a situation where one business makes a commercial transaction with another (Yu, Wang, Zhong, & Huang, 2017). The conduct of business using this type of commerce is not only to maximize revenue and value by selling and buying products and services but also to build long-term business relationships with other companies (Yu et al., 2017). Both parties are large business entities, and the initial phases of this model involve wholesalers and manufacturers (Manzoor, 2017). A good description of this type of e-commerce occurs when another company's products serve as components for another company's finished product (Yu et al., 2017). The business-to-business modality is usually associated with industries with complex supply chain models.

Business-to-business-to-customer. This model is the fifth type of e-commerce. The model combines business-to-business and business-to-customer strategies (Manzoor, 2017). In this case, an individual consumer (end-user) receives a service or a product from a company that also received the product or service from another company, but without the addition of extra value. The two companies engage in a business partnership in which they enjoy mutual benefits and an expanded customer base as end-users access

the products and services (Manzoor, 2017). The model can be complex and challenging to manage.

Business-to-employee. The business-to-employee model is becoming increasingly popular. This e-commerce model is employee-oriented, as the focus is on matters that involve employee satisfaction and competence (Ladkin & Buhalis, 2016). Companies provide services and products to their employees through an intra-business network. Enterprises make a significant effort in the competitive market to attract and retain high-skilled employees by implementing effective recruitment, employee empowerment strategies, and very attractive terms of employment (Manzoor, 2017). In this situation, businesses advertise vacancies to potential employees, and a good example is in the hospitality sector in which employers ask applicants to join Social Network sites (Ladkin & Buhalis, 2016). The business-to-employee model is now famous because of the existence of social networks and the Internet.

Government-to-consumer. The government-to-consumer model is one of the oldest forms of e-commerce. This model involves the transactions between the government and citizens, such as online tax payments and other types of federal or state registrations, as well as the exchange of information (Yapar, Bayrakdar, & Yapar, 2015). The government-to-consumer model gives three types of choice to citizens: (a) when to interact with government officials, (b) how to interact with governmental officials, and (c) from where to interact with governmental officials (Ali & Mujahid, 2015). In this model, the government manages the revenue through designated agencies (Manzoor,

2017). According to Ali and Mujahid (2015), the primary purpose of government-toconsumer is to make the government more user-friendly for citizens.

Government to business. Similarly, the government-to-business model is relatively standard throughout the world. This type of transaction involves specific government agencies and enterprises that operate within the country (Manzoor, 2017). Exchange of information takes place between the two entities, and the primary purpose of government-to-business is to provide a friendly environment for businesses to enable them to perform more efficiently (Ali & Mujahid, 2015). The government agencies use online portals to ensure that the enterprises uphold legal regulations and pay corporate taxes, among other requirements (Manzoor, 2017). According to Ali and Mujahid (2015), the objective of this model is to reduce operational costs, save time, and create a more transparent business environment when dealing with the government.

Consumer-to-government. The consumer-to-government model is the final e-commerce modality. In this e-commerce model, the transaction is informational as it involves the online interaction of a citizen with the government (Manzoor, 2017). The citizen uses the online platform to provide feedback to the government concerning its policies and services (Manzoor, 2017). A good example is the use of social media, SMS, and mobile applications available to the public to interact through different means with the government, making the management of these multichannel formats by the government essential (Tursunbayeva, Franco, & Pagliari, 2017). Researchers have noted that consumer-to-government presents an opportunity for citizens to participate in the government process by giving their input on a variety of issues (Tursunbayeva et al.,

2017). The consumer-to-government models are less common than other forms of ecommerce.

#### Overview of E-commerce in Ghana

The application of e-commerce in the business sector is evolving in Ghana. With the liberalization of telecommunication in the 1990s, Internet use in Ghana increased significantly (Adadevoh, 2018). The Digital Opportunity Index of the International Telecommunication Union/UNCTAD has evaluated the growth of Ghana's digitalization among other African countries and indicated an improvement pattern that shows an enhancement of e-commerce in the country (Lavery et al., 2018). ICT and their applications have a significant influence on the financial growth of all countries (Ewurah, 2017). The development of ICT and its continuous use by some businesses boost economic growth by diversifying both local and international trade processes (Ewurah, 2017). The business community has recognized the need to understand the significant factors that affect the pace of adopting e-commerce technologies by SMEs in Ghana to speed up the process. Despite the positive development of the ICT sector, certain constraints have hampered the development of the IT industry in Ghana and prevented IT systems in critical economic areas (World Bank, 2016). SME business owners should understand the constraints which have prevented the deployment of IT systems in vital economic sectors.

Internet access plays a crucial role in technological adoption. At the start of the ICT-led growth of Ghana in 2005, a significant constraint to accessing the Internet for many businesses in Ghana was the percentage of individuals having Internet connections

and the high-speed broadband connections (World Bank, 2016). According to the World Bank report, only 1.8% of people used the Internet in Ghana, which was lower than all African countries' average of 2.8% and 7.8% in developing countries. Currently, approximately 37.88% of people are using the Internet in Ghana, which is higher than the 24.4% in the African region and slightly lower than the average of 45.5% in developing countries (International Telecommunication Union, 2018). Access to Internet services is essential to enable SME business owners to adopt e-commerce to market products.

The role of government. The government plays a crucial role in determining Internet access. According to Adadevoh (2018), ICT diffusion in Ghana can be attributed to government readiness and focus on bridging the digital divide. Therefore, the Ghanaian government has made remarkable efforts towards the creation of a favorable ICT environment for businesses through the development of e-commerce-oriented and enabling policies (Mensah, 2016). The government of Ghana requested for support in implementing its agenda for ICT-led growth and secured the World Bank's eGhana Project between 2006 and 2014 with the disbursement of US\$80.25 million from International Development Association resources (World Bank, 2016). The government began to implement the ICT for Accelerated Development policy with the aim of fast-tracking the process of socio-economic development in the country (Adadevoh, 2018). By implementing policies that promote growth in ICT, governments are encouraging SME business owners to adopt e-commerce to market products.

The international communities are assisting countries to develop their ICT sector.

Several UN agencies and international donors supported and continue to support the

Ghana government's efforts regarding ICT projects, and so far, the ventures have been productive (Mensah, 2016). Some existing ICT projects in Ghana include ICT centers for comprehensive training, the e-government portal for government-to-consumer or consumer-to-government, and the International Institute for Communication and Development support for ICT projects (Boateng, Heeks, Molla, & Hinson, 2011). E-commerce in large businesses and SMEs depend on government readiness and support to expand the ICT infrastructure and the managerial capabilities of the business owners regarding innovation and growth (Ewurah, 2017). Policy makers and researchers should explore how governments can have a positive impact on Internet access for businesses.

The role of expatriates and small and medium enterprises. Expatriates and SMEs also play critical roles in e-commerce and technological adoption. According to Choshin and Ghaffari (2017), critical problems in e-commerce are the retention of customer satisfaction, the adoption of proper infrastructure with the lowest possible cost, and adequate e-commerce awareness and understanding. Some factors that influence the adoption of e-commerce include technological strength, management approaches, corporate strategy, customers, and supplier pressure (Klaiber, Hermanus, & Mason, 2014). From a managerial perspective, Ghanaian expatriates who return home apply educational experiences gained from developed countries and use their IT business knowledge to incorporate e-commerce effectively in managing their businesses (Boateng et al., 2011). SME business owners should be knowledgeable in IT skills to adopt e-commerce for marketing products.

Boateng et al. (2011) posited that many SME business owners in Ghana have adequate IT skills and knowledge to develop innovative strategies using ICT for business growth and sustainability in the competitive market. Examples of consultation companies that offer ICT services to SMEs in Ghana are Amourest Consult, I-Net Ghana, and Broadband Home, among others (Boateng et al., 2011). Businesses in some industries can outsource IT services or employ qualified individuals to enhance innovation and facilitate e-commerce in the business (Frimpong & Gyamfi, 2016). The strategy of engaging the services of professionals may be useful, particularly within the Ghanaian context.

Internet usage in Ghana has increased, despite the slow uptake of e-commerce among SMEs. The implication is that Ghana has experienced phenomenal growth in ICT penetration in every facet of the economy, and its blossoming impact on the socio-economic activities cannot be overemphasized (Mensah, 2016). However, Addo (2012) argued that despite the high potential of e-commerce adoption, SME business owners in Ghana are still reluctant to embrace e-commerce fully into their business processes. The lack of the owner's knowledge and expertise in IT can trigger fears that the e-commerce technology might become a disruption to the business operations (Kartiwi, Hussin, Suhaimi, Jalaldeen, & Amin, 2018). While the role of expatriates returning to Ghana indicates a significant uptake of e-commerce in Ghana, scholars must explore other factors such as the Internet, social networks, and e-commerce to understand the entirety of e-commerce adoption in Ghana (Ewurah, 2017). Expatriates, SMEs, and the government all play vital roles in technological adoption in developing countries.

Social networks and e-commerce. The Internet has made social network a useful technology in advancing the adoption of e-commerce by SMEs. The Internet is the foundation that has led to the development and growth of e-commerce systems (Agwu & Murray, 2015). Scholars concluded that social media is a modern marketing tool, offering SMEs the ability to strengthen customer relationships and boost brand awareness and product promotion (Broekemier, Chau, & Seshadri, 2015; Hassan, Ahmad Nadzim, & Shiratuddin, 2015; Jones, Borgman, & Ulusoy, 2015). Rugova and Prenaj (2016) stated that social networking offers the benefit for SME business owners to implement marketing strategies at low financial costs. According to Ananda, Hernández-García, and Lamberti (2016), marketing professionals acknowledged the ability to connect with customers continuously through social networking to supplement conventional marketing activities. A company's social network resources in this context, could determine the extent of e-commerce application within the company.

SME business owners could use social networks to reach their customers as opposed to conventional marketing because of the reduced cost of running social media channels. Social media platforms, especially mobile social media platforms, are effective channels of communication through which business owners spread brand awareness messages about their products and services (Kalkan & Bozkurt, 2017; Karimi & Naghibi, 2015). In a study conducted by Phua, Jin, and Kim (2017), the favorite social networks that customers use to track brands include Facebook, Twitter, Instagram and Snapchat. By using social media, SMEs can promote their products and services (Abed, Dwivedi, & Williams, 2015). The effort of SMEs toward the development of e-commerce

capabilities reinforces the functions of social networks as a popular marketing tool in the creation of value (Galati, Crescimanno, Tinervia, & Fagnani, 2017). SME business owners can select a number of social media applications to gain access to customers.

Social networks in e-commerce cross national boundaries and promote intercompany collaboration and transactions in a fast-growing market globalization. Ecommerce capabilities in SMEs support social networks, which are platforms for business processes and the building of trust in online transactions (Agarwal & Wu, 2018). One of the social media problems for business owners, however, is to determine the effect of the marketing strategies that benefit them. According to Tajudeen, Jaafar, and Ainin (2018), it is difficult for researchers and business practitioners to determine the return on investment for using social media. Business impact relates to the efficient control of the marketing tools used to improve customers acquisition and reach (Tafesse & Wien, 2018). As part of their strategic marketing strategy, business owners have a duty to evaluate and appreciate the importance of social media. Businesses in Ghana and other developing countries, therefore, require e-commerce that are aligned with the social networks to maximize the benefits of their business (Abed et al., 2015). Examination of factors affecting e-commerce adoption through the use of social networks in Ghana is vital. Also, a review of barriers to e-commerce adoption in developing countries will allow the SME business owners to decide on how to use social media for effective customer retention.

The future of e-commerce in Ghana. As previously noted, the inadequate IT infrastructure in Ghana greatly hinders the fast spread of e-commerce, not only among

SMEs but also citizens of the country. According to Ocloo et al. (2018), most of the remote areas in developing countries, Ghana included, have no or minimal access to Internet infrastructure such as high-speed fiber optic cables needed for the adoption of ecommerce. Adequate telecommunications infrastructure is key to the advancement of ecommerce in the developing world, but Ghana lacks such sophisticated telecommunications machinery (Agboh, 2015). An essential feature for effective adoption of e-commerce is the availability of adequate ICT infrastructure.

According to recent statistics, Internet penetration in countries such as Ghana and Nigeria have expanded considerably in mobile platforms (Agwu & Carter, 2014).

Therefore, there is excellent potential for these countries to reach a high level of market penetration through an e-commerce strategy centered on mobile platforms as a start (Amegbe, Hanu, & Nuwasiima, 2017). Nigeria in West Africa and Kenya in East Africa have successfully used mobile money transfers and mobile advertising (Amegbe et al., 2017). Just as mobile phone users in developing countries have smartphones, which can accommodate various applications, the use of mobile phone platforms can help businesses in Ghana to achieve positive adoption of e-commerce by consumers (Agwu & Carter, 2014). Any form of Internet access can increase e-commerce opportunities.

The government plays an essential role in determining e-commerce opportunities in Ghana. Concerning infrastructural development, the government should be at the forefront (Awiagah et al., 2016). If the government and other stakeholders in the ICT sector focus on addressing infrastructural issues adequately, developments will be rapid with the efficient enhancement of e-commerce (Awiagah et al., 2016). The alleviation of

infrastructure challenges may take place through public-private partnerships where the private sector cooperates with the government to provide e-commerce access and amenities (Ocloo et al., 2018). All stakeholders should give priority to the establishment of the appropriate technology and improvement in bandwidth and Internet connectivity (Lavery et al., 2018). The government and private sector should collaborate to address stakeholders' needs regarding the adoption of e-commerce to market products.

In Ghana, the consumer attitude towards e-commerce is still a problem. The problem of low adoption of e-commerce by consumers continues to exist due to the lack of technical knowledge and Internet security (Kwadwo et al., 2016). Kwadwo et al. posited that policymakers should address the socio-cultural practices carefully to enable the people and SMEs to trust and patronize e-commerce systems. Most people do not trust electronics transactions; hence, they still depend on cash-based ones (Frimpong & Gyamfi, 2016). Therefore, a positive change in attitude and mentality requires the constant demystification of the e-commerce process. The implementation of effective strategies could provide excellent potential for tremendous e-commerce growth in developing countries like Ghana.

