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Technological Factors for the Sustainability of the Small Business Entrepreneur

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2015

Abstract

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by

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MBA, Atlanta University, 1984

BSc, University of Benin, 1978

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Technical innovation creates challenges for the small business entrepreneur who uses global activities in the marketplace. Information technology and the technological innovations of the World Wide Web are driving competitiveness in the marketplace with a loss of market share for the individual business owner. The purpose of this phenomenological study was to explore the lived experiences and perceptions of a purposive sample of 20 small business owners in the metropolitan Atlanta area regarding the effect of technology, technological insertion, and application for long-term sustainability. Rogers's diffusion of innovations theory served as the conceptual framework of this study. Data were gathered through face-to-face, semistructured interviews. After analyzing the interview transcripts using inductive analysis, 6 major themes emerged. The themes include the forces that drive the introduction of technology, types of technology used to reach potential and existing customers, most commonly used and implemented types of technology, the beliefs and values on the use of technology, the obstacles that inhibit the use of technology, and the competitive advantage of the use of technology for the small business entrepreneur. The implications for positive social change include the potential for growth and sustainability for the small business entrepreneur leading to stronger economies and job creation in local communities and nationally. Small business owners may use the findings to implement technology insertion strategies contributing to long-term sustainability initiatives. These findings may also inform scholars of business management and entrepreneurship regarding the effect of technology, technological insertion, and application for long-term sustainability.

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Dedication

To my wife Bomo, and daughters Alero, Linda, Odemi, and Toju for their support through this life changing experience: You gave me the inspiration to continue and complete this doctoral journey. Finally, to my Lord and savior: to whom all glory belongs for achieving this milestone.

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Section 1: Foundation of the Study

Small business owners face challenges of profitability while coping with demands posed by technological innovations (Chitakornkijsil, 2009; Ferguson, Green, Vaswani, & Wu, 2013). The success of small businesses as creators of jobs and their economic role in the community and nation negates the need for a study on growth and sustainability strategy that includes the effect of technology (Haag & Cummings, 2008). The purpose of this study was to explore the experiences and perceptions of small business owners regarding technology insertion strategies for long-term sustainability.

Background of the Problem

As organizations continue to pursue strategies for sustainability, the need for environmental awareness and social responsibility to the community has become a necessity for long-term survival and sustainability (Rusinko, 2005). A sustainability initiative is a driving force for success to move forward in the 21st-century business environment (Rusinko, 2005). With increased global competition and management, decision makers are focusing on a more efficient innovative strategy while cutting back on research budget for competitiveness (Estrin, 2009).

Startup companies encompassing entrepreneurs and venture capitalist benefit from this trend by becoming a driving force for innovation (Estrin, 2009). The leaders of larger companies are applying feedback from both consumers and entrepreneurs through knowledge brokering. This occurs within the supply chain to further ideas for developing innovative initiatives (Harvard Business Review on Innovation, 2001). The willingness of a small business entrepreneur to take a calculated risk plays a significant role in

innovative creativity. This is done through the development of ideas from frontline interactions with customers to satisfy the needs of individuals or groups (Harvard Business Essentials, 2003). Changes in technological innovations through information technology (IT) and the World Wide Web have created challenges for the small business entrepreneur (Bayer & Servan-Schreiber, 2011).

Entrepreneurs are decision makers who generally capitalize on opportunities for innovation (Olson, 1986). In the global marketplace, outsourcing and globalization have perpetuated the evolution of the entrepreneurial transition into international territory (Chitakornkijsil, 2009). Entrepreneurs rely on networking opportunities created by the Internet and IT for agility in distribution, design for growth, and adapting to challenges and threats posed by environmental, cultural, and political factors (Lacity, Willcocks, & Khan, 2011). The use of technologies such as computer programming for data warehousing has become an organizational initiative for strategic planning for departmental networking and communication processes (Castro, Montoro-Sanchez, & Ortiz-De-Urbina-Criado, 2011).

Crisis management and total quality management require strategic planning initiatives for survivability involving technological innovation (Senge, Smith, Kruschwitz, Laur, & Schley, 2008). The goal of global sustainability is to manage the risk and challenges posed by innovations to the environment, as well as to manage the economic and social implications for business stake and shareholders (King, 2008). Achieving sustainability requires a swift reaction to changes within industry and market

by meeting threats from the dynamism of technology. It also requires including strategies that encompass a consideration of technology as an influence factor (King, 2008).

The competitive environment created by technology tools such as eBay and the World Wide Web have driven companies into price wars for competitiveness in product and service offerings to consumers (Haag & Cummings, 2008). The Internet continues to play a role in the marketing strategy for businesses. Consumers are shopping the Internet rather than engaging in direct transactions involving person-to-person business dealings (Benedicktus, Brady, Darke, & Voorhees, 2010). Within organizational structure, managers use computer programs to keep track of customers with data warehousing activities. These technological applications and insertions have prompted the need to examine the effect of technology in the sustainability strategy of the small businesses entrepreneur. Sustainability initiatives will be driving forces for success to move forward (Haag & Cummings, 2008). Evolutionary challenges from technological innovation continue to pose a threat to sustainable human and societal development in technology-dominated global business (Gramling, Freudenburg, Laska, & Erikson, 2011).

Entrepreneurship has been the foundation of businesses in America, and small businesses play an important role in the American economy. According to Kuratko (2005), entrepreneurial small businesses employed 53% of the private workforce, and accounted for 47% of sales and 51% of private sector gross domestic product of the US economy. The building of a lasting company in a global business environment requires the continual creation of innovative products and services (Estrin, 2009). When leaders fail to keep pace with technological innovations, businesses tend to lose market share and

experience increased challenges with survivability and sustainability (Harvard Business Essentials, 2003). In this study, I explored and documented the experiences and perception of entrepreneurial small business owners regarding the effect of technology insertion tools on sustainability.