## **E-commerce in Developing Countries**

There exist great opportunities for the growth of e-commerce in developing countries. According to the UNCTAD (2018), developing countries account for 80% of the world's population and generally have low rates of primary Internet use but with high growth rates. According to the UNCTAD report, sub-Saharan Africa surpassed the growth rate of the world in 2014 with 136% of people using the Internet compared to

47% of world growth index. Awiagah et al. (2016) posited that the application and use of e-commerce in developing countries could help in reducing the costs of communication, advertising, marketing, production processes, and the delivery of goods and services to the global market. SME business owners should adopt e-commerce to improve business performance and profitability.

Business leaders should explore new opportunities to sustain their firms. New trading opportunities for businesses in developing countries, particularly with the B2C model, are likely to grow with access to developed countries' markets (Awiagah et al., 2016). Agwu and Murray (2015) argued that e-commerce adoption depends on the cultural, economic, legal, political, and physical infrastructure systems, which significantly varies among countries. Agwu and Murray opined that well-articulated e-commerce within an organization often facilitates business growth and expansion.

According to Kabir and Musibau (2018), business leaders who do not implement e-commerce are now considering the adoption of e-commerce in their daily business operations. Most business leaders in the developing world are adopting e-commerce because of the record of moderate success rate by some SME owners who have adopted e-commerce.

Nevertheless, technology adoption is slow in developing countries. Agarwal and Wu (2018) noted that incorporation of e-commerce in large enterprises helps such firms to derive the benefits associated with global e-commerce but deplored the slow pace at which SME owners are adopting and using technology in developing countries. Many researchers have demonstrated that SMEs in developing countries are still far from

achieving e-commerce success, and many businesses in developing nations are not satisfied with their e-commerce systems (Idris, Edwards, & McDonald, 2017; Wu, Gide, & Jewell, 2018). For example, the UNCTAD (2018) estimated that online shoppers in Africa in 2017 were less than 2% of the world total of the global B2C e-commerce; with Nigeria, South Africa, and Kenya accounting for almost half of the online shoppers. Business leaders in developing countries, including Ghana, should adopt e-commerce to improve customer satisfaction and enhance business performance.

Business leaders in developing economies have recognized the importance of e-commerce in business sustainability. According to UNCTAD (2018) report, the B2C e-commerce market in Africa was worth approximately \$5.7 billion in 2017, corresponding to less than 0.5% of GDP and below the world average of more than 4%. By region, the top four developing and transition economies in the UNCTAD B2C e-commerce index of 2018 are Mauritius, Nigeria, South Africa, and Ghana (UNCTAD, 2018). The UNCTAD report confirmed that Africa lags the rest of the world on e-commerce readiness and included forty-four African countries in the 2018 edition of the index. Therefore, SME business owners and governments should improve e-commerce adoption in Africa.

High literacy levels are a pre-requisite for ICT competence. The requisite for high ICT competence translates to effective e-commerce implementation and management (UNCTAD, 2015). However, in most developing countries, the ICT literacy level is relatively low, which increases the inadequacy for adopting e-commerce because consumers' attitudes harm the process (Xing, 2018). The growth of the Internetuser population in developing countries continues to expand to actualize the potential of

e-commerce, and the digitization among the younger generation may support the creation of great e-commerce platforms shortly (UNCTAD, 2018). Nevertheless, the e-commerce adoption process is slow in developing countries; hence government should constantly assess other considerations such as infrastructural, socio-cultural, socio-economic, and political barriers to realize the potential of e-commerce technologies in emerging economies (UNCTAD, 2015). Therefore, governments should make conscious efforts to increase the consumers' understanding of e-commerce usage in developing countries.

Barriers to e-commerce adoption in developing countries. Perceptions of e-commerce vary among consumers in developing countries. Researchers have identified many barriers to e-commerce adoption in developing countries. Several researchers have recommended the investigation of the relationship between certain types of barriers and the adoption of e-commerce (Abiso & Ajagbe, 2018; Agwu & Murray, 2015; Alyoubi, 2015). Some barriers to e-commerce adoption in developing countries like Ghana are poor logistics in information distribution, inadequate technology, and the lack of credit cards (Agwu & Murray, 2015; Esmaeilpour, Hoseini, & Jafarpour, 2016). Other factors impacting e-commerce adoption include inadequacy in the number of trustworthy, high-skilled online merchants, a complex legal system, Internet insecurity, and limited telecommunication transmission capabilities (Al-Alawi & Al-Ali, 2015; Rahayu & Day, 2015). By understanding the barriers affecting e-commerce adoption, SME business owners could develop strategies to mitigate the barriers.

SME business leaders require governments to provide the enabling environment for e-commerce growth. According to Hoque and Boateng (2017), developing countries

often lack the physical, legal, and economic infrastructure needed for e-commerce growth. Academic research indicates that e-commerce is a sound strategy and an ideal opportunity for SMEs in developing countries to enhance their level of national integration with international markets (Alyoubi, 2015). In developed countries such as Western Europe, North America, and the newly industrialized countries of Asia, research has shown that a consensus exists among SME business owners that implementing e-commerce technology transforms business activities (Abiso & Ajagbe, 2018). Therefore, SME business owners in developing countries should adopt e-commerce to transform their business activities.

An increase in growth rates should translate into a corresponding increase in the rate of e-commerce adoption by SMEs. However, the corresponding increase in e-commerce adoption is not the case because many local circumstances act as obstacles in the quest for economic prosperity via e-commerce for SMEs. According to Agwu and Murray (2015), the impact of the Internet and e-commerce across firms, industries, and economies needs a thorough analysis to separate the hype from the reality, and what is possible for developing nations. The adoption of e-commerce by SMEs in developing countries is a new development, and some SMEs have concerns regarding the availability and willingness to use the Internet. Despite the adoption of e-commerce in Ghana, some SME business owners are unable to reap the benefits of e-commerce technologies. A vast difference between the adoption rate, implementation, and use of e-commerce cause difficulties in allowing e-commerce to thrive (Alyoubi, 2015). The adoption of e-commerce technologies raises vital infrastructural, socio-cultural, socio-economic, and

political factors that influence the adoption and usage of e-commerce among SMEs in Ghana (Ocloo et al., 2018). The next subsection contains a discussion of some of the barriers to e-commerce adoption.

Infrastructure barriers. A significant barrier to e-commerce adoption is infrastructure. Local and international business can only connect if there are proper telecommunication infrastructures in place because the provision of necessary infrastructure can enhance the adoption of e-commerce by SMEs (Al-Alawi, & Al-Ali, 2015). Adequate telecommunications infrastructure is key to the advancement of e-commerce in the developing world, but Ghana lacks such sophisticated telecommunications machinery (Kwadwo et al., 2016). According to Ocloo et al. (2018), most of the remote areas in developing countries, including Ghana, do not have or only have limited access to Internet infrastructure such as high-speed fiber optics to provide the capacity for e-commerce. The inadequate IT infrastructure in emerging economies, Ghana inclusive, dramatically hinders the fast spread of e-commerce not only among SMEs but also among the public (Kabanda & Brown, 2017). The provision of adequate telecommunication infrastructure is essential to enable SME business owners to adopt e-commerce to market products.

The availability of telecommunication infrastructure is critical to e-commerce adoption. The findings from Elbeltagi, Hamad, Moizer, and Abou-Shouk (2016) and Kabanda and Brown (2015) attributed poor infrastructure as the main barrier to e-commerce adoption by SMEs in developing countries, and Ghana is no exception.

Inevitably, most Ghanaians, especially those who live in rural areas have no access to

Internet facilities; thus, they cannot provide the e-commerce platforms needed to buy and sell goods on the Internet (Akugri et al., 2015). SMEs in Ghana also have problems accessing the technology due to limited bandwidth and poor Internet connectivity (Afolayan, Plant, White, Jones, & Beynon-Davies, 2015). A significant barrier to e-commerce adoption by SME business owners in Ghana is poor access to technology.

A steady supply of electricity is vital for effective e-commerce adoption in developing countries. Unreliable electricity supply in developing countries is another major problem that reduces the effectiveness of e-commerce, which is the case in Ghana (UNCTAD, 2018). Organizations have the opportunity to establish a reliable network and electricity infrastructure for business sustainability in Ghana (Choshin & Ghaffari, 2017). Active stakeholder engagement, telecommunications infrastructure enhancement, and system affordability are necessary to guarantee effective e-commerce operations in Ghana (Boateng, Tetteh, & Boateng, 2015). SME business owners should overcome the infrastructure barriers to adopt e-commerce to market products.

Socio-cultural barriers. Business leaders encounter many sociocultural barriers to adopt e-commerce. In developing countries, peoples' lack of confidence in the online culture and technological applications is a significant hindrance to e-commerce development (Al-Nasser, Islam, Abidin, Azam, & Prabhakar, 2015). Most cultures in developing countries have negative perceptions of online transactions, and the cultural and social beliefs do not favor the diffusion of e-commerce (Villa, Ruiz, Valencia, & Picón, 2018). SMEs in Ghana and other developing countries had their own unique business cultures before the introduction of online transactions (Choshin & Ghaffari,

2017). Although Internet capabilities and e-commerce have remarkably improved business processes in developed countries, these systems are still new to businesses in developing countries, particularly SMEs (Xing, 2018). SME business owners should overcome the socio-cultural barrier and adopt e-commerce to market products.

Socio-cultural barriers play a significant role in inhibiting the uptake of e-commerce by SMEs in developing countries like Ghana (Kwadwo et al., 2016). Most cultures in developing countries believe in enhanced personal contact and the use of a familiar language in business transactions (Choshin & Ghaffari, 2017). SMEs in Ghana are reluctant to adopt and implement e-commerce fully because of socio-cultural characteristics such as the possibility of not being able to shop and conduct business in a social setting where people can interact face-to-face (Kwadwo et al., 2016). SME business owners should overcome socio-cultural barriers to improve e-commerce growth.

Sociopolitical factors determined socio-cultural barriers. According to Kwadwo et al. (2016), the socio-cultural elements of the Ghanaian society shape the level of transactional trust in the country. Basarir-Ozel and Mardikyan (2017) argued that ecommerce relies heavily on transactional trust because almost nothing is by physical performance, but preferably achieved virtually. Therefore, the parties to the transaction must have trust in the e-commerce business model to operate in such an environment (Kwadwo et al., 2016). The low level of trust in online transactions is among the challenges that need overcoming if e-commerce is going to thrive in developing countries such as Ghana (Saif-Ur-Rehman, 2016). Transactional trust is an essential aspect of e-commerce.

Saif-Ur-Rehman (2016) suggested that in the best interest of SMEs, adopting e-commerce and building a trustworthy exchange relationship with online customers is essential. Saif-Ur-Rehman posited that transactional trust is the basis of e-commerce, allowing for the selling of goods and services without the buyer and seller ever meeting. SMEs in Ghana could employ trust-building mechanisms to manipulate e-commerce acceptance for the good of the business sector (Abualrob & Kang, 2016). Ghana business leaders should encourage more existing Internet users to trust the online market for making purchases, thereby, increasing Internet penetration and e-commerce growth (UNCTAD, 2018). SME business owners should overcome barriers of transactional trust to increase e-commerce adoption.

Socioeconomic barriers. Socioeconomic barriers also reduce e-commerce. SMEs in Ghana have limited resources, such as funding to drive the adoption of e-commerce (Majama & Israel'Teddy'Magang, 2017). Mazzarol (2015) confirmed that SMEs in developing countries, and all over the world, face a myriad of challenges in securing finances to facilitate their operations. Bagale (2014) stated that cost is an essential factor influencing the activities of SMEs due to the high investment requirements in employee training, hardware, and software. The readiness of SMEs to adopt e-commerce involves financial resources that are available for purchasing, installation, promoting, delivery, and continuous expenses during the usage of e-commerce such as upkeep (Al-Alawi & Al-Ali, 2015). For e-commerce to be successful in developing countries such as Ghana, effective mitigation or elimination of regulatory and socioeconomic barriers are necessary (Kwadwo et al., 2016). According to

Frimpong and Gyamfi (2016), some existing socio-economic issues in developing countries like Ghana include limited educational systems, poor economic conditions, inadequate online payment systems for fund transfers, and ineffective distribution channels of goods ordered online to customers. By addressing the socio-economic barriers, government and business leaders might improve the adoption of e-commerce.

SME business owners do not like to take risks in acquiring sophisticated IT applications. Most business leaders are risk averse to procuring IT solutions because they think that lack of warranty would not allow them to obtain a return on any investment in technology (Ocloo et al., 2018). According to Rahayu and Day (2015), some SME business owners in Ghana recognize and appreciate the benefits of e-commerce to businesses but do not have the resources to adopt e-commerce in their business operations efficiently. SME business owners should invest in IT applications and adopt e-commerce to market products.

Most business leaders face the challenge of financial resources to implement e-commerce. The advent of e-commerce has resulted in the creation of fresh possibilities, including dependence on Internet-enabled technology, which enables business leaders to adopt online model involving social, economic, and environmental elements to sustain their business (Oláh et al., 2018). According to Kwadwo et al. (2016), some SMEs in Ghana want to incorporate e-commerce into their business operations, but they lack the necessary funding to realize their business goals. In Ghana, some SME business owners continue to use ineffective business modules because they cannot afford the changes that

will significantly improve business success (Ameyaw & Modzi, 2016). Therefore, SME business owners should overcome the barrier regarding the lack of financial resources.

Governmental barriers. Governmental barriers to e-commerce also exist.

According to Al-Somali, Gholami, and Clegg (2015), lack of financial resources and the lack of an appropriate legal and regulatory environment contribute to the relatively low rate of adoption of e-commerce in developing countries compared to the developed countries. Most governments in developing countries such as Ghana lack the framework to expand e-commerce (Kwadwo et al., 2016). Most developing countries lack effective ICT policies to support Internet service provision, which undermines the importance of prioritizing the strategies for e-commerce development and success. The primary purpose of e-commerce legislation is to create a functional legal balance between doing business through electronic and traditional means (Ocloo et al., 2018). The government of Ghana should develop the ICT legal framework to inspire SME business owners to adopt e-commerce to market products.

Legal systems can serve as examples of government barriers. One of the governmental barriers that Akhlaq and Ahmed (2015) identified the idea of having an established legal system to address cybercrimes. According to Akhlaq and Ahmed, an organized legal system could help address trust issues in making an online purchase, solving at least the problem of SME reluctance and lack of trust in online interactions. A significant factor affecting online purchase intention is the unavailability of a legal framework to protect online consumers in electronic transactions (Akhlaq & Ahmed, 2015). Findings by Akhlaq and Ahmed indicated that a positive relationship exists

between the perceived effectiveness of the legal framework and consumer online purchase intentions. Scholars have debated on how to address the issue of consumer trust in the online purchasing environment (Akhlaq & Ahmed, 2015; Choshin & Ghaffari, 2017). By developing a legal framework, SME business owners could build trust and adopt e-commerce to market products.