Problem Statement

Entrepreneurial small business owners continue to experience losses on return on investment (Chitakornkijsil, 2009; Cole, 2013). The number of entrepreneurial small business owners experiencing loss of market share and the inability to compete has increased significantly since the advent of Internet and World Wide Web innovations (Gilbert & Reid, 2009; Moores, 2010; Seo, Perry, Tomczyk, & Solomon, 2014). The general business problem is that some business leaders are unable to insert technology at various stages of growth in the life cycle of their respective businesses (Verreynne & Meyer, 2010). The specific business problem is that most small business owners need to refine the process or strategy for the insertion and application of technology in their respective business operations to ensure growth and survivability (Hempel, Ostermeier, Schaaf, & Vedder, 2013).

Purpose Statement

The purpose of this qualitative phenomenological study was to explore the experiences and perceptions of small business owners regarding technology insertion strategies for long-term sustainability. Small businesses for this study were defined as self-starter businesses, managed by individual entrepreneurs who are involved in the sole decision-making process for sustainability in their respective businesses. By applying a

qualitative approach and a phenomenological design with an interview as the data collection instrument, I interviewed 20 entrepreneurial business owners. A sample of 20 is a realistic purposive sample size in a qualitative study (Cunliffe, 2011).

Using the interview information, I identified patterns and themes relating to the effect of technology in the strategic planning for long-term sustainability. The metropolitan Atlanta area was representative of the study population. The answers to questions, along with the findings provided stakeholders of small businesses within the metropolitan Atlanta area with insights and information on the effect of technology on the sustainability of their respective businesses. Positive social change occurs through better employment and income opportunities that result from improved environmental conditions for the entrepreneur. This provides additional tax revenue to the local community (Malchow-Møller, Schjerning, & Sorensen, 2011). In addition, improvements within the local community occur when small business leaders take advantage of technology while providing employment opportunities (Kuratko, 2005).

Nature of the Study

The purpose of this qualitative phenomenological study was to explore the experiences and perceptions of small business owners regarding technology insertion strategies for long-term sustainability. Thomas and Magilvy (2011) explained that a qualitative phenomenological researcher focuses on the totality or structure of the experience of the participants. The intent of qualitative research is to understand a particular social situation, event, role, group, or situation (Babbie, 2007). Qualitative research is a highly investigative process. A qualitative researcher gradually makes sense

of a social phenomenon by contrasting, comparing, replicating, and classifying the object (Babbie, 2007).

A quantitative research method was not as effective as a qualitative method for this research study because the focus was to explore the factors of technology and technological insertion on the long-term sustainability strategy as a phenomenon. To determine that a qualitative design was more suitable for this study the following points were considered: (a) the study was to explore and sought an understanding of a central phenomenon, (b) the nature of the problem required that I explored through the seeking and understanding from personal experiences of the participants rather than describing trends or relationship between variables, (c) a small sample size was used rather than a larger sample size, and (d) the use of in-depth verbal interviews allowed me to search for common themes and factors rather than gathering numeric data for statistical analysis or predicting trends. The relationship between qualitative research participant and the researcher are that of interactive and collaborative (Cain, 2010). The qualitative research process for this study allowed exploration through data collection and analysis through responses to questions in the words of the participants.

Other qualitative designs and approaches considered for this study were grounded theory and ethnography designs. These qualitative approaches apply much broader theoretical agendas involving analytical implications that were deemed not feasible for this study and were rejected for this research (Babbie, 2007; Marshall & Rossman, 2010). Grounded theory allows a researcher to create a theory that described the research topic, whereas ethnography tends to describe a cultural group behavior pattern or beliefs

(Dunne, 2011). The phenomenological method was considered as a more conducive design for this study than the grounded theory, and ethnographic method because observation of the business owners at their various settings were considered not feasible for the exploration and uncovering of personal experiences regarding the effect of the application of technological tools or insertion on the sustainability initiatives.

Research Question

The central research question was: What are the perceptions and experiences of small business entrepreneurs regarding technology insertion and application strategies for long-term sustainability?

Interview Questions

I asked the following interview questions from the participants of this study to contribute knowledge to the research question.

1. What does technology insertion mean to you?

2. Have you engaged in or implemented any technology insertion efforts the last 3 years? Why or why not?

3. What types of technology have you inserted?

4. How do you think technology affects the sustainability of your business?

5. What are the forces that resist or drive you to introduce technology?

6. What have you experienced regarding implementing technology in the different functional areas of your business?

7. What are your beliefs about the value of implementing technology in your business?

8. What do you believe about the following statement: Implementing technology helps in the success of my business?

9. What do you believe about whether implementing technology could aid with creating a competitive advantage?

10. What type of technology do you employ in reaching your potential and existing customers?

11. What type of technology do you use within the internal operation and activities of your organization?

12. Explain any external factor or factors that contribute or inhibit the use of technology for the everyday operation of your business.

13. Are there any changes to assist you in implementing technology in your organization?

14. Do you consider technology as a threat to the success of your business in moving forward?

15. Do you consider yourself to be technology savvy?

16. What is your philosophy on implementing technology in your business?

Conceptual Framework

The theoretical underpinning of this study is Rogers's (2003) theory of diffusion of innovations. The theory explains how idea or product gains momentum and spread through a social system. People, according to Rogers, are part of the social system. Introducing an innovation to a target population within the social system requires understanding of the characteristics of the target population (Rogers, 2003).

The process of diffusion of innovations within a social system includes the communication channels, and time factor (Rogers, 2003). The question of uncertainty remained key concern to members of the social system in adoption of innovation. Reducing the level of uncertainty requires individuals in the social system evaluating the advantages and disadvantages of such innovation (Rogers, 2003). Rogers concluded that communication channels are significant at the knowledge stage in the diffusion process and including the time dimension was significant in the innovation-diffusion process.

The innovation-decision process involves a knowledge of the innovation, and the decision to implement the innovation (Rogers, 2003). Adopters are distinguished categories within the social system. Rogers concluded that these adopter categories include the innovator, early majority, late majority, and laggard; each playing significant roles in the diffusion of innovation process

Definition of Terms

The following includes defined terms and phrases that are used in this study.

Blue ocean: Open market space with little to no competition, allowing the introduction of new industries, products, or services (Kim & Mauborgne, 2004).

Hermeneutical phenomenology: Research toward lived experiences, and interpreting life in which the researcher seeks to reveal the essence of human experience by asking what the nature of the phenomenon under study (Hatch, 2002).

Phenomenological study: A study that attempts to understand people's perception, perspectives, and understandings of a particular situation (Leedy & Ormrod, 2001).

Protocol writing: Asking individuals to write their experiences down that relates to the phenomena under investigation (Hatch, 2002).

Start-up: A business or an undertaking that began operation and grew from a tiny organization to a multimillion-dollar corporation (Barringer & Ireland, 2010).

Sustainability: A need to live in the present in ways that do not jeopardize the future (Senge, Smith, Kruschwitz, Laur, & Schley, 2008).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions carry risk (Bansal & Corley, 2011; Leedy & Ormrod, 2001). Identifying assumptions aids a person's understanding of the topic (Leedy & Ormrod, 2001). According to Leedy and Ormrod (2011), assumptions are what the researcher takes for granted and may cause misunderstanding.

In this study, the following assumptions were:

1. The participants of this study were honest when answering the interview questions.

2. The participants of this study were honest when providing the protocol writing.

3. Participants were honest for not disclosing or discussing any of the interview conversations with other individuals.

4. Participants understood, knew, and answered the questions asked during the interview.

5. The individuals interviewed provided information that was representative of the population considered in this study.

6. The entrepreneurial business owners in this study implemented some form of technological tool or application in the everyday operation of their respective businesses.

Limitations

Babbie (2007) ascertained that limitations are potential weaknesses or problems identified by a researcher in a study. The limitations of a study establish the inherent boundaries, restrictions, and suspicions of the study (Cunliffe, 2011). The limitations identified in this study were:

1. The study population was limited to the metropolitan Atlanta area.

2. The two types of data collection used for the study were the interview and the protocol writing.

3. Participants were entrepreneurs that were self-made and have been in business for more than 5 years. Realizing the busy schedule maintained by this set of small business owners, I relied on the participants' willingness to engage in the interview and provide the protocol writing.

4. The participants had knowledge regarding the use of various types of technologies within the different levels of operation in the organization.

Delimitations

Delimitations narrow the scope of the study (Leedy & Ormrod, 2001; Nenty, 2010). In this study, I interviewed entrepreneurial business owners who have been in business for more than 5 years with an employee size of no more than 20 in the metropolitan Atlanta area. Participants were asked to respond to the interview questions to explore from their own lived experiences the effect of technology insertion or application on the long-term sustainability strategy of their respective businesses.

<div align="center">Significance of the Study</div>

Contribution to Business Practice

The significant effect and purpose behind this study was that entrepreneurs as well as potential entrepreneurs in both the service and retail businesses in the Atlanta metropolitan area would benefit from the outcome of the study. The results could help provide insight into long-term sustainability initiatives for the small business entrepreneur in the metro Atlanta area with the implementation of technology insertion strategies into the 21st century and beyond. The forces influencing the resistance or encouragement of the introduction of technology in the daily operation of the businesses for sustainability would evolve from this study through the application of the qualitative design. Scholars of business management, entrepreneurship, and sustainability expects to find the design and conclusions from this study informative that can be referenced in future studies about the relevancy of the complex phenomena of sustainability.

Implications for Social Change

The implications for positive social change include the potential for entrepreneurs and would-be entrepreneurs embracing technology and technological application in the strategy for growth and competitiveness in the 21st century business environment dominated by technology and globalization. The improved filial conditions that result from augmented employment and tax revenue generation to society serves as a positive social change implication of this study (Malchow-Møller, Schjerning, & Sorensen, 2011). In addition, the findings presented in this study may promote social change by creating opportunity for improving communities through technological growth and sustainability and providing employment (Kuratko, 2005). The sustainability and survival of the entrepreneurial small business has social implications to both the local and national economy of the United States because entrepreneurial small businesses employed 53% of the private workforce, and accounted for 47% of sales and 51% of private sector gross domestic product of the US economy (Kuratko, 2005). Sustainability is about enhancing people, profit, and the planet in order to impact innovation and sustainable business growth (Nieto, 2009).

Review of the Professional and Academic Literature

The purpose of this qualitative study was to explore the experiences and perceptions of entrepreneurial business owners regarding technology insertion strategies for long-term sustainability. In this section I examine the influence of technology, and the application of technology for operational decision-making initiatives.

The literature review includes secondary sources of articles from journals and dissertations that cover the categories of sustainability, technology insertions, method, and an overview of Rogers (2003) diffusion of innovation theory.

Sustainability

Pearce (2008), Bezzubtz (2009), and Headd and Kirchhoff (2009) linked organizational sustainability strategies with a gap in information technology or technological insertion for sustainability strategic initiatives. Pearce stated that sustainability involves finding the optimum balance within a complex system of independent issues for sustainability to move forward into the 21st century business environment and beyond. Pearce concluded that sustainability strategies include the environmental, economic, social, and political factors. Pearce expressed that different systemic components must function together and be holistically integrated and interwoven for an effective sustainability strategy to work for the improvement of the value for stakeholders and survivability of the organization.