With tight security measures on e-commerce platforms and cost-effective strategies, businesses and individuals in developing nations would be willing to accept e-commerce (Al Ladan, 2016). Similar to the continual introduction of secured platforms in developed countries, the ICT stakeholders in emerging markets should develop proper risk management strategies (Choshin & Ghaffari, 2017). The conviction of people to accept online or electronic transactions will increase the atmosphere of trust significantly (Bojang, 2017). The government should embark on extensive education and awareness-raising on the advantages of using technologies to encourage broad e-commerce adoption within SMEs in Ghana (Ocloo et al., 2018). Government support is critical to overcoming most of the barriers to e-commerce.

Government support. While the government can serve as a barrier, it can also facilitate e-commerce. Garg and Choeu (2015) opined that government intervention in the areas of funding and maintenance, regulation, data protection and security, and policies could reduce Internet access prices, which might have a positive influence on e-commerce adoption among SMEs in Ghana. Awiagah et al. (2016) demonstrated that government support is one of the factors that influence e-commerce adoption among SMEs in Ghana. Government intervention in the areas of infrastructure and development

of legal and regulatory systems to support e-commerce could influence many SME business owners to adopt e-commerce (Awiagah et al., 2016). The government and other ICT stakeholders in Ghana should collaborate and further explore how to transit from cash, face-to-face transactions to electronic transactions for the clarity of use for all citizens (Ameyaw & Modzi, 2016). The government plays a critical role in e-commerce growth in developing countries.

Government support to identify and incorporate e-commerce technology in business would improve the competitiveness of SMEs in the new digital economy (Awiagah et al., 2016). To mitigate barriers and to reduce limited trust, the government needs to promote the use of ICT, including education and training in this field (Ocloo et al., 2018). E-commerce in developing countries will increase with an increase in investment training and other programs for enlightening people on its importance (Turban et al., 2017). A collaboration of the Ghana government and ICT stakeholders to invest in ICT and build infrastructures will encourage e-commerce adoption by SMEs (Ocloo et al., 2018). The government and ICT stakeholders should address the barriers and create opportunities for SME business owners to adopt e-commerce to market products.

### **Characteristics of Small and Medium Enterprises**

SMEs play an essential role in the economics of a developing country. Many scholars argued that SMEs are the engine that drives a country's economy (Zafar & Mustafa, 2017). SMEs are the primary driving force for business development, employment, production of goods and services, and generation of income (Bouazza,

2015). According to Fiseha and Oyelana (2015), SMEs help to address employment, individual wealth, the alleviation of poverty, and income generation in both developing and emerging economies (Muriithi et al., 2017). Aga, Francis, and Rodríguez-Meza (2015) posited that in developing countries, SMEs are abundant and form a nucleus of economic activity that provides employment, contributes to economic growth, and engages in initiatives to reduce poverty on a global scale. Many researchers have indicated that SMEs are the primary source of private sector employment (Aga et al., 2015). According to Katua (2014), a correlation exists between the degree of vitality in the SMEs in a country and the degree of poverty, unemployment, economic well-being, and living standards of the citizens of that country. SMEs business owners are essential in the economics of Ghana.

A significant correlation between country's economy and SME is via job creation. Relying on the World Bank Enterprise Survey indicator database, Ayyagari, Demirguc-Kunt, and Maksimovic (2014) used cross-sectional data from 104 countries to provide evidence of job creation by SMEs. According to Ndiaye, Razak, Nagayev, and Ng (2018), SMEs employ about half of the workforce in developing countries, contribute 60% of total employment, and 40% of GDP in emerging economies. In Ghana, West Africa, SMEs are the backbone of the economy, representing roughly 85% of businesses within the private sector and contribute about 70% of Ghana's GDP (International Trade Centre, 2016). Available data from the Registrar General's Department indicated that 90% of registered businesses in Ghana are SMEs (Prempeh, 2015). SMEs contribute to the economic growth in Ghana.

According to Yoshino and Taghizadeh Hesary (2016), SMEs are the backbone of the Asian economy, accounting for 98% of business enterprises and contributing 66% to the national labor force. In 2012, SMEs contributed a total export value of 41.5% in the People's Republic of China with an increase of 6.8% year-on-year; while in Thailand, SMEs made up the total export value of 28.8% with 3.7% year-on-year growth (Yoshino & Taghizadeh Hesary, 2016). Based on data from the Ministry of Co-operatives and SMEs, in Indonesia, SMEs contribute nearly 97% of the domestic employment opportunities and 56% of the total business investment (Organization for Economic Co-operation and Development, 2018). Relative to economic growth and social inclusion, SMEs play an essential role in developed and developing countries by increasing employment and creating industries (Terzi, 2015). SME business leaders could create job opportunities and improve employment trends by adopting e-commerce to market products.

The ability of SMEs to contribute so heavily to employment is partly because business owners use flexible management structures. SMEs could contribute to employment creation depending on their ability to adapt to the competitive and continuously changing business market (Elbeltagi et al., 2016). The natural strengths of SMEs are the lack of hierarchy and flexibility of their organizational structure (Pierre & Fernandez, 2018). According to Pate and Wankel (2014), flexibility is the primary advantage of SME business owners because they can adapt quickly to new circumstances and respond to market needs. Some SME business owners choose to remain small to benefit from their independence, flexibility, ability to make quick decisions, and their

close relationships with customers (Love & Roper, 2015). Most SME business owners use a simple business structure to remain flexible and make necessary changes without being required to seek approval of board members or stockholders (Deshati, 2016). The managerial style of SME business owners and their response to the business environment differ from larger firms (Basuony, 2014). Consequently, the SME business owners' technology usage and perceived utility may vary from larger firms.

SMEs grow at different rates than larger firms. SMEs frequently experience rapid growth and are likely to become more successful compared to larger firms (Blackburn, 2014). The small size of SMEs can be an advantage concerning specialization and filling the need in niche markets (Ndesaulwa & Kikula, 2016). Conversely, the small size of SMEs can also be a disadvantage regarding obtaining business financing because financial institutions generally consider SMEs as high credit risk (Taiwo, Falohun, & Agwu, 2016). Quartey, Turkson, Abor, and Iddrisu (2017) found evidence suggesting that the size of SME is a significant determinant regarding their access to finance in the Economic Community of West African States (ECOWAS) region, which may affect their performance. SMEs business leaders should adopt e-commerce to market products.

SMEs face challenges sourcing funds from financial institutions. Banwo, Du, and Onokala (2017) used World Bank Enterprise Survey data to survey firms in more than 124 countries and revealed that most SME business owners have difficulty accessing loans from banks. Banwo et al. opined that most credit officers lack an in-depth understanding of the SME business cycles and are therefore averse to lending to SMEs. Furthermore, Fiseha and Oyelana (2015) found that SMEs in developing countries face

numerous barriers, which include lack of operating space, lack of finance, and lack of business skills. SME business owners face financial barriers which might influence technology usage and uptake.

In some countries, human labor is the highest form of technological resource. Pierre and Fernandez (2018) stated that SMEs are always seeking available human, financial, and technological resources to achieve their innovations. Similarly, Ayyagari et al. (2014) found significant evidence to suggest that SMEs are relevant sources of employment growth and job creation. However, Page and Söderbom (2015) argued that although SMEs create new jobs, they can also destroy jobs through higher failure rates. According to the Small and Medium-scale Enterprises Development Agency of Nigeria (SMEDAN, 2015), 80% of SMEs fold up before their fifth year of existence. SME business owners should adopt e-commerce to market products and enhance business success.

Business leaders require financial funding to sustain their business. SMEs tend to rely on the trade credit financing from suppliers to facilitate their transactions when they experience difficulty in accessing bank financing, which implies a higher risk (McGuinness, Hogan, & Powell, 2018). For the development of SMEs, a competitive business environment that promotes access to finance is of considerable significance (Kachlami & Yazdanfar, 2016). Dong and Men (2014) analyzed the World Bank Enterprise Survey indicator database. They found that owners of young SMEs in emerging economies face severe financial constraints, which have a detrimental effect on

productivity, survival, and profitability. Access to finance is critical to the survival of SMEs.

Most SMEs lack adequate source of finance to sustain their business. According to Terzi (2015), around 200 million formal and informal micro, small, and medium enterprises in developing economies lack access to loans and lines of credit. Many SMEs rely heavily on internal financial resources to fund their business activities because they often face challenges to access external capital (Ayob, Ramlee, & Abdul Rahman, 2015). In developing countries, SME business owners chose to finance their business operations via retained earnings before gradually acquiring external capital (Ayob et al., 2015). Therefore, SME business owners may lack the finance to focus on technological innovation and e-commerce adoption.

SMEs experience different levels of risk. Amah and Okoisama (2017) identified that another characteristic of SMEs is their ability to take risks, uniquely when identified business opportunities may increase organizational performance and success level of the firm. According to Baule and Fandel (2016), risk-taking behavior refers to the willingness of SMEs to seize the opportunity in an uncertain business environment. Murugesan and Jayavelu (2017) suggested that optimistic SME business owners have a better chance at survival than the pessimistic ones. Parimala and Ilham (2016) shared a similar view and revealed that a significant and robust relationship exists between innovativeness, risk-taking, customer satisfaction, and adaptability. SME business owners should be willing to take a risk to sustain their business.

Researchers have argued that a business leader's risk-taking behavior has a positive impact on firm performance. The desire to take risks using reliable business strategies allows SME business owners to safeguard employee, achieve customer satisfaction, retain managerial talent, and maintain the production of superior goods and services (Amah & Okoisama, 2017). By taking reasonable risks, SMEs could adopt innovative thinking, which enhances the company's performance and results in more accessible adaptation to changes in the business environment (Pratono, 2018). SME business owners could take risk to enhance the company's performance and foster easier adaptation to changes in the business environment.

The risk-taking behavior of SMEs, however, requires resources to provide proper training of employees. According to Falker and Hiebl (2015), SMEs tend to be reluctant to allocate resources to knowledge-building activities, which might help to mitigate such known risks. SMEs are liable to overlook risky choices that bring about positive outcomes (Hess & Conttrell, 2016). Pierre and Fernandez (2018) stated that the recruitment of qualified human resources is a crucial determinant of SMEs' innovation culture. SMEs that are motivated by creativity to create their product tends to make strategic decisions, such as being the first to market, offering new and unique products, and taking calculated risks (Campbell & Park, 2017). SMEs with simple organizational structures are more flexible than large firms when it comes to responding to the dynamic business environment; however, they often experience less profit due to their small size (Falker & Hiebl, 2015). The small business owners fear that their future profits will be at risk from the unpredictable business environment (Ding, Malleret, & Velamuri, 2016).

Because of fear of the unknown, SME business owner is less likely to adopt new technologies.

Human capital is generally more important in small businesses than technological innovation. Small business owners should consider investing in human resources for the development of their firms (Darcy, Hill, McCabe, & McGovern, 2014). Because SMEs often operate in the labor-intensive and low value-added sector, a business leader who desires to increase their competitive edge must invest in capacity building to help increase productivity and standard of living (Pierre & Fernandez, 2018). Therefore, owners and managers of SMEs must recognize the importance of managing both the physical capital and the intangible resources embedded in their employees and business processes (Dženopoljac, Janoševic, & Bontis, 2016). SME business owners must understand the importance of human resources in business performance and sustainability.

Business leaders should provide adequate resources to manage a business.

Resources are critical to the growth of SMEs, and the resources of firms include human resources, physical resources, organizational resources, social resources, and financial resources (Greene, Brush, & Brown, 2015). While it may be easy to replicate products or services within an organization, human resources can be difficult to imitate (Chuang, Liu, & Chen, 2015). Altarawneh (2016) suggested that human resource could be the primary source of sustainable development for SMEs. The development of SMEs in any economy would consequently facilitate socioeconomic growth and reduce poverty through employment creation and utilization of indigenous resources (Denver, Gibson,

Tonderayi, & Severino, 2018). SMEs are increasingly recognizing the need for ecommerce strategies to market products.

# **Transition and Summary**

The purpose of this qualitative multiple case study was to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. Section 1 contains the foundation of the study, the background of the problem, problem and purpose statements, nature of the study, and research question. Other areas of focus in Section 1 include conceptual framework; definition of terms; assumptions, limitations, and delimitations; the significance of the study; and review of the professional and academic literature. In the literature review, I presented an overview of the TAM, classification of e-commerce, e-commerce adoption and its barriers, characteristics of SMEs, and rationale for SME business owners to adopt e-commerce strategies to market products in Ghana.

In Section 2, I justified using a qualitative multiple case study to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce strategies to market products in Ghana. Some topics I will discuss in section 2 include a restatement of the purpose statement, the role of the researcher, participants, research method and design, population and sampling, and ethical research. Section 2 also contains a detailed description of the data collection instruments and technique, data organization techniques, data analysis technique, and the reliability and validity of the study.

In Section 3, I will summarize the prior information of the preceding sections and discuss the application to professional practice and implications for change. The areas of focus in this section will include an overview of the study, presentation of the findings, applications to professional practice, how the study may contribute to positive social change, and recommendations for actions and further study. I will incorporate a reflection about the research process and provide summary and study conclusions.

# Section 2: The Project

The purpose of this study was to explore the strategies that some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce for product marketing. Five business owners in Southeastern Ghana, who use e-commerce for marketing products and have significant profitability as a result of e-commerce, participated in this multiple case study. In this section, I restate the purpose of the study, discuss my role as a researcher, outline participant eligibility criteria, and describe the research method and design of the study. Section 2 also contains a description of the target population and the sample size, compliance with ethical standards, data collection instruments and techniques, data organization techniques, data analysis methods, the study's reliability, and validity.

## **Purpose Statement**

The purpose of this qualitative multiple case study was to explore the strategies that some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The target population for this study consisted of five SME business owners in the furniture industry in Southeastern Ghana who had significant success in adopting e-commerce to market products. The implications for social change include increases in employment, income, and living standards in the local community where the business operates as well as improved customer satisfaction through enhanced use of e-commerce.

#### Role of the Researcher

In a qualitative study, the primary role of a researcher is to select the right research design and methodology, recruit participants, collect data, and analyze the results. In a qualitative study design, the researcher assumes the function of the data collection instrument (Khoshsima, Hosseini, & Toroujeni, 2017). I served as the primary data collection instrument and developed a list of interview questions to conduct semistructured, open-ended interviews with the participants. As the research instrument, I was responsible for recruiting research participants for data collection through phone interviews and relevant company documents in the form of standard operations procedure manuals. Additonally, the appropriate choice of strategy for data collection, management, analysis, verification, and presentation is the role of the researcher (Marshall & Rossman, 2016). My role as a researcher in this study involved (a) collecting data, (b) defining methods of data collection, (c) analyzing data, and (d) presenting the data results objectively and ethically.

I had no relationship with the participants of this study. I might have known the participants in a business context; however, my limited knowledge of the potential participants reduced the possibility of bias. Further, as a business practitioner with basic theoretical knowledge but no e-commerce working experience, my expertise and perspective did not bias my approach toward data collection, analysis, and interpretation.

A researcher must create rigorous ethical standards to protect participants during the research process (Yin, 2018). In participatory research, a researcher must display ethical considerations and attitudes and may need to adopt procedures that will ensure the

protection of human subjects involved in the study from any physical, mental, or social harm (Fouché & Chubb, 2017; Ketefian, 2015). I maintained ethical standards contained in the Belmont Report (1979), which contains three ethical principles: (a) respect for persons, which involves treating participants as independent; (b) beneficence, which involves protecting participants from harm; and (c) justice, which involves treating participants fairly and equally (Eisner, 2017). To meet the requirement of the Belmont Report, I showed respect to the participants using the informed consent form to provide information for comprehension and voluntary decision. All persons involved as a subject of the research should receive informed consent to freely decide on participation (Adashi, Walters, & Menikoff, 2018). I also complied with the guidelines of the Walden University Institutional Review Board (IRB) that demanded the ethical requirement of obtaining permission before collecting data from participants. I also assured all participants of their confidentiality in this study (see Ketefian, 2015).

A researchers' personal biases and values might sometimes influence the outcome of investigations. A bias during the stages of data collection, data analysis, data interpretation, and the publication of findings leads to wrong conclusions (Brown, Kaiser, & Allison, 2018). A deliberate introduction of bias into the study by a researcher is unethical (Brown et al., 2018). But researchers can work to remove potential biases regarding the participants or the research area of the study (Roulston & Shelton, 2015). Researchers often use field notes to validate and interpret the findings of research during the data collection process (Yin, 2018). I used interview notes during the data collection and analysis, a voice recording of the phone interview to gather the views and opinions of

the participants, member checking, and transcription of interview data to mitigate biases. To reduce bias in this study, I also put aside my personal views and opinions of e-commerce adoption and focused on the information the participants provided. Furthermore, to reduce researcher bias, I documented the data collection, analysis, and reporting processes to maintain awareness of potential personal bias. The journal process in data collection enables a researcher to mitigate personal bias as the researcher reflects on personal assumptions, beliefs, and values that may affect the study (Merriam & Tisdell, 2015). Researchers have a responsibility to report on the perspectives of participants objectively; therefore, I made efforts to represent the participants' thoughts and views accurately.

A researcher must build also confidence with the participants in the qualitative research. Honest and open communication with participants by the researcher helps participants to make informed decisions about participation and allow for a comfortable sharing of thoughts and experiences (Harvey, 2017). I used the interview protocol (see Appendix A) to ensure that each participant answered the same semistructured interview question in the same order in addition to reducing interviewer bias and encouraging continuity (Halcomb & Peters, 2016; Yin, 2018). Using an interview protocol helped me to strengthen my study consistency and continuity and establish a positive and trusting relationship with the participants.

#### **Participants**

Qualitative researchers should select participants who have requisite competence, experience, knowledge, and skills to understand the complexity and context of the

phenomenon of adopting e-commerce to market products. A researcher can use purposeful sampling to select participants who meet the selection criteria that align with the overarching research question (Morse, 2015a; Palinkas et al., 2015). Purposeful sampling enables a researcher to select participants who are knowledgeable and have relevant information about the purpose of the study (Moore, Blom, Whitehouse, & Gooberman-Hill, 2017). The purposeful sampling is an appropriate approach for case study research involving individuals or groups who have experienced a phenomenon of interest (Palinkas et al., 2015). Thus, I used purposive sampling to select five SME business owners in the furniture industry.

As part of purposeful sampling, using inclusion criteria in defining the sample helps to ensure the homogeneity of the sample (Palinkas et al., 2015). The eligibility criteria for participants included SME business owners in the furniture industry in Southeastern Ghana who had successfully adopted e-commerce strategies to market products. SME business owners listed as registered members of the Association of Ghana Industries (AGI) who had successfully adopted e-commerce strategies to market products were eligible to participate in the study. Only CEOs of companies registered as members of the AGI were eligible to participate in this study. Another criterion I considered in selecting the five participants is their inclusion in the list of SME business owners in the furniture industry from the Business Ghana directory, which is a public list of furniture manufacturing businesses with the names of the companies, telephone contact numbers, and location addresses. I selected only participants who provided

relevant data based on their experiences from decision making and implementation of ecommerce strategies to market products.

After obtaining IRB approval, I used the selection criteria to recruit participants. I sent letters of invitation to the prospective participants through e-mail to recruit the five potential participants. In the invitation letter, I provided information regarding the purpose of the study and the voluntary nature of participation in the research. The invitation letter contains information for potential participants regarding the lack of monetary incentives for participating in the study.

Additionally, a working relationship with prospective participants in qualitative research would ensure the study's success (Harvey, 2015; Raheim et al., 2016). To establish a working relationship with the participants, I used social media, e-mails, and telephone calls to engage the potential participants who agreed to participate in the study. I also used the informed consent form as a tool to establish a working relationship with the research participants. My experience as a recognized chief executive of a small business in local business affairs helped me in relating to the potential participants to gain their confidence to participate in the study and share their experiences freely. For a study to be successful, researchers must also gain the trust of the research participants (Halcomb & Peters, 2016). Qualitative researchers should participate in active and respectful listening to develop relationships and promote a thorough discussion with participants (Bodie, Vickery, Cannava, & Jones, 2015; Tam et al., 2015). I engaged the research participants in active and respectful listening and used open-ended questions to

create a rapport that facilitated in-depth discussion throughout the phone interview process.

### Research Method and Design

The three conventional research methods that researchers use to conduct research are quantitative, qualitative, and mixed methods (McCusker & Gunaydin, 2015). A researcher's choice of research method and design depends on the purpose of the study, the research question, and the time available for the study. The purpose of this study was to explore the strategies that some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce to market products. Thus, I used the qualitative method for this study. Some qualitative designs include case study, phenomenology, ethnography, and narrative designs (Castleberry & Nolen, 2018; Yin, 2018). Researchers use a case study design to gain an in-depth understanding of a specific issue or problem over a specified period (Morgan, Pullon, Macdonald, McKinlay, & Gray, 2017). The qualitative multiple case study was the most appropriate research method and design for this study.

#### Method

Quantitative, qualitative, and mixed methods are three common types of research methods (Abutabenjeh, 2018). Qualitative researchers explore and understand individuals' perceptions of the social or human problem (Corti & Fielding, 2016). A qualitative researcher applies a subjective analysis of the meaning of experiences and words rather than an objective measurement of phenomena (Florczak, 2017). A qualitative method of study offers a more versatile way to gather, analyze, and interpret

data as it relates to human perception (Yin, 2018). The qualitative method is used to examine a current phenomenon in its real-life context to get a clear and detailed understanding (McCusker & Gunaydin, 2015). A researcher uses a qualitative method to provide a more in-depth insight into a study (Florczak, 2017; Hadi & Closs, 2016). The qualitative method was appropriate for my intention to explore, explain, and understand what strategies some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce to market products.

In contrast, the quantitative research method involves the use of mathematical models to investigate the relationships and differences among variables (Apuke, 2017). Researchers use a quantitative research method to test a hypothesis and predict relationships (Haegele & Hodge, 2015). The quantitative research method tends to limit the effort required to record each participant's experiences (Savela, 2018; Shannon-Baker, 2016). As the objective of this research was not to test a hypothesis and predict relationships, the quantitative method was not appropriate. Researchers may also choose to use a mixed-method approach, which is a combination of qualitative and quantitative methods (Makrakis & Kostoulas-Makrakis, 2016; Shannon-Baker, 2016). The use of variables for measurement and hypothesis testing in the study rendered the mixed method approach inappropriate for this study. My aim in this study was to explore the strategies that some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce to market products; hence, the qualitative method helped to collect rich data.

## Research Design

The common types of qualitative designs are case study, phenomenological, ethnographic, and narrative (Bengtsson, 2016; Cairney & St Denny, 2015; Lewis, 2015). I used a multiple case study design for this study. The application of a case study design requires researchers to analyze questions through multiple data sources (Bengtsson, 2016; Yazan, 2015; Yin, 2018). A multiple case study design provides tools for greater insight into the research topic (Manhas & Oberle, 2015; Park & Park, 2016; Tumele, 2015). Researchers use multiple case study design to understand complex issues in real-world settings (Harrison, Birks, Franklin, & Mills, 2017). I used the multiple case study design for this research to explore the strategies that some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce to market products.

Other designs were considered but not chosen. Researchers use a phenomenological design to understand the meanings of participants' experiences relating to a phenomenon (Sutton & Austin, 2015). But the phenomenological design was not suitable because I did not want to analyze the participants' lived experiences. The ethnographic research is about the beliefs, cultural values, and behavior of individuals and groups of people (Schober et al., 2016). Ethnographic research was also not appropriate for this study because it involves extended observation of a given community or group to characterize the culture that governs its members' behavioral patterns and interaction. Additionally, narrative researchers rely on a representation of the participants' written or spoken words to describe and reconstruct the individuals' personal experiences (Lewis, 2015). Researchers use narrative design when storytelling is the

mode of data collection (Cash, Hicks, Culley, & Adlam, 2015). For this research, the narrative design was not suitable because the purpose was not to examine the life experiences of individuals or groups of individuals. My objective as the primary researcher was to collect and analyze data from multiple sources, including interviews and company documents; therefore, the phenomenological, ethnographic, and narrative designs were inappropriate for the study.

Achieving data saturation is essential when conducting qualitative research. Data saturation occurs when additional data do not result in new information (Fusch & Ness, 2015; Yin, 2018). Once a researcher reaches data saturation, more interviews and data analysis is unnecessary (Carcone, Tokarz, & Ruocco, 2015). The objective of data saturation is to obtain quality information on the subject under review (Creswell & Poth, 2017). Based on the qualitative researchers' experience, data saturation occurs when no new trends or themes emerged with new data collection (Merriam & Tisdell, 2015). To ensure data saturation, I continued interviewing the SME business owners in the furniture industry until no new trends or themes that emerged from the data.

# **Population and Sampling**

The population for this study consisted of five SME business owners in the furniture industry based in Southeastern Ghana who had successfully adopted e-commerce to market products. Using a purposeful sampling method permitted the selection of participants with relevant knowledge and experience of the research topic in this study (Etikan, Musa, & Alkassim, 2016). Purposeful sampling involves participants who have specialized expertise or characteristics applicable to the study (Palinkas et al.,

2015). Purposeful sampling is a nonrandom strategy in which a researcher includes in the sample-specific cases that could yield useful data for the study (Lucas, 2014; Robinson, 2014; Rowley, 2014). The selection of the participants for this study was through a purposeful sampling strategy.

Alternative sampling methods, such as snowball sampling and convenience sampling, were inappropriate for this study. With convenience sampling, a researcher selects readily accessible sites and participants for the study (Marshall & Rossman, 2016). Convenience sampling is less tasking to a researcher in terms of time and resources but lacks rigor, which may affect the quality of data collection and credibility of the study (Marshall, 1996). With the snowball sampling strategy, a researcher asks previous participants to recommend other potential participants for the study (Isaacs, 2014; Lucas, 2014; Marshall & Rossman, 2016). Using snowball sampling has a drawback of excluding participants outside the network of the initial contacts (Lucas, 2014). Through purposeful sampling, I did not focus on selecting readily accessible participants, but I selected participants who have relevant skills, knowledge, experience, and competency to answer the overarching research question.

Yin (2018) suggested a sample size of five is sufficient for a case study research. Researchers should collect data from enough participants to mitigate the likelihood of bias (Yin, 2018). Yin noted that three participants are sufficient to produce useful and reliable data for a study. A sample population of at least three participants might provide quality data required to achieve data saturation (Fugard & Potts, 2015). Fusch and Ness (2015) proposed a careful sample collection that would give the best opportunity to

achieve data saturation. Researchers accept two to three cases as the minimum sample size in a multiple case study (Andersson & Evers, 2015). In an exploratory case study, between three and 16 interviewees should be sufficient to achieve data saturation (Roy, Zvonkovic, Goldberg, Sharp, & LaRossa, 2015). In similar case studies, Dankwa (2018), Potts (2018), Wani (2018), and Warren (2016) sampled a maximum of four business owners and achieved data saturation. The sample size of five was adequate to achieve data saturation for this study.

A database of SME business owners obtained from AGI provided a list of names and contact information to select potential participants for this study. The database of AGI was a public and accessible document. The eligibility criteria for selecting the participants included SME business owners whose ages were 18 years and above, who are residing in Ghana and involved in the day-to-day management of the business. According to Palinkas et al. (2015), purposeful sampling is the recruiting of individuals who are information-rich regarding matters of interest to the purpose of the research. Barrat, Ferris, and Lenton (2015) noted that purposive sampling of individuals enables researchers to gain a thorough understanding of a phenomenon. A purposeful sampling method helped me in the selection of the participants for an in-depth interview for this study.

The participants received invitation letters by email as a medium for recruiting participants for this study. Participants who indicate interest in participating in research should go through the ethical consent process (Yin, 2018). The participants who met the inclusion criteria and responded with an expression of interest went through the ethical

consent process to confirm their eligibility to participate. The participants received an informed consent form in a follow-up email for review and sign to indicate their willingness to participate in the study. The participant replied to the email by returning the signed consent form. I made a follow-up telephone call to explain in detail the purpose of this study to the participants who agreed to participate in the research. The participants decided on a convenient time and date for a phone interview. During the interview process, the participants responded to seven open-ended semistructured interview questions. The duration of the interview session was 30-45 minutes per participant.