Bezzubetz (2009) addressed conditions of organizational instability during change efforts, and explored: (a) the causal conditions for resultant sustainable change, (b) the stability resulting from the causal conditions, and (c) the strategies used to sustain change. To sustain the vision through the cycle of change, Bezzubetz proposed that when the highest levels of the organization drove organizational change, necessary conditions such as adequate funding, and a transparent trusting environment were more likely to be present. Bezzubetz and Pearce (2008) demonstrated that an evidence-based change process engaging the workforce with adequate administrative and financial resources

ensures successful change and sustainability. Headd and Kirchhoff (2009) used US Census Bureau special tabulations and followed a cohort of small single-establishment firms formed in 1992 and a cohort of fast growers to 2002 to track their employment changes.

The interdependence on one economy created by global market environment involving small- and medium-sized enterprises negates the need for intra organizational networking (AlSagher & Mohammed, 2011). AlSagher and Mohammed concluded that global market activities are influenced by global network, and codependence of capitals for sustainability initiatives. Leaders of organizations must invent themselves in a way that accommodates these social and environmental factors (Bhattacharya, Korschun, & Sen, 2009). Business strategies for sustainability must express the concept of evolutionary advantage through the application of evolutionary system design to cultivate strategies for sustainable success (Borga, Citterio, Noci, & Pizzurno, 2009).

An effective implementation and profitable strategy for sustainable growth requires the adoption of sharing of risk within the value chain, and the global innovation ecosystem (Adner, 2006; Balkau & Sonnemann, 2010; Sherman, 2010). Sustainability and profitability initiatives require increased domestic innovation strategy from the small business entrepreneur (Byus, Deis, & Ouyang, 2010). In times of economic downturn, aggressive innovation strategy creates competitive advantage for sustainability (Calkins, 2010). Information technology innovations improve the performances of organizations by transforming sustainable processes and practices in the local, national, and global economy through research and development (Chapas, Brandt, Kulis, & Crawford, 2010;

Melville, 2010). The rise of innovative technology and competition for talent from emerging economies is compromising the US economy (Bhattacharya, Sen, & Korschun, 2008; Tassey, 2008).

The funding decisions through outside sources were solely on valuation of risk and wealth standings of the entrepreneur. The use of initial public offerings (IPO) or microfinance institutions (MFI) by small or medium sized entrepreneurial firms poses challenges for start-up companies (Gregory, Rutherford, Oswald, & Gardiner, 2005). As small businesses evolve into emerging growth companies, entrepreneurs are making difficult decisions regarding the options available to them on raising capital and the consequences of pursuing any of those options (Coffman & Umemoto, 2010). The decisions made by an entrepreneur will have implications to both the short-term and long-term success of business ventures.

Entrepreneurial finance involving venture capitalists, banks, government loan programs, and business angels as sources for outside financing for entrepreneurs continues to pose challenges in the access of funding for the small business owner (Boasson, 2009; Brewer, 2007). Within an acquisition framework, successful entrepreneurial start-up firms with either a record of sustaining successful ventures have been able to acquire funding through venture capitalists, and monetary ambition outweighs innate principles (Ross, Westerfield, & Jaffe , 2008; Umesh, Jessup, & Huynh, 2007). Winton and Yerramilli (2008) ascertained that bank financing is a viable option for start-up entrepreneurial establishments. Only 12% of innovative entrepreneurial start-ups in the planning stage have debt financing (Katarina, Joannis, & Eugenia, 2010). New

entrepreneurial ventures that cannot attract outside financial resources for technological

expansion, and innovation would fail in the 21st century business environment

(Audretsch, 2009).

As technology, particularly the Internet, continues to dominate the 21st century

global business environment, understanding options available in raising funds using

technology applications is creating challenges for the small business owner (Barringer &

Ireland, 2010). New sources of outside financing present the need for insight about

technology's effect on small business funding as well as accessing capital for cost cutting

initiative, profitability, and sustainability. Entrepreneurial firms represent a large

percentage of job growth and innovation in the United States. In the year 2007, of the

approximately 5.5 million firms that existed in the United States, about half a million

were new start-ups generating approximately 40% of new jobs (Stranger, 2010).

Christensen (2010) concluded that the use of debt and equity could have a long-term

implication for the survival, failure, success, competitiveness, and future expansion of

entrepreneurial venture.

Hsu (2007) investigated the sourcing and valuation of venture capital (VC)

funding among entrepreneurs with varied levels of prior start-up funding experiences,

academic training, and social capital, and concluded that prior funding experience

increased the likelihood of VC funding. Hsu's study was conclusive regarding the effect

of networking through social interactions as a positive influence to the likelihood of

entrepreneurial ventures funded by a venture capitalist. Pontin (2009) also concluded

that consumer Internet behavior influenced venture capitalist decisions to offer funding for start-up and new entrepreneurial ventures.

The corporate sustainability model involving the inputs, outputs, processes, and outcomes of an organization or business need to be productive enough to support a sustainable model (O'Dwyer, 2009). The sustainability model of an organization supports its sustainable performance, financial performance, and survivability (Leavoy & Phyper, 2010). To develop a sustainable technology innovation plan, organizational strategy must keep pace with evolving trends in technology, green product innovations, and customer awareness created by the dot-com explosion (Chow, Goodman, Rooney, & Wyble, 2007; Dangelico & Pujari, 2010).

Nortel Networks, once a thriving networking company, was unable to recover from the dot-com crash of 2000 because the company lacked a clear corporate strategy. In 2010, Nortel filed for Chapter 11 bankruptcy and was disbanded (Cooper & Edgett, 2011). Corporate and entrepreneurial business strategy for growth involves innovative sustainability strategy (Guth, 2009; Schwienbacher, 2008). Creative individuals and entrepreneurs continue to drive innovation in the United States with start-up businesses accessing knowledge through the combination of existing business, academics, social responsibility, self-regulation, corporate responsibility, and capital resources to generate technology-based firms (Colombo, Mustar, & Wright, 2010; Hart, 2010; Hammann, Habisch, & Pechlaner, 2009).