Data saturation refers to a phase of a research study where the data gathered does not reveal any new themes or information concerning the primary research question (Hennink, Kaiser, & Marconi, 2017; Schiller et al., 2015). According to Fusch and Ness (2015), data triangulation is a method that enhances data saturation. Data from in-depth interviews from the participants and data from company documents provide information for data saturation. During the phone interviews, participants responded to open-ended questions. Exploring the responses of the participants until no new themes emerge from the discussion indicated data saturation. I ensured data saturation by continuing to interview participants from different organizations until no new information emerges.

# **Ethical Research**

Researchers should understand and comply with the guidelines for conducting ethical research. Research involving human elements requires ethical consideration according to the scholarly criteria (Ferreira, Buttell, & Ferreira, 2015). Researchers

should address ethical issues by ensuring the protection of all research participants and adhering to the principles of the Belmont Report of 1979 (Jeanes, 2017; Petrova, Dewing, & Camilleri, 2016). Research involving human subjects has three basic ethics, namely (a) principles of respect for persons, (b) beneficence, and (c) justice (U.S. Department of Health & Human Services, 2016). Ethical standards help researchers prevent the manipulation or falsification of data from encouraging the pursuit of knowledge and truth, which is the primary objective of the research (Nebeker, Linares-Orozco, & Crist, 2015). To ensure compliance with ethical standards and protection of human research participants, I completed the National Institute of Health web-based training (see Appendix C).

To be ethical, a researcher should provide informed consent to research participants before the study starts. A researcher must obtain permission from the participants and provide full disclosure and knowledge before collecting the data (Ferreira et al., 2015; Lie & Witteveen, 2017). To comply with all the ethical standards, I obtained IRB approval from Walden University before contacting participants and gathering data. Eligible participants received a copy of the informed consent form by email after IRB approval. According to Dekas and McCune (2015), a consent agreement must cover issues such as (a) consent to participate in the topic of interest, (b) the primary purpose of the study, (c) the study procedures, (d) risk and benefits inherent to the study, (e) the voluntary nature of research participation, and (f) policies and procedures for non-disclosure protection. I complied with the three basic ethics of research involving the human subject, namely, the principles of respect of persons, beneficence, and justice.

After obtaining IRB approval, I contacted the participants through e-mail with a letter of invitation (see Appendix B), introducing the purpose of the study and inviting each to participate in the research. Participants also received via email an informed consent form to complete and sign for confirmation of their willingness to take part in the study. According to Dekas and McCune (2015), researchers use a consent form to ensure participants understand their rights and confidentiality. For each participant, I safeguarded the signed participant consent forms in an electronic device and identified the name of the file with a unique identification code. I made the participants aware of the voluntary nature of the study and the option to withdraw at any time from the interview or the research process without suffering any penalty. Additionally, I reminded the participants at the start of every interview that they have the right not to participate and that they may refrain from answering any questions they choose.

I informed the participants explicitly that there are no risks of participating in this study and that the information provided is not for use outside the doctoral study without their permission. The participants did not receive any incentives for participating in the study. However, as the primary researcher, I will make available to the participants an electronic copy of a summary of the findings of the study. Participants knew the official contact information of the Walden University representative to engage for further clarification. I will save the digital data secured with an encrypted password and the paper data for a minimum of 5 years. After the five years have elapsed, I will destroy all the copies by use of a paper shredder and deletion of the electronic copies.

To ensure full compliance with the requirements of Walden University's IRB, I obtain full approval for the study before commencing the data collection process. The Walden's IRB approval number for this study is 05-05-20-0660146 To maintain confidentiality, I assigned participants unique codes such as P1, P2, P3, P4, and P5; and deleted any information that might identify the participant from the published document.

## **Data Collection**

#### **Instruments**

Researchers must understand the most appropriate data collection instrument for the study. In academic studies, the researcher is the primary instrument for collecting data (Mojtahed, Nunes, Martins, & Peng, 2014). During the interview process, a researcher may use semistructured interview questions to gain insight into the problem they are investigating (Mojtahed et al., 2014). As the primary data collection instrument, I used semistructured interview questions (see Appendix E) to explore strategies that some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce to market products. Participants responded freely and truthfully to the openended interview questions during the phone interview.

The use of interview protocol will ensure consistency in the interview responses. Qualitative researchers create a case study protocol to help improve research reliability (Castillo-Montoya, 2016; Yin, 2018). Many qualitative researchers use the interview protocol to approach the interview with the participants and collect the data on the study phenomenon. To ensure consistency among respondents, I used an interview protocol

(see Appendix A) to guide my interaction with the participants during the phone interview process.

Researchers use various tools to ensure the accuracy of the study data. Kalla (2016) indicated that researchers look for the emergence of themes throughout the interview process. Data saturation occurs when no new information emerges from participants (Kalla, 2016). To ensure data saturation, I continued to interview the participants until no new themes emerge. Wang, Duan, and Yu (2016) noted that member checking is an effective strategy to ensure credibility in qualitative studies. Member checking involves providing participants with the opportunity to review and confirm their interview responses (Morse, 2015). I used member checking to validate the interview responses to ensure data accuracy.

Most qualitative researchers use methodological triangulation to ensure the credibility of the research. Researchers have indicated that methodological triangulation improves data credibility by showing concurrence between two sources of data (Abdalla, Oliveira, Azevedo, & Gonzalez, 2018; Ingham-Broomfield, 2015; Yin, 2018). The data sources for my research include the use of phone interviews to collect primary data, interview notes, and the review of company archival documents on product marketing through e-commerce from the five case organizations. Using the data from the phone interviews and the archived documents helped achieve methodological triangulation, thereby improving the validity and reliability of the research findings.

## **Data Collection Technique**

Qualitative researchers may use various techniques to collect data. Researchers of multiple case studies may conduct interviews and review company documents to collect data (Percy, Kostere, & Kostere, 2015). The use of semistructured interviews enables the participants to respond to open-ended questions (McIntosh & Morse, 2015). The success factor for obtaining quality and in-depth knowledge from semistructured interviews includes adequate preparation of the interview guide, proper recruitment of participants, and the receipt of informed and voluntary consent (Castillo-Montoya, 2016; Cridland, Jones, Caputi, & Magee, 2015). I used semistructured phone interviews to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana.

After obtaining IRB approval, I commenced this study by sending a letter of invitation through e-mail to each participant. The content of the e-mail included a brief background of the purpose of this study. Next, I sent an e-mail containing the informed consent form to each participant for review and sign-off to affirm their willingness to take part in the study. Following the selection of the five qualified and consenting participants, I agreed in consultation with the participants the most suitable date and time to conduct a 30-45-minutes phone interview session. I formalized the arrangement for the phone interviews with the participants. Before the interview date, I called the interested participant to reaffirm the time of the phone interview. On the agreed date, I called the participants 30 minutes before the scheduled time to remind them of the phone

interview. I conducted the phone interview process following the step-by-step procedures laid down in my interview protocol.

The interview process involved ten steps. First, I introduced myself to the participant and the research topic and appreciated the respondent's willingness to take part in the study. Next, I explained the contents of the consent form send through email and answered questions and addressed any concerns of the participant. I requested the permission of the participant to start recording the phone interview after reminding the respondent of the purpose of the study. I commenced the interview process by asking the first question and followed up with additional questions where necessary. After asking the last interview question to each participant, I discussed member checking and requested that the respondent send the company documents by email. Finally, I thanked the participant for the cooperation. I obtained their permission to revert with follow-up questions and concerns if necessary, during transcription of the interview data and for member checking.

Researchers tend to use various triangulation methods to collect data. The four significant types of triangulation are (a) data triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) a methodological triangulation (Davey, Davey, & Singh, 2015). The methodological triangulation involves the use of at least two of the six possible sources, which include document review, archival documents, interviews, direct observation, participant observation, and physical objects to gain a holistic view of phenomena (Fusch & Ness, 2015; Yin, 2018). Methodological triangulation requires the use of various data collection methods to verify and reinforce the study results, thereby

establishing credibility across information sources (Florczak, 2017; Patton, 2015). Lewis (2015) noted that by gathering data from different sources and using different methods about a phenomenon, methodological triangulation increases the validity of the research findings. I used methodological triangulation as the principal method of data collection to enhance the validity of my study findings.

To supplement the data from the phone interviews, I obtained secondary data from four participants through a review of copies of company documentation, such as annual financial reports, minutes of meetings, newsletters, and company diaries. Because the fifth participant was unwilling to share the company documents, I requested and obtained supplementary information such as company records about the SME from AGI. The company records from AGI was useful in providing some background of the SME regarding the adoption of e-commerce over the years.

The semistructured interview technique has its advantages and disadvantages. The advantage of conducting interviews is the opportunity to gather the information that relates to the opinions, beliefs, or viewpoints of individuals (Castillo-Montoya, 2016). Semistructured interviews enable a researcher to concentrate on study boundaries and help to clarify potential inferences through face-to-face contact with the participants (Cridland et al., 2015; Yin, 2018). Face-to-face interviews may promote the creation of a rapport and more knowledge generation than an online interview, although the quality of the data obtained using both methods may be the same (Shapka, Domene, Khan, & Yang, 2016). A combination of face-to-face semistructured interviews and brief handwritten interview notes can provide an objective analysis of participant data (Hadi & Closs, 2016;

McIntosh & Morse, 2015; Yin, 2018). The coronavirus pandemic protocols emphasized on social distancing, making the use of face-to-face interviews not feasible. I used semistructured phone interviews to collect data from participants because of the restrictions on movement as a result of the coronavirus pandemic in Ghana.

Researchers noted some disadvantages of conducting interviews. The disadvantage of conducting interviews may include the perception of bias by the interviewer, the travel expense of the researcher, and the time taken to coordinate the convenient time and date to conduct the interviews with the participants (Cridland et al., 2015). Additionally, the flexibility of semistructured interviews may create a perception of bias that could inhibit the participants from freely expressing their opinions that could cause participants to respond to what the interviewer needs to hear (McIntosh & Morse, 2015). Using an interview protocol to conduct the interview helped minimize bias and ensured consistency in the format of questioning each participant. An interview protocol is a tool that researchers use to maintain focus to collect data without bias (Taylor, Bogdan, & DeVault, 2015). I used the interview protocol to collect data from each participant.

Many qualitative researchers use member checking to ensure that the interpretations given to the collected data from participants align with what the respondents meant during the interview session. The qualitative researcher can impose personal views and interests in all phases of the research process (Birt, Scott, Cavers, Campbell, & Walter, 2016). Member checking helps to guarantee a researcher's impartiality in interpreting the participants' responses (Harper & Cole, 2012; Robinson,

2014). A significant reason for using member checking in a study was to show readers the neutrality of the researcher. Researchers use member checking to improve the accuracy of the study findings. I used the member checking process to confirm the accuracy of my interpretation of the participants' responses.

# **Data Organization Techniques**

Understanding the technique for organizing collected data is essential in qualitative research. Data organization involves multiple data storage approaches in qualitative research to protect the integrity of the data collected through semistructured interviews (O'Keeffe, Buytaert, Mijic, Brozović, & Sinha, 2016). I assigned codes such as P1, P2, P3, P4, and P5 to participants to safeguard their privacy and confidentiality, which made me, the researcher, the only individual who knows the participants' identity. By using pseudonyms for the participants, the researcher can achieve confidentiality (Petrova et al., 2016). To achieve the confidentiality of the respondents, I used the alphanumeric code to hide the participants' identities. Member checking is a useful approach that investigators use to organize data to assist in verifying the validity and trustworthiness of a qualitative study (Birt et al., 2016). The technique of providing the research participants with a summary of the interview for evaluation and confirmation of the researcher's interpretation of their responses to the interview question is member checking (Birt et al., 2016). I used member checking to enhance the credibility, validity, transferability, and input of the participants in the study.

Qualitative researchers must organize, store, and safeguard their study data. With the informed consent process, I requested the participant's approval to conduct the audiorecording of the phone interview. Researchers need to maintain each participant's transcribed recorded interviews on a password-protected external hard drive in distinct folders (Traynor, 2017). After the coding and retrieval of textual data from interviews, most qualitative researchers use NVivo Software for data analysis (Woods, Paulus, Atkins, & Macklin, 2016). I used NVivo Software for inputting, storage, and coding of data to generate the themes while maintaining the participants' privacy and confidentiality. In compliance with IRB requirements, I kept the hard copies of raw interview data, voice recordings, and reflective journals in a secured steel file cabinet at home. I stored the data files for the electronic interviews on a password-protected laptop computer and backed up on an external hard drive with password protection. After five years, I will permanently destroy the paper files using a paper shredder and all electronic files using Soft Pedia DP Wiper to erase all digital data.

## **Data Analysis Technique**

The purpose of this qualitative multiple case study was to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Southeastern Ghana. Researchers ensure the reliability, trustworthiness, and richness of the study through triangulation involving the use of different data collection methods (Fusch & Ness, 2015). Open-ended interview questions are an effective data collection method that researchers use to gather data from the experiences of the unconstrained participants to help explore the meaning of the study (Sohn, Thomas, Greenberg, & Pollio, 2017). For this study, each participant had an opportunity to review the interview questions (see Appendix E) before participating in phone interviews.

Additionally, I conducted a review of company documents to achieve methodological triangulation. The company documents I reviewed include both official policy statements and documents containing guidelines for adopting e-commerce strategies.

The study findings might provide a means of understanding the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Southeastern Ghana. According to Yin (2018), the thematic analysis of data relates to the study's central research question. It consists of five stages: (a) compilation, (b) disassembly, (c) reassembly, (d) interpretation, and (e) conclusions. The first stage of the data compilation involves sorting the collected data, such as the interview transcripts and company documents, to form a database. The second stage, the disassembling of data, involves the disaggregation of information into smaller pieces or fragments of compiled data. The process of disassembling may involve assigning codes or labels to the compiled information. According to Theron (2015), coding is a slow, cyclical process involving the merging, splitting, or renaming of codes.

On completion of coding, the third stage was data reassembly, which requires the rearranging and recombining of fragmented data into graphical or tabular form. Data reassembly results in the re-arrangement of data into different groups such that the new compilation of data is different from the original data (Yin, 2018). After reassembling the data, the fourth stage was data interpretation, which involves using tables or graphics to prepare a narrative report. Qualitative researchers should note that the initial interpretation may require reassembling, disassembling, or the recompilation of the database differently (Yin, 2018). To close the data analysis process, the researcher writes

a conclusion which would contain an analysis of the results of the research and findings based on their relationship to the central research question. Yin posited that the conclusion must have a reliable connection between the research question and the analyzed data. The conclusion must also contain information on the implications of the findings and areas for future research.

Researchers should identify the appropriate data analysis approach for their study. NVivo is a qualitative data analysis platform that researchers use to compare words and phrases to recognize common themes, subthemes, categories, and tags using word recognition and auto-coding functions (Roller & Lavrakas, 2015). I organized data to examine and interpret themes and trends resulting from open-ended questions to recognize similarities. Using NVivo tools in data analysis can aid in achieving the goals of identifying themes from the study data. The use of NVivo software simplifies textual data analysis from extensive interviews (Rogerson, Soltani, & Copeland, 2016). NVivo software is a secure method of identifying themes in the various interview responses and enhances the research process by reducing the data analysis time. The interpretation stage of the data analysis process is a prerequisite for the organization of data into themes (Yin, 2018). I used the NVivo software to define and categorize codes and patterns for analysis from various information sources.

The design of the research focused on collecting data based on the semi-structured interviews and the existing literature, which allowed more information and themes to emerge. I correlated the identified themes with the past and present literature on SMEs and e-commerce adoption to market products, and the conceptual framework. TAM was

the conceptual framework for this study. Fred Davis developed TAM in 1985. The constructs of TAM provided the lens to answer the research question: What strategies do some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana?

## Reliability and Validity

## Reliability

Qualitative researchers should ensure the reliability of their study findings. In a qualitative study, reliability refers to the dependability of the research process that includes a method, design, and concept that the researcher applied in the study (Dikko, 2016; Morse, 2015a). The use of multiple data sources increases the reliability of a case study (Bengtsson, 2016; Hadi & Closs, 2016; Harvey, 2015). According to Yin (2018), qualitative researchers may establish the reliability of their study by clarifying the dependability of their research findings. In the next subsection, I discussed how I addressed the dependability of the study outcome to enhance research reliability.

Dependability. In qualitative research, investigators use qualitative methods to address the dependability of study findings. To improve the dependability of the study, researchers create an audit trail (Abdalla et al., 2018). Identifying and recording the data sources allows for an audit trail for future researchers, which promotes the study's credibility (Cope, 2014). I used methodological triangulation to compare multiple forms of data collection sources. To address the dependability of this study, I reviewed company records and the semistructured phone interviews with participants. The review of company documents from the SME business owners in the furniture industry in

Southeastern Ghana, who adopted e-commerce strategies to market products, added credibility to the study data.

Researchers should establish a process for addressing the dependability of the study findings. Birt et al. (2016) and Harvey (2015) proposed a follow-up member checking of data interpretation to allow the participants the opportunity to review the interviewers' interpretation of the information with the implication to confirm the dependability of a study. To attain a similar conclusion, a researcher must ensure the dependability of a study to enable future researchers to subject a similar phenomenon to the same design, procedure, and protocol (Bengtsson, 2016; Hadi & Closs, 2016). I used the interview protocol (see Appendix D) to ensure consistency and integrity with each participant during the interview process. I conducted the member checking of interview transcripts with each participant to ensure the accuracy of information. By using the interview protocol and member checking, I enhanced the reliability and addressed the dependability of the study results.

# Validity

Establishing the validity of a study is critical in qualitative research. The subject of validity is essential for the qualitative researcher to assess the rigor, soundness, and transferability of the research process (Cypress, 2017). The validity of qualitative research is a demonstration of the degree of confirmability, credibility, and transferability of the research findings (Leung, 2015). To enhance the validity of the study findings, I used the interview protocol, recorded and accurately transcribed the interview data, documented the data analysis techniques, and disclosed the procedures used in the case

study. In the next subsections, I discussed how I addressed the credibility, transferability, and confirmability; and ensured data saturation to establish the validity of the research findings.

Credibility. A researcher can determine the credibility of the data through the analysis of the participant's responses by conducting member checking. Bengtsson (2016) defined credibility as the process where a chain of logic exists between the decision made and how the study is conducted. I addressed the credibility of this study using several strategies such as methodological triangulation, member checking, and regular participation and input from participants during the research process. I demonstrated methodological triangulation from the semistructured interviews, interview notes, and the collection of company documents. Researchers use member checking to ascertain the accuracy and credibility of the data (Birt et al., 2016; Thomas, 2015). To ensure credibility, I conducted member checking after transcribing and analyzing the participants' responses to verify that the analysis represents the actual intention of the participants.

Transferability. Qualitative researchers should establish the transferability of their study findings. A qualitative researcher can enhance transferability through the provision of detailed descriptions of the research procedure for the study (Hagaman & Wutich, 2017; Morse, 2015a; Yin, 2018). Transferability in qualitative study refers to a researcher's ability, assurance, and trust to apply the findings or results in other future research settings or contexts without losing significance (Hadi & Closs, 2016; Leung, 2015). The transferability of qualitative studies involves the applicability of the findings

and not the generalization of the findings to the general population (Bengtsson, 2016). I provided a detailed and thick description of data by connecting the background of the problem, conceptual framework, review of the professional and academic literature, and research procedure with data collection, analysis, interpretation, and results of the study.

By providing a detailed description of the research process, future researchers and readers could determine the transferability of a study. The researcher is responsible for the transferability of research findings (Parker & Northcott, 2016). The findings from the study might not be the general representation of the business strategies that some SME business owners in the furniture industry in Southeastern Ghana use to adopt e-commerce to market products. However, the findings from this study might include recommendations that could be relevant to researchers to judge the applicability of the research procedure and method to their studies. To address the transferability of the study concerning the reader and future researchers, I provided detailed literature on research ethics, data collection, sampling techniques, and the process of data analysis.

Confirmability. Qualitative researchers should address the confirmability of their study. Confirmability refers to the degree to which other researchers could corroborate the results of a study (Bengtsson, 2016). The purpose of validity in the case study is to achieve acceptance and applicability, unlike statistical generalization in quantitative research studies (Marshall & Rossman, 2016; Yin, 2018). Achieving confirmability requires the researcher to describe the basis for the conclusion and interpretations devoid of personal bias and to demonstrate a direct linkage to the data (Bengtsson, 2016). In qualitative studies, researchers use an audit trail to ensure

confirmability (Hays, Wood, Dahl, & Kirk-Jenkins, 2016). The audit trail is a detailed log that researchers use to document the decisions and activities that took place throughout the study (Percy et al., 2015). I maintained an audit trail and used reflexivity strategies to ensure the confirmability of this study.

Data saturation. Researchers ensure the attainment of data saturation to promote the thoroughness of the study. The guiding principles researchers use to reach data saturation include: (a) no new information emerging, (b) stop the coding process, (c) no new themes, and (d) ability to replicate the study (Fusch & Ness, 2015). To reach data saturation in this study, I continued to collect data through semistructured phone interviews and archival company documents until no new themes are emerging. By analyzing the data from five participants in five case organizations, I enhance the validity of the data collected. I ensured data saturation by the convergence of semistructured interviews and archival company documents collected from five SME business owners in the furniture industry in Southeastern Ghana who adopted e-commerce strategies to market products.

# **Transition and Summary**

In Section 2, I began by restating the purpose statement and discussed the processes involved in qualitative research and research methods and designs, including the rationale for choosing a qualitative research methodology and case study design. The presentation in Section 2 covered the explanation and application of the principles of ethical research with emphasis on the three underlying principles of respect for persons, beneficence, and justice. I also discussed data collection instruments, data collection and

organization techniques, and data analysis. My discussion in Section 2 included member checking criteria, which requires participants to evaluate the accuracy of the interpretation of the interview responses. Other topics discussed in Section 2 include the role of the researcher, population and sampling, and reliability and validity, including the qualitative approaches I used to establish the reliability and validity of the study.

In Section 3, I will present the findings of the research and discuss how the findings apply to professional practice and the implications for social change. I will also discuss the recommendations for action and further research on the adoption of e-commerce to market products by SME business owners in the furniture industry in Southeastern Ghana. Finally, in Section 3, I will share the narration on my reflections on the research process and provide a robust concluding statement of the study.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this qualitative multiple case study was to explore the strategies that some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. By answering the semistructured interview questions, the participants—five SME business owners from different furniture industry in Southeastern Ghana—provided me with the primary data to answer the overarching research question. The sources of secondary data include company archival documents and interview notes. Based on the participants' responses to the interview questions, interview notes, and document review, I identified four themes: (a) use of social media, (b) hosting of website, (c) mode of payment, and (d) efficient infrastructure. Within this study, the TAM related to the findings and provided a better understanding of the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The study findings indicate that SME business owners in the furniture industry use a combination of strategies to adopt e-commerce to market products in Ghana.

In this section, I present the findings on the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. Relying on the illustrations from the study participants, I relate the study findings to the TAM conceptual framework. The other topics discussed in this section include the application of the findings to professional practice, implications for social change, recommendations for action and future research, reflection, and summary and study conclusions.

## **Presentation of the Findings**

SMEs face challenges in using e-commerce strategies to market their products in developing countries (Agwu & Murray, 2015). E-commerce contributes to the growth of SMEs' revenues and brings about the economic growth of developing countries (Kwadwo et al., 2016). However, few SME business owners perceive e-commerce as a source of additional cost in doing business (Ahmad et al., 2015). Researchers have attributed the low rate of adoption of e-commerce technology in developing countries to a lack of proper understanding of the benefits of e-commerce (Alyoubi, 2015). Most SMEs often fail to utilize e-commerce technologies and tools to reach more customers and attract more business opportunities (Choshin & Ghaffari, 2017). The four themes I identified in this study are: (a) use of social media, (b) hosting of website, (c) mode of payment, and (d) efficient infrastructure. In the next subsections, I will present the four themes that emerged from my thematic analysis of the participants' responses to the interview questions.

#### Theme 1: Use of Social Media

The first theme to emerge was the use of social media, which involved the need to use appropriate platforms such as Facebook, WhatsApps, and Instagram for advertising products. The theme, use of social media, emerged from Interview Questions 1-3 and 5-7. All participants affirmed using social media as a strategy to adopt e-commerce to market products in Ghana's furniture industry.

Responding to Interview Question 1, P1 said, "Our best shot of marketing our products using e-commerce is through social media platforms like Facebook, Instagram,

and WhatsApp." P2 stated, "We used social media platforms such as Facebook and WhatsApp to market our products." P3 remarked, "We set up social media accounts on Facebook, Twitter, and Instagram. We built a relationship with our target audience by frequently interacting with them and sharing product images." P4 noted, "We use the social media platforms like Facebook, Twitter, and Instagram for the display of our products for visualization by our prospective customers." P5 posited, "We mostly rely on social media platforms such as Facebook and WhatsApp to market our products." P5 further explained, "Advertisement using Facebook and WhatsApp allows us to reach more customers because of the frequent use of mobile devices by customers nowadays." The archival company documents that P1, 3-5 provided validated their statements.

Responding to Interview Question 2, P1 said, "We make use of social media ads for Facebook and Instagram mostly." P2 stated, "However, we realize that our customers are sending inquires through social media platforms such as WhatsApp and Facebook. We are, therefore, using our website to direct our customers to social media platforms." P3 remarked, "With social media platforms like Facebook, Twitter, and Instagram, we can put out our product catalogue with a good description of our products to enable our customers to make an informed choice." P4 noted,

Social media is the only e-commerce stream we have adopted in marketing our products aggressively. Platforms like Facebook, Instagram, and Twitter each have millions of users just waiting to learn about our brand. So, we offer special discounts to our prospective customers who reach us through the social media platform.

Finally, P5 posited, "By introducing more social media advertising using Facebook and WhatsApp, we are able to reach more customers, and it is very helpful even to follow up and relate with customers."

Responding to Interview Question 3, P1 said, "We direct them to our social media platforms such as Facebook, Instagram, and Twitter. ... share on our social media platforms short videos of our products." P2 stated, "Presently we use the WhatsApp platform to reach our customers after most of them have viewed our different products on the website to make a selection of the product to purchase." P3 remarked,

We frequently use social media for marketing our products. Facebook, Twitter, and Instagram have been continuously rolling out new features and tools that help us to reach our target audience efficiently. Facebook ads, Instagram ads, and

Twitter ads allow us to upload our entire product catalogue

P4 noted, "Because we target the social media platform groups, we can connect to friends and family who have always been one of the most trusted sources for product recommendations." P5 posited, "We are paying more attention to the use of WhatsApp and Facebook ads to reach our customers."

Responding to Interview Question 5, P1 said, "With the fast Internet connection, we can post to our social media platforms to boost our online presence." P2 stated, "We also make use of social media platforms like Facebook, WhatsApp, and Instagram to post very clear and vivid pictures to promote our brand." P5 posited, "We also make use of social media platforms like Facebook and WhatsApp to promote our brand."

Responding to Interview Question 6, P1 said,

The innovative ways that can help grow our SME's online presence are the use of social media platforms such as Instagram and LinkedIn to promote the marketing of our products. We have to use social media to be having a conversation with our customers as frequently as possible and listen to what they want.

P2 stated, "For our social media platforms, we want to pay more attention to our content on Instagram, Twitter, and LinkedIn to reach more customers." P3 remarked, "We created a WhatsApp group for distributing relevant information to attract and engage our customers. Using this medium, we are able to share high-resolution images of our new products and also helps for the frequent customer engagement." P4 noted, "By creating a WhatsApp group and adding new customers too has yielded results in so many ways and has gone a long way to increase and expand our client base." Finally, P5 posited,

We created a WhatsApp group to interact with customers, share relevant product information to attract and retain our customers. Using this medium, we are able to share high-resolution images of our new products and also helps for the frequent customer engagement by word of mouth.

Responding to Interview Question 7, P1 advised, "SME business owners need to make good use of the power of social media to reach much larger customers because web presence is losing the competition to social media." P2 stated, "Reaching our customers is much easier if we send a WhatsApp message to our customers as a follow-up after receiving their deliveries." P3 remarked, "We have, therefore, directed our attention to the development of better and more interactive social media platforms like Facebook,

Instagram, Twitter, and WhatsApp to market our products." P4 noted, "Our main focus is to improve and show more presence in social media such as WhatsApp, Facebook, Instagram, and Twitter to enhance our customer engagement after a successful purchase." P5 posited, "Social media is becoming a very popular mode of shopping online by customers; therefore, we increase our online presence using social media. By sending WhatsApp messages, we can reach our customers easier to enhance customer engagement."