Technology Insertion and Technology Application

Scholarly articles served as the literature related to technology insertion and application for this research study. Eze (1999), Sanchez (2003), and Gary (2010) linked the effect of technology in strategic decision-making process for survivability at various levels. Based on a cross-tabulation of survey data, more than 58% of the respondents believed that the strategic application of IT could help Nigerian commercial banks (NCBs) largely to improve their competitive positions (Eze, 1999). Additionally, Eze showed the influence of implementing IT on a small-sized business as it moves to a larger size.

Gary (2010) showed that a properly implemented enterprise resource planning (ERP) systems delivered increased capabilities and productivity benefits to organizations that invest in such systems. Gary suggested that by implementing a technologically-based ERP system, positive social change is promoted by improving the working atmosphere that results in higher productivity needed for sustainability (Hidayati, 2011). Negative consequences follow when an expensive technological implementation fails to accomplish expected benefits resulting in lost revenues, and dissatisfied and demoralized users (Gary, 2010).

In a study of implementing an e-business component in Tierra Wools, a small, rural, art business in New Mexico, revenues and profits rose, and operating expenses, including marketing expenses, decreased (Sanchez, 2003). In this study, Sanchez investigated: (a) consumers using Tierra Wools' Internet site versus other marketing venues, (b) how Tierra Wools' Internet site compared to the Internet sites of its

competitors, (c) how implementing an e-business site affected Tierra Wools' business

performance trends, and (d) how implementing e-business helped preserve northern New

Mexican culture. Sanchez used a customer survey to determine the utility of Tierra

Wools' Internet site. The quality of Tierra Wools' Internet site was found to be superior

to competitors. The results of the study gave insight and information to help managers of

small, rural businesses understand how implementing e-business would affect their

existing business and the success of small and medium sized enterprises with

globalization (Hoivik & Mele, 2009).

Long-term established industry leaders are often unwilling to take risks to adopt

new technologies and can be overshadowed by competitors with the ability to adapt and

implement new solutions with better value propositions and enhanced corporate social

responsibility (Huyett & Viguerie, 2005; Jamali, Zanhour, & Keshishian, 2009). Leaders

could mitigate the quick pace of innovation and technology by embracing global

complexities and incorporating flexibility into their organizational business strategy

(Huyett & Viguerie, 2005). The decrease in labor needs influenced by the use of

computers in performing marketing, advertising, and logistical tasks has provided

business owners with the added advantage of minimizing capital needs (Cartwright &

Craig, 2006; Lee & Liberman 2010).

In the global marketplace, the interplay between globalization and technology

innovation has created a global competition for markets shares, pushing larger corporate

enterprises and smaller innovative entrepreneurial entities toward profitability and

survivability (Cartwright & Craig, 2006). Within the global and local economy, business

operations that involve administrative, bookkeeping, call center, and back office are lost

to the use of computers (Kanji & Chopra, 2010). Outsourcing activities made possible

through the application of technology involving the Internet, wireless, and other high-

speed communication networks have presented opportunities negating a reduced need for

operational capital for the entrepreneur (Kanji & Chopra, 2010). Enhanced management

practice, corporate social responsibility, and technological innovation were likely to take

businesses above the threshold of sustainability (Kanji & Chopra, 2010). Policy models,

institutional inertia and cultural values, corporate social responsibility, and appropriate

metrics beyond money coefficients were needed for steering societies toward global

sustainability (Henderson, 2006; Kleine & von Hauff, 2009; Kocmanova & Nemecek,

2009).

Kapoor and Lim (2008) ascertained that high-technology acquisition

establishments tend to stall innovative initiatives. Leaders of larger firms acquiring

smaller firms tend not to anticipate the creative leadership and engineering synergies of

the organizations they purchase (Laudal, 2011). Although mergers and acquisitions have

become the best-known business strategies for growth in US organizations, acquiring

organizations tend to underestimate the complexity of integrating the acquired

organization's resources, resulting in an unsuccessful acquisition which dismantles

innovation and sustainability initiatives (Kongpichayanond, 2009). Bros-Brouwers

(2010) applied insight from innovation theory, sustainable development practice, and

small business characteristics to show that many sustainable innovations could be

directed at the improvement of technological processes while lowering cost of production for both small and medium sized enterprises.

Entrepreneurial online banking behavior and relationship banking alleviates the severity of financial problems perceived by entrepreneurs (Liang, 2008). With wireless solutions expanding and becoming more available and affordable, increased efficiency reaching customers has provided opportunities for organizations to adopt more effective business strategies (Hicks, 2009). Hicks described this trend in technology and media growth as business strategic initiatives for growth.

Sustenance in a global economy involves a drive for green innovative technological initiatives (Löscher, 2010). Dynamic trends in technology impact the need to raise funds in meeting cash flow challenges and fund anticipated capital investments (Barringer & Ireland, 2010). Sengupta (2011) concluded that network played an important role in facilitating access to business finance through building and developing trust between entrepreneurs and investors as long as other requirements for making financial decisions are favorable.

An effective marketing design creates value for a target audience (Menon, Homburg, & Beutin, 2005; Steenkamp & Kashyap, 2010). Globalization and a business environment driven by corporate social responsibility, technological innovations, advancements, and the internet have forced marketers to use a more holistic approach to marketing (Tengblad & Ohlsson, 2010). This holistic approach applies relationship marketing among other mix as an effective model in meeting customer's demands and needs (Kotler & Keller, 2009). Kotler and Keller ascertained that marketers must

develop strategies that promote the building of strong bonds and relationships by providing benefit through personal selling and building of a transactional relationship.

Rationalized and formalized approaches in the decision-making process involve business-to-business marketing while engaging small and medium sized businesses in sustainability initiatives (Loucks, Martens, & Cho, 2010).   Barry and Terry (2008) ascertained that relational marketing provides cross-cultural context within the global economic system. With marketing concepts moving from classic to modern paradigms, competitiveness, and survivability in the 21st century business environment continue to present opportunities for more relationship marketing strategy in the business-to-business and business-to-customer marketing environment (Kotler & Keller, 2009).