The participants' responses to the interview question aligned with previous research indicating that most modern businesses advertise vacancies to potential employees and request applicants to join social network sites (Ladkin & Buhalis, 2016), and the government uses different means to interact with the public, including the use of social media, SMS, and mobile applications (Tursunbayeva et al., 2017). However, research has also noted that SMEs in Ghana have fewer resources and are reluctant to use e-commerce tools such as websites and blogs, electronic mail, search engines, social media, and virtual communities for their business transactions (Barroso et al., 2019). But all participants use various social media as a strategy to adopt e-commerce to market products. The study findings indicated that SME business owners in the furniture industry used social media as a strategy to adopt e-commerce to market products in Ghana. As applied in this study, 100% of the participants acknowledged using social media as a strategy to adopt e-commerce to market products.

# **Theme 2: Hosting of Website**

A business's website is where all transactions take place between the organization and the consumer directly (Mangiaracina et al., 2015). The theme, hosting of the website, emerged from Interview Questions 1-7. All participants attested that using the hosting of the website as a strategy to adopt e-commerce to market products in Ghana's furniture industry.

In response to Interview Question 1, P2 stated, "We used the website to market our products." P3 remarked, "We enlisted on the worldwide market by setting up a website that is accessible from every type of device, readable with clear design and information on it." P4 noted, "We use the website ... for the display of our products for visualization by our prospective customers." P5 posited, "We mostly rely on our website to market our products."

Responding to Interview Question 2, P1 said, "We are encouraging social distancing by redirecting our clients to make use of our website to view our online product catalog and also placing orders online." P2 stated,

The use of the website is most successful in marketing our products to our customers. Another successful strategy of marketing our products is that customers placing orders through our website enjoyed a credit facility of six months to one year.

P3 remarked, "We identify the use of websites as successful in marketing our products. With the website well designed and interactive, our prospective customers can navigate and select products of their choice." P5 said,

The use of the website is most successful in marketing our products to our customers. We are able to put a wider range of our products on the website for the customers to search and make purchases. Another successful strategy of marketing our products is that customers placing orders through our website enjoy a good discount on their shopping than a walk into our showrooms.

Responding to Interview Question 3, P1 said, "We make sure our clients or potential customers visit our website to view our product catalog." P2 stated, "On our website, we show our products made from our well-seasoned tropical wood that competes with imported furniture from countries such as Italy, UK, Spain, and the USA." P5 indicated, "We mostly use our website for marketing our products." P2 also acknowledged that an interactive designed website is essential "to ensure customer retention and repeat business. The correct labeling of products on the website for the customers to select as regards the quality and texture." P5 further noted, "the efficient design of the website design to be interactive for good customer experience and retention."

In response to Interview Question 5, P2 stated, "We address these key barriers by making our website more visible. By redesigning, we created a more interactive website with frequent and continuous updates and putting relevant information to assist customers in making a better choice of our products." P3 remarked, "The final website only required clicks and not typing to select products and complete the process of purchasing." Some participants also noted:

- We also let our web designer make our website more interactive and simpler
  to use by using checkboxes to complete all transactions on the website. We
  make the website more attractive by putting high-resolution pictures of our
  products for the customers and provide accurate descriptions. (P4)
- We address the key barrier of making our website interactive by outsourcing
  the website design to competent IT firms. By outsourcing, we redesigned the
  website and created a more interactive website with frequent and continuous
  updates, putting relevant information to assist customers in helping them
  make a better choice of our products. (P5)

Responding to Interview Question 6, P3 said, "We integrate into our website and social media platforms possible locations of our showrooms where the customer can select for the delivery to their addresses." P1 said, "We want to make our website more interactive for better customer experience." P3 stated, "It is also clear to us that we are experiencing more traffic on social media platforms than the website, which indicates the web presence is losing the competition to social media."

The participants' responses to the interview question aligned with research suggesting that business leaders use the hosting of the website to market products. The study findings demonstrated that SME business owners in the furniture industry used hosting of the website as a strategy to adopt e-commerce to market products and sustain their business in Ghana. As applied in this study, 100% of the participants attested using the hosting of a website as a strategy to adopt e-commerce to market products.

## Theme 3: Mode of Payment

The adoption of e-commerce technologies such as electronic data interchange and electronic fund transfer may help to improve customer service, trading partner relationships, cost reduction, supply chain management, and contribute to business profitability (Awiagah et al., 2016). The theme, mode of payment emerged from Interview Questions 4-6. All participants acknowledged using the mode of payment as a strategy to adopt e-commerce to market products in Ghana's furniture industry.

Responding to Interview Question 4, P1 said, "We also experience some delays in receiving payments due to a lack of trust of customers on online payments... most customers are unable to complete their shopping on various platforms because of a lack of credit/debit cards." P2 stated,

We also have the barrier of delayed or ease of payment online using the available channels. Most customers have challenges in funds transfer sometimes due to

Internet network failure and the limit of their transactions per day from their banks. P3 remarked, "We do encounter some challenges regarding delayed payments online because of the limited use of credit/debit cards. As a result, some customers may prefer personal contact to pay cash. We also have the issue of trust." P4 affirmed encountering "some challenges as regards payments online because most customers do not have access to credit/debit cards to complete the transactions on the platforms." P5 attested facing a challenge of "delayed payments online using the available channels" and the frustrating issues around the transfer of funds "due to Internet network failure and the limited use of credit/debit card."

Responding to Interview Question 5, P1 said, "We addressed the delay in payment for orders by providing multiple options of payment, which now includes the mobile money transfer method provided by telecommunication service providers, such as MTN MoMo, Vodafone Cash, and AirtelTigo Cash." P2 stated, "We encourage payment by mobile money transfer from our customers who are unable to use the banking method with debit or credit cards." Responding to Interview Question 5, some participants explained:

- To address the limited use of credit cards, we integrated into our e-commerce marketing platforms with payment options accessible to many of our target audience. These payment options involve the use of mobile money transfers from telecommunication service providers like MTN MoMo, Vodafone Cash, and AirtelTigo Cash. As regards the preference of personal contact and trust of society exclusively in using cash, we accommodated a section on our platforms that allowed customers to request for a face-to-face meeting with sales/marketing representatives at the customer's convenience. (P3)
- We address the challenges in payment by adopting the easiest form of payment, which is by using a mobile money transfer. The interoperability of telecommunication service providers enhanced the use of mobile money transfer on the platforms to make payments by customers. Some of these mobile money platforms that we use include MTN MoMo, AirtelTigo Cash, and Vodafone Cash. The provision of the multiple payment options that are

available to our customers helps to avoid delayed payments and uncompleted transactions on our platforms. (P4)

Responding to Interview Question 5, P5 posited, "We overcome the delayed payment by introducing mobile money transfer for our customers who are unable to use the banking method with debit or credit cards." Responding to Interview Question 6, P1 said, "It is advisable to integrate efficient payment models with the website using reputable Banks and Fintech companies for the protection of customers." P2 stated, "Improved payment systems using mobile money transfer, which is available in rural areas, will help grow our business." Responding to Interview Question 6, P3 remarked, "Online payment sometimes is a problem for our customers, so instead of using the credit/debit cards, we introduced the use of the mobile money transfer option to complete transactions online." Some participants noted:

- To address the issue of payment, we are taking advantage of the interoperability of all the telecommunication service providers using the mobile money transfer platform. Additionally, by working closely with reputable Banks and the Fintech companies, we can provide secure and reliable online payment options for our customers who want to use their credit/debit cards for their transactions online. (P4)
- We do have problems regarding online payment, so instead of using the credit/debit cards, we introduced another option of using a mobile money transfer. The improved payment system using mobile money transfer, which is available in rural areas, will help grow our business. (P5)

The participants' responses to the interview question aligned with Awiagah et al.'s (2016) statement that business leaders consider the mode of payment to adopt e-commerce to market products. The study findings demonstrated that SME business owners in the furniture industry used the mode of payment as a strategy to adopt e-commerce to market products and sustain business in Ghana. As applied in this study, 100% of the participants attested using the mode of payment as a strategy to adopt e-commerce to market products in the Ghanaian furniture industry.

#### **Theme 4: Efficient Infrastructure**

The inadequate IT infrastructure in emerging economies, Ghana inclusive, dramatically hinders the fast spread of e-commerce not only among SMEs but also among the public (Kabanda & Brown, 2017). Organizations have the opportunity to establish a reliable network and electricity infrastructure for business sustainability in Ghana (Choshin & Ghaffari, 2017). By determining the existence and needed level of appropriate infrastructure on technological, physical, financial, and institutional levels, business leaders in developing countries such as Ghana can manipulate e-commerce successfully (Alyoubi, 2015). If the government and other stakeholders in the ICT sector focus on addressing infrastructural issues adequately, developments will be rapid, and e-commerce will be enhanced efficiently (Awiagah et al., 2016). SMEs depend on government readiness and support to expand the ICT infrastructure and the managerial capabilities of the business owners regarding innovation and growth (Ewurah, 2017). The theme, lack of infrastructure emerged from Interview Questions 4-6. Four of the

participants identified efficient infrastructure as a strategy to adopt e-commerce to market products in Ghana's furniture industry.

According to Ocloo et al. (2018), most of the remote areas in developing countries, Ghana included, have no or minimal access to Internet infrastructure such as high-speed fiber optic cables needed for the adoption of e-commerce. Adequate telecommunications infrastructure is key to the advancement of e-commerce in the developing world, but Ghana lacks such sophisticated telecommunications machinery (Agboh, 2015; Kwadwo et al., 2016). According to Ocloo et al. (2018), most of the remote areas in developing countries, including Ghana, do not have or only have limited access to Internet infrastructure such as high-speed fiber optics to open the capacity for ecommerce. Responding to Interview Question 4, P1 said, "We also do have major problems regarding the reliability of the supply of electricity, which sometimes forces us to shut down business briefly during the day." P3 identified inadequate ICT infrastructure as a critical barrier to adopting e-commerce, adding, "We sometimes incur high costs in providing constant electricity when there is light off from the Ghana Electricity Company." P4 noted, "We sometimes encounter problems with electricity when there is power off from the national grid, leading to no Internet connectivity."

Concerning infrastructural development, the government should be at the forefront (Awiagah et al., 2016). The alleviation of infrastructure challenges may take place through public-private partnerships where the private sector cooperates with the government to provide e-commerce access and amenities (Ocloo et al., 2018). All stakeholders should give priority to the establishment of the appropriate technology and

improvement in bandwidth and Internet connectivity (Lavery et al., 2018). Responding to Interview Question 5, P1 said, "For an interruptible supply of electricity to run our business smoothly, we purchase a standby generator that can power our server, desktops, laptops, and printers." P3 stated, "Concerning the inadequate ICT infrastructure, we invested in equipping each relevant office with a modern desktop or laptop computer and smartphones for the staff." Continuing, P3 advised, "To overcome the issue of high cost and lack of reliable electricity, we procured a standby generator, which made sure that we had a constant supply of electricity to power all gadgets needed for our e-commerce transactions." Responding to Interview Question 5, P4 remarked, "To make sure there is a constant supply of electricity for our business transactions, we purchased a standby generator to provide an uninterrupted electricity supply to carry out transactions."

According to Hoque and Boateng (2017), developing countries often lack the physical, legal, and economic infrastructure needed for e-commerce growth. Some barriers to e-commerce adoption in developing countries like Ghana are poor logistics in information distribution, inadequate technology, limited telecommunication transmission capabilities, and the lack of credit cards (Agwu & Murray, 2015; Esmaeilpour et al., 2016; Rahayu & Day, 2015). Local and international business can only connect if there are proper telecommunication infrastructures in place as the provision of necessary infrastructure can enhance the adoption of e-commerce by SMEs (Al-Alawi, & Al-Ali, 2015). Some participants stated:

 Delivery to customers is always by road, and most of the time, we experience delays for the products to reach our customers. We have therefore put up

- more showrooms for easy pick-up of products by customers after shopping online. We also engage the services of major transport companies using their night services to reach remote areas to complement our transport system. (P2)
- All our delivery is by road, and we do suffer some setbacks due to the bad
  road network, so we engage other transport companies to deliver our products
  to remote areas. We use our transport system for delivery to other difficult
  areas where the house addresses are not very easy to locate. (P3)

The participants' responses to the interview question aligned with Awiagah et al.'s (2016), Ewurah's (2017), and Hoque and Boateng's (2017) statements that business leaders require to establish reliable network and electricity infrastructure to adopt ecommerce to market products. The study findings demonstrated that SME business owners in the furniture industry used efficient infrastructure as a strategy to adopt ecommerce to market products in Ghana. As applied in this study, 80% of the participants attested using efficient infrastructure as a strategy to adopt e-commerce to market products in the Ghanaian furniture industry.

### Findings Related to the Technology Acceptance Model

Many researchers have successfully applied TAM to understand why and how individuals decide to use a particular technology (Faqih, 2016; Peng et al., 2015; Rahman et al., 2016; Saprikis et al., 2018). Researchers use TAM to understand that a user's decision to accept new technology depends on its PU and PEOU (Wunnava, 2015). The study findings indicate that some SME business owners could adopt e-commerce to market products by implementing strategies based on TAM. As applied in this study, all

participants attested using a combination of strategies to adopt e-commerce to market products and sustain the business.

Some of the tenets of TAM include the relationship between PU, PEOU, attitudes toward computer usage, and intentions to use technology (Wunnava, 2015; Yeh, 2015). According to Awiagah et al. (2016), TAM is the appropriate model the scholars use to explain how external variables influence the belief, attitude, and intention in the use of IT systems. As applied in this study, SME business owners should establish strategies for adopting e-commerce to market products and improve business performance. All participants confirmed the TAM regarding the use of strategies to adopt e-commerce to market products.

Researchers have used TAM in previous studies. Sondakh (2017) applied TAM to a study designed to predict the interest of taxpayers in using electronic tax returns. Some researchers have used the TAM to explain the adoption of mobile digital libraries with results showing that functional system interfaces should be intuitive, interactive, tailor-made, and easy-to-use (Gholami et al., 2018). As applied in this study, SME business leaders have adopted e-commerce to market products and improve business performance. All participants' responses echoed Gholami et al.'s assertion on the importance of adopting e-commerce to market products.