The Internet is shaping how decision makers and managers are making strategic decisions involving e- commerce initiatives for firms in the financial industry (Chopra, 2009; Wise & Morrison, 2000). The Internet continues to alter the purchasing process for buyers while simultaneously decreasing cost in business-to-business e-commerce marketing (Avlonitis & Karayanni, 2000; Cao, Xu, & Douma, 2012; MacLean, 2010). Deeter-Schmelz and Kennedy (2004) concluded that the Internet is a source of efficiency, but its effectiveness as an information source continues to lag behind that of a traditional sales force. Lou and Donthu (2007) contended that the emergence of the Internet would not eliminate intermediaries because intermediaries add value for both producers and buyers involved in e-commerce marketing (Nardal & Sahin, 2011).

The effect e-commerce and social responsibility have had on organizational buying regarding organizational buying centers and the adoption of new purchasing

technologies have disallowed firms to conduct business on organizational structure (Murillo & Lozano, 2009). The use of technology involving e-commerce cannot be successful without considering the organizational relationship of the technologies (Murillo & Lozano, 2009). Effective marketing strategy is integral to adequately create value, communicate that value, deliver the value, and be able to sustain that value to make the selling of the product easy to sustain long term profitability goals through application of value management strategy (Moore & Manring, 2009).

E-commerce continues to shape how business-to-business transactions and business-to-consumer activities are valued for effectiveness and profitability considering the agility in which consumers of product and services obtain information (Berthon, Ewing, Pitt, & Naude, 2003). Market segmentation could play a role in the development of a marketing communications strategy to reach potential customers with technological influence factors (Krol, 2005). In the design of an effective marketing strategy, marketing executives and business leaders have to understand that consumers seek knowledge of the product, its authenticity, and experience before making purchasing decisions (Burnett & Hutton, 2007). The resource-based view is the outlook of an organization and its ability to interpret its resource base and the resource requirements of the market in building a sustainable business strategy (Lee & Lieberman, 2010; White, 2009).

Leaders of entrepreneurial start-up organizations tend to heavily multi-task, because leaders are involved in many layers of a business (Graebner, Eisenhardt, & Roundy, 2010). Global strategies continue to overpay for start-up technology firms

(Zhao, 2009). The quasi-experimental design approach and corporate social responsibility crosses the boundaries of many different disciplines, as organizational leaders are readily able to surmise the effect of managers, business owners, and their environments for relevance in strategic initiative involving technology for sustainability (Haynes, & Hudson, 2010). The technological frontier, innovative capital, previous experience, age, and size are important determinants for the survival of an organization (Fontana & Nesta, 2009). The cognitive perspective of a manager's responses to disruptive business models provides an important understanding to how entrepreneurial innovative organizations pose a threat to the management of the acquiring entity (Dewald & Bowen, 2009).

Technology evolution has disrupted traditional business models prompting business leaders and business organizations to adapt to the rapid change involving the introduction of a new strategic organizational behavior and structure to address the new competitive market and product such as in the wireless communications, sensors, and social network markets (Bughin, Chul, & Manyika, 2010; Perera, Aldama, Amar, & Trostianki, 2009). Wireless communications, sensors, and social networking such as Facebook have expanded and are an essential part of how organizations introduce their products and services to consumers and the demand generation. This new supply and demand has influenced how organizations incorporate strategic decision and model for survivability and sustainability. Ribeiro (2010) found that the survival of organizations in either mergers or acquisitions depends on the value given to this new trend in supply and demand. Ignoring this new wave of change and failing to adapt to this trend of

supply and demand, could result in competitive disadvantage especially with

organizations operating in a *blue ocean* market. A blue ocean market is an open market

space with little to no competition, allowing the introduction of new industries, products,

or services, yet saturated with competition (Bughin, Chul, & Manyika, 2010).

The underlying value of complementary technologies is how the acquisition of

that technology can take place through the retention of stakeholders (Desyllas & Hughes,

2008). The shareholder framework in entrepreneurial firms is the primary element for

sustainability in an acquisition in which an acquirer must identify the economically and

socially driven stakeholders for a sustainable result (Pirson & Lawrence, 2010; Schlange,

2009). The quasi-experimental design approach crosses the boundaries of many different

disciplines, as organizational leaders are readily able to surmise the effect of managers,

business owners, and their environments for relevance in strategic initiative involving

technology for sustainability performance (Clougherty & Moliterno, 2010; Pojasek,

2009). Acquisition, diversity management practices are compromised when corporate

strategy and resource availability are not aligned, signifying that integration of an

acquired firm, requires extreme due diligence by organizational leaders and

entrepreneurial business owners (Reynoso, 2009; Yang & Konrad, 2011).

Method

The various literature selections of research designs on method range from

quantitative, qualitative, and mixed method articles. Scholarly articles retrieved by me

served as the literature related to method used for this research study. The relevancy in

the method applied in the articles of Adavikolanu (2008), Donald (1999), Dzisi (2008), and Olaka (2007) applicable to this research study.

Adavikolanu (2008) used a mixed method approach to examine the causes of serial acquisition events and their consequences to the shareholders of technology firms. The research hypotheses investigated was the effect of the strategic and financial determinants on shareholder value in serial acquisition of technology firms. The research data derived from company databases, Internet sources, and publicly available records about acquisition transactions. Adavikolanu used a survey, questionnaire, and statistical instruments through content analysis, t tests, and correlation analysis techniques for a quantitative evaluation. The method and design used in the Adavikolanu study was not relevant to the method and design used in this study, but shared a valuable insight while choosing the design.