Abdekhoda et al. (2016) applied the TAM to explore physician acceptance of EMRs. Alalwan et al. (2016) used the TAM to explain the key factors influencing a customer's intention to adopt mobile banking. Liébana-Cabanillas et al. (2018) analyzed users' acceptance of mobile payment systems on social networks by integrating trust and

perceived risk into the traditional TAM. The study findings from previous research studies indicate that TAM is a useful framework that SME business owners could use to adopt e-commerce to market products for improved business sustainability. As applied in this study, all participants' responses echoed Alalwan et al.'s and Liébana-Cabanillas et al.'s statements on the adoption of e-commerce to meet business needs.

All participants used a combination of strategies involving the use of social media, hosting of website, mode of payment, and efficient infrastructure to adopt e-commerce for product marketing to improve business performance. As applied in this study, all participants applied the TAM principles regarding the user's PU and PEOU decision to embrace new technology to adopt e-commerce to market products.

# **Applications to Professional Practice**

The identification of strategies that SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana is crucial to improving business performance and sustainability. Successful adoption of e-commerce technologies could provide SME business owners with an alternative e-commerce strategy to compete in the local and global markets (Alzahrani, 2019). The results of this study could contribute to information sharing, collaboration, and teamwork among SME business owners who are seeking strategies to use to adopt e-commerce to market products. Based on the study findings, the most significant contribution to professional practice may be the provision of a practical model for SME business owners to develop strategies for adopting e-commerce in the Ghanaian furniture industry. The practical model could serve as the basis for improving business practice in other countries' furniture industry.

By adopting e-commerce, SME business leaders could reach more customers and to expand the supply chain network for significant productivity (Kabir & Musibau, 2018). According to Agwu and Murray (2015), e-commerce adoption within a company often enables growth and expansion. All the participants asserted using a blend of strategies to adopt e-commerce to market products. The results of this study could aid SME business owners to adopt e-commerce to market products and achieve business success. The findings from this study could significantly enhance a firm's performance on strategies to use to adopt e-commerce to market products in the Ghanaian furniture industry. The findings of this study might add value to the furniture business community through the dissemination of information regarding e-commerce strategies to market products and provide a competitive edge to individual furniture firms. All participants acknowledged that the use of social media and hosting of the website were fundamental to adopting e-commerce to market products in the Ghanaian furniture industry.

Malkov and Smolyakov (2015) posited that e-commerce does not have boundary restrictions to make SMEs more competitive. The results of this study could contribute to business practice by providing e-commerce strategies that could enable business leaders to respond to business stimuli and adapt to external changes in the business environment. The findings from this study could contribute to the literature on e-commerce and provide SME business owners with new insight regarding strategies to use to adopt e-commerce to market products in the Ghanaian furniture industry. New and upcoming SME business leaders may use the findings of this study to understand the

strategies and best practices for adopting e-commerce to market products in the Ghanaian furniture industry.

## **Implications for Social Change**

The study findings may significantly contribute to providing SME business owners with e-commerce strategies to market products in the Ghanaian furniture industry. Relative to economic growth and social inclusion, SMEs play an essential role in developed and developing countries by increasing employment and creating industries (Terzi, 2015). According to Ndiaye et al. (2018), SMEs employ about half of the workforce in developing countries, contribute 60% of total employment, and 40% of GDP in emerging economies. The positive social change contribution by business owners might involve the provision of employment for the local community. By adopting e-commerce, SME business owners will market products, earn revenues to engage more staff, thereby providing job opportunities for the local community where the company is operating. The study findings contribute to positive social change by helping SME business owners to understand the e-commerce challenges in the Ghanaian furniture industry and gain adequate knowledge of strategies to use to adopt e-commerce to market products.

In Ghana, West Africa, SMEs are the backbone of the economy, representing roughly 85% of businesses within the private sector and contribute about 70% of Ghana's GDP (International Trade Centre, 2016). SMEs could contribute to employment creation depending on their ability to adapt to the competitive and continuously changing business market (Elbeltagi et al., 2016). The implications for a positive social change of this study

included the local communities might benefit from the economic growth resulting from improved business performance. As illustrated in this study, adopting e-commerce strategies might assist SME business owners to successfully market products and continue to provide job opportunities to the local community. With increased employment, the SME business owners may create a more economically empowered local population, which might help reduce poverty in the local communities.

Ayyagari et al. (2014) found significant evidence to suggest that SMEs are relevant sources of employment growth and job creation. However, Page and Söderbom (2015) argued that although SMEs create new jobs, they can also destroy jobs through higher failure rates. As illustrated in the study findings, e-commerce strategies might assist SME business owners in the furniture industry to market products and continue to provide social amenities and educational empowerment to the local community. The result of this study might instill a heightened sense of self-worth and respect among the SME business owners in the local market for contributing to the welfare of the local communities. By applying the findings from this study, SME business owners might adopt e-commerce to market products and sustain their business to the benefit of the local community.

The SME implementation of e-commerce may contribute to an increase in revenues and economic growth in developing countries such as Ghana (Kwadwo et al., 2016). By implementing e-commerce strategies, SME business owners could market products and sustain their business. Because the SME business owners could sustain their business, their firms will pay more tax, which the government could use to provide

infrastructures such as roads, electricity, and water for the local citizens. The successful adoption of e-commerce strategies to market products would provide job opportunities to local citizens and promote economic growth in the local community. Sharing the findings of the study amongst SME business owners could encourage the adoption of successful e-commerce strategies by more SMEs, which might increase employment and incomes in regional communities. The general public might learn from the e-commerce strategies that SME business owners use to market products in the Ghanaian furniture industry.

#### **Recommendations for Action**

Adopting e-commerce strategies to market products is essential to business success. Researchers have attributed the low rate of adoption of e-commerce technology in developing countries to a lack of proper understanding of the benefits of e-commerce (Alyoubi, 2015). The study findings indicate that SME business owners use a combination of e-commerce strategies to market products. In developing countries, most SME business owners do not realize the advantages of using e-commerce because they presume that e-commerce adds costs to their businesses (Chen & Zhang, 2015). Some SME business owners who operate e-commerce businesses listen to the needs of consumers and develop strategies to improve business practices and satisfy customers (Thakur, 2018). I recommend that SME business owners should adopt e-commerce strategies to market products for business sustainability.

SMEs face challenges using e-commerce strategies to market their products in developing countries (Agwu & Murray, 2015). According to Ahmad et al. (2015), many

SME business owners lack sufficient knowledge about the benefits of e-commerce, including the organization's competitiveness on their business profitability. SME business owners lack the knowledge and capabilities to adopt e-commerce strategies resulting in the low percentage of e-commerce adoption by SMEs to market their products (Barroso et al., 2019). A critical problem facing SMEs is the need to carry out sales and market products successfully using e-commerce (Holland & Gutiérrez-Leefmans, 2018). I recommend that SME business owners should have adequate knowledge of e-commerce and ICT to identify the appropriate strategies for successful marketing of products.

Business leaders in Ghana have fewer resources and are reluctant to use e-commerce tools such as websites and blogs, electronic mail, search engines, social media, and virtual communities for their business transactions (Barroso et al., 2019). Some SME business leaders often fail to utilize e-commerce technologies and tools to reach more customers and attract more business opportunities (Choshin & Ghaffari, 2017). The infrastructural, socio-cultural, socio-economic, and political factors influence the adoption and usage of e-commerce among SMEs in Ghana (Ocloo et al., 2018). Kabir and Musibau (2018) advised business leaders to consider the adoption of e-commerce in their daily business operations. I recommend that SME business owners should adopt social media and hosting of websites to market products and sustain their business.

The main barrier to e-commerce adoption by SMEs in developing countries is poor infrastructure (Elbeltagi et al., 2016; Kabanda & Brown, 2015). SMEs in Ghana also have problems accessing technology due to limited bandwidth and poor Internet

connectivity (Afolayan et al., 2015). According to Awiagah et al. (2016), the application and use of e-commerce in developing countries could help reduce the costs of communication, advertising, marketing, production processes, and the delivery of goods and services to the global market. I recommend that SME business owners should ensure efficient infrastructure in adopting e-commerce to market products and sustain their business. I will disseminate the results of this study to various stakeholders through presentations in conferences, training, and seminars, publications in academic and business journals, and knowledge sharing in my place of employment and social network.

## **Recommendations for Further Study**

The purpose of this qualitative multiple case study was to explore the strategies some SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. In developing countries, SMEs face challenges in using e-commerce strategies to market their products (Agwu & Murray, 2015). The study findings provided rich information that future researchers could further explore regarding the strategies SME business owners use to adopt e-commerce to market products. A significant limitation of this study was the small sample size of five SME business owners from five furniture firms in Ghana. Researchers who use larger or smaller sample size could generate different themes. I recommend that future researchers should use a more significant sample size consisting of participants with various roles and responsibilities in e-commerce from varied industrial sectors.

This study was limited to a cross-sectional, qualitative multiple case study involving SME business owners in five firms in the Ghanaian furniture industry. I

recommend that future researchers should explore longitudinal, quantitative, or mixed methods, involving participants from different levels of employment in diverse industrial sectors at different geographical locations. Another limitation of this study was the demographic pattern, the information participants shared, and the availability of archival data. I recommend that further studies should focus on the strategies that generation X and Y, immigrants, millennials, minorities, natives, men, or women SME business owners use to adopt e-commerce to market products for improved business performance.

This study was limited to my accurate interpretation of the participants' responses to the interview questions because I have limited knowledge and competency in the doctoral research study. The study was also limited to my professional background as a business practitioner and personal beliefs regarding e-commerce strategies for marketing products for improved business performance. I recommend that future study should involve research experts from related multidiscipline in e-commerce to capture details that I might have missed in this doctoral research.

#### Reflections

In conducting this qualitative multiple case study, I explored the strategies SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. I used the purposive sampling technique to select five SME business owners from five firms in the Ghanaian furniture industry. By using the purposive sampling technique, I selected five SME business owners who had relevant knowledge, competence, and experience to answer the research question. The qualitative research method enabled me to conduct semistructured interviews and interact with the

participants, which improved my communication, emotional intelligence, interpersonal, listening, and networking skills. By interviewing at participant's convenient time and date, the respondents expressed themselves freely, which allowed me to gain in-depth knowledge and understanding of the research problem.

Before commencing this study and to comply with the research ethics, I obtained IRB approval before engaging with the participants, which enabled me to gain a better understanding of the requirements for using human beings in a research study. The use of emails and telephone calls to contact the participants offered me the opportunity to improve my collaborative, inspirational, negotiation, and listening skills. By organizing and analyzing the data collected from participants to establish themes and patterns, I was able to understand the research problem and establish the study findings.

From the study findings, I obtained an in-depth knowledge of the research problem from five SME business owners involving the use of a similar blend of e-commerce strategies to market products for improved business performance. Of particular interest is the knowledge that SME business owners use social media, host websites, mode of payment, and efficient infrastructure as e-commerce strategies to market products. My understanding of the research problem positively changed my personal biases and preconceived ideas and values on the e-commerce strategies SME business owners in the furniture industry use to market products in Ghana. A reflection on my experience within the doctoral study process indicates that I gained a better understanding of the research process, which improved my self-confidence and skill in conducting academic research work.

# **Summary and Study Conclusions**

SME business leaders are facing a critical problem of adopting e-commerce to market products. This qualitative multiple case study aimed to use TAM to explore strategies that SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. I administered seven open-ended questions through semistructured interviews of five SME business owners from five furniture firms to collect data to answer the research question. Four themes emerged from the thematic analysis of data indicating the improvement strategies that SME business owners in the furniture industry use to adopt e-commerce to market products in Ghana. The themes were (a) use of social media, (b) hosting of website, (c) mode of payment, and (d) efficient infrastructure.

Potential and contemporary SME business owners may gain useful insights and information on e-commerce strategies to adopt in marketing products. The adoption of e-commerce strategies to market products might assist SME business owners in sustaining their business and continuing to provide job opportunities to the local community. The successful adoption of e-commerce could result in stable income for community employees, promote economic growth within the community, and a positive lifestyle for residents. The general public might learn from the e-commerce strategies SME business owners use to market products in the Ghanaian furniture industry. The use of TAM as a lens for this study may fill a gap in the literature on e-commerce. The study findings align with the conclusions of previous scholars on the significance of adopting e-commerce strategies to market products for improved business performance.

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## Appendix A: Interview Protocol

Date of Interview: Code Assigned:		
1. Introduce self to the participant(s).		
2. Introduce the research topic.		
3. Thank the participant for taking the time to respond to the invitation to participate		
in the study.		
4. Briefly go over contents of the consent form send by email, answer questions and any		
concerns of the participant before starting the phone interview.		
5. Request for participant's permission to start the voice recording of the phone		
interview.		
6. Remind the participant of the purpose of the study is to explore strategies that some		
SME business owners in the furniture industry use to adopt e-commerce to market		
products in Ghana.		
7. Begin the interview with question #1.		
8. Introduce follow-up question(s) where applicable		
9. End interview sequence; discuss the follow-up member checking process with		
each participant and request for company documents to be sent through email.		
10. Thank the participant(s) for their part in the study.		
End protocol.		

## Appendix B: CITI Certificate



Completion Date 30-Mar-2019
Expiration Date N/A
Record ID 31101301

This is to certify that:

## Joseph Kwaku Amaglo

Has completed the following CITI Program course:

Student Researchers (Curriculum Group)
Student Researchers (Course Learner Group)

1 - Basic Course (Stage)

Under requirements set by:

**Walden University** 



Verify at www.citiprogram.org/verify/?w5ca08e7b-6d89-4f6d-b6a2-0cae0a6a926f-31101301

## Appendix C: Interview Questions

Date of Interview:	Code Assigned:	· · · · · · · · · · · · · · · · · · ·
	. 6	

- 1. What strategies did you use to adopt e-commerce to market your products?
- 2. What strategies were most successful in the adoption of e-commerce to market your products?
- 3. What aspect of e-commerce do you frequently use for marketing your products?
- 4. What were the key barriers to adopting e-commerce to market your products?
- 5. How did your company address the key barriers to adopting e-commerce to market your products?
- 6. What innovative ways of adopting e-commerce can help you grow your business?
- 7. What else would you want to share regarding the strategies that SME business owners can use to adopt e-commerce to market their products?