Donald (1999) used survey instrument to collect data from 196 small business owners. When choosing a research instrument for this study, I considered Donald's choice of a survey instrument. Dzisi (2008) employed a mixed method research design. Dzisi used mail surveys as instrument to collect data from 241 indigenous Ghanaian women with 20 of these women purposefully selected and interviewed. The main limitation was the restricted locale of the sample (Ridenour & Newman, 2009). The sample was reasonably representative of the ten municipalities and indigenous communities in Ghana. The method and research design used by Dzisi was relevant to this study regarding the purposive sample.

Olaka (2007) provided information to help one segment of the small business entities, the Certified Professional Accountant (CPA) entrepreneurial firms to survive in business. Olaka examined transformational leadership in relation the CPA entrepreneurial firm's survival and sought to determine whether transformational leadership could help to enhance the survivability of CPA entrepreneurial practices. Additionally, Olaka determined what increased or reduced business failure rates. Olaka used survey questionnaire as data collection instrument. Through purposive sampling, 100 CPAs selected for his study and multiple regression analysis applied to analyze the data. The method used by Olaka was relevant to this research study regarding the use of a purposive sample.

Diffusion of Innovation Theory

Rogers's book *Diffusion of Innovations*, first published in 1962 is in its fifth edition. Diffusion of innovation theory is applied in various fields of studies, and numerous researchers have applied the theory in their research. Because diffusion strategies are required at different stages of the diffusion process, researchers in various field of studies can benefit from a more in-depth understanding of the diffusion process (Rogers, 2003). Though not related to this study phenomenon on the application and insertion of technology by small business owners for sustainability initiatives, the studies of Isleem (2003), Less (2003), and Zakaria (2001) shows the application of Rogers's diffusion theory in research.

In the research study to examine the level of computer use for instructional purposes by teachers, Isleem (2003) utilized Rogers's diffusion of innovation theory to

conclude that teachers used more mainstream computer applications than specialized computer applications in classroom. Less (2003) applied Rogers's diffusion of innovation theory to conclude that significant relationship exist between the years of teaching and highest degree attained by teachers. Utilizing Rogers's diffusion theory, Zakaria (2001) concluded that implementation of technology tools was significant in classroom teaching.

Transition and Summary

In Section 1, I presented informational background and history regarding reasons for the research study. Within this section, I discussed the purpose of the study, conceptual and theoretical framework, assumptions, limitations, and the significance of the study. I also presented a review of literature under the topics of sustainability, technological insertion, method, and Rogers's diffusion of innovation theory.

Section 2 was an overview of the research project to include the role of the researcher, the participants, the population, and sampling. In addition, I described the research method and design, data generation, and data analysis in Section 2. In Section 3, I presented the results of the study, to include the presentation of findings, analysis, and interpretation. I concluded Section 3 by summarizing the results of the study as well as recommendations for action.

Section 2: The Project

Section 2 is an overview of the research project, including the role of the researcher, the participants, the population and sampling, research method, design, data collection and analysis. In addition, the reliability and validity of the study and the reliability of instruments used in the collection of data are discussed.

Purpose Statement

The purpose of this qualitative phenomenological study was to explore the experiences and perceptions of entrepreneurial business owners regarding technology insertion strategies for long-term sustainability. The targeted population was entrepreneurial business owners. A sample of 20 was a realistic purposive sample size for this qualitative study (Cunliffe, 2011). The study population was limited to the metropolitan Atlanta area.

The sustainability and survival of the entrepreneurial small business has an economic implication to society by providing employment to both the owners and the employees. The implication for positive social change includes the potential to social and economic benefits to society. If individuals and stakeholders of entrepreneurial small businesses gain employment, the wages and earnings derived could provide economic benefit to the individual and family (Malchow-Møller, Schjerning, & Sorensen, 2011).

Role of the Researcher

My role as the researcher in this study was to select the participants from the population of entrepreneurial business owners in the metropolitan Atlanta area. I analyzed the data obtained from interviews and writing protocols throughout the study

(Schoorman & Bogotch, 2010). I explained the study to the participants by going through the content of the consent form (see Appendix A) with the participants and answering any questions relating to the research study. I shared the data with the participants as specified in the consent form, made available and signed, by the participants (see Appendix A).

The participants lived experiences were captured pertaining to how they implemented technology in the everyday operation of their respective businesses and how the application of technology or technological insertions affected the sustainability strategy and initiatives in moving forward (see Appendix B). With more than 20 years in the metro Atlanta area, both as a small sized business owner and consultant, I have interfaced, experienced, and observed the struggles and challenges the small business owner faces to remain competitive. A strategy for competitiveness is significant for the small business owner. The Atlanta metropolitan area has experienced an exponential population growth after the city hosted the 1996 Olympics prompting the need for sustainability strategy for small entrepreneurial businesses.

I selected participants who contributed to the proposed qualitative research study because of their lived experiences regarding the phenomenon using various technological tools such as computers and IT tools in the daily operation of their respective businesses. Purposive sampling was used to select participants from list of retail and service entrepreneurial businesses, obtained from the public listing of the Better Business Bureau in Atlanta and the office of the Secretary of State. The Secretary of State's office and the Better Business Bureau routinely make available to the public comprehensive listings of

businesses in the state. The participants for this study were obtained from the listing available to the public of registered small businesses that fits the definition of small business of the study. The participants were entrepreneurs who were self-starter business owners with no more than 20 employees and had been in business for more than 5 years.

Procedure for Gaining Access

I have worked as a business consultant with small businesses in the metropolitan Atlanta area for more than10 years. Locating the addresses of places of business and meeting the business owners who responded to participate in the study was not prohibitively difficult. Building relationships between the participating entrepreneurial business owners and the researcher was not a problem, which was important to the study design of this study.

I sent invitations to participate (see Appendix C) via e-mail, and the United States Postal Service. I explained to the participants the research problem, purpose of the study, and methods used for conducting the research study (see Appendix C). I assured the participants of anonymity and confidentiality throughout the research study (see Appendix C). After obtaining approval from the Institutional Review Board (IRB) to conduct the research, the IRB approval number 12-03-12-0159432 was included in the consent form sent to the participant with the invitation letter enumerating the outline of the study, statement of its voluntary nature, and an outline of the risk and benefits to the participants (see Appendix C). I arranged the date, time, and place for the interview with the participants and discussed information regarding the preparation of the protocol-writing document.

Ethical Protection of Participants

To maintain participant's privacy, I did not discuss the research in open environment: but within a confined location determined by the participant. To ensure no infringement of the participant's privacy (Damianakis & Woodford, 2012), data collection for this study did not convene until the Walden University Institutional Review Board (IRB) approved the proposal and assigned an approval number 12-03-12-0159432. The IRB was responsible for ensuring that the study would comply with ethical standards (Bozeman, Slade, & Hirsch, 2009).

I followed Walden University ethical guidelines throughout the research study. I protected the confidentiality of the participants throughout the study by assigning the participants different codes and allowing participants to choose and assign the meeting location (Lavis, 2010). Participants had the option to withdraw from the study at any time. I explained the rights for each participant before the beginning of each interview and the protocol writings. I addressed the benefits of participating in the research study to the participants. Participants had access to review notes, and transcripts of the interview upon request to the researcher (see Appendix C). Participants were assured that the paper trail or document identifying the participant's name or name of business from the interview and protocol writing will be stored in a safe place with the researcher for a period of 5 years after which papers would be shredded and files including electronic recorder containing data destroyed by burning.

Research Method and Design

A phenomenological design was used for this study. Phenomenological research provides the studying of phenomena normally hard to observe (Moustakas, 1994). Moustakas ascertained that phenomenology is a process that emphasized findings from personal experiences. Moustakas described phenomenology as understanding the meaning of the description of the experience through interviews, recordings of the interview, and interpretation to understand the context of the situation or phenomenon. I used hermeneutical phenomenology design to understand, and interpret the phenomenon in this study. Through personal and in-depth interview, the entrepreneurial participants were asked to share lived experiences and write one page or less about their experiences regarding implementing, and application of technology in their respective businesses.

Method

In this qualitative study, I used the phenomenological design. Leedy and Ormrod (2001) ascertained that a qualitative researcher explores the general broad topic that is difficult to measure or observe. Leedy and Ormrod further determined that a qualitative research method used in a study provides a better understanding of the nature of the study, creates new concepts related to the phenomenon, and uncovers problems that may exist within the phenomenon. Thomas and Magilvy (2011) ascertained that qualitative researchers are interested in the individual's experiences, and on how the experiences interact within their social world. In this study, I used the interview and protocol writing as instruments to collect data. I recorded and transcribed the interviews, followed by a qualitative data analysis for themes from the transcripts.

The qualitative approach was the most appropriate method to answer the research question. When deciding on the research method, I did not select the quantitative method because quantitative study approach incorporates hypotheses as a basis for the problem statement research, and involves capturing and analyzing numerical data, which was considered not applicable to this study (Arnold & Lane, 2011; Watkins, 2012). In this study, I conducted an in depth interview through personal interaction with the individual participants to understand the phenomenon (Goodbody & Burns, 2011).

Research Design

The ethnography, grounded theory, and phenomenological research designs were viable choices when conducting a qualitative study (Moustakas, 1994). I considered phenomenology design as the best design for this study to understand the shared experiences of the phenomenon from the common group of entrepreneurial individual (Goertz & Mahoney, 2012). I rejected the grounded theory and ethnography designs for this study because the phenomenological design enabled me understands, describe, and interpret the phenomenon by using a hermeneutic phenomenological approach (Dunne, 2011; Thomas & Magilvy, 2011).

In this study, the intent was not to generate or discover a theory but to understand through exploration the shared experiences of a purposive sample of entrepreneurial small business owner in the use and application of technology and IT tools in their respective business operation. I rejected the ethnographical design for this study because the participants for this study were a purposive sample of individual small business owners without a shared cultural grouping. In ethnographical design, a qualitative

researcher is concerned on an entire cultural grouping involving some interactions within time, which was not applicable with the participants of this study (Thomas & Magilvy, 2011).

I rejected the case study design for this research because the case study approach involves an event, a program, or an activity that is not applicable in this study. The phenomenological design was more applicable for this study than the case study because in this study, I explored the individual participant's experience of the phenomenon and not because of an event, program, or activity, as in the case study design (Watkins, 2012). In this study, I organized participants' responses to the interviews questions and analyzed them for emerging themes using the nine-step inductive analysis process (Goodbody & Burns, 2011; Hatch, 2002), which includes:

1. Read the data and identify frames of analysis.

2. Create domains based on semantic relationships discovered to exist within frames of analysis.

3. Identify any salient domain, assign them a code, and put the others aside.

4. Reread the data, refining the salient domains and keeping a record of relationships found in the data

5. Decide if the identified domains support the data, and search for examples that do not fit with or run counter to the relationships in the domains.

6. Complete an analysis within domains.

7. Search for themes across domains.

8. Create a master outline expressing relationship within among domains.

9. Select data excerpts to support the elements of the outline.

Population and Sampling

In this qualitative study using a phenomenological design, I explored the experiences and perception of individual entrepreneurial business owners. I used a purposive sample of 20 small business owners for this study. Purposive sampling is a method used in research to select participants for a study when the participants share particular characteristics from an accessible population determined by the qualitative researcher to be appropriate for the study (Suri, 2011). A purposive sampling method is used to select a representative sample of the available population if the population has a unique perspective and has the relevant information about the phenomenon under inquiry in a study (Suri, 2011). I selected a purposive sample of 20 participants of entrepreneurial business owners who have been in business for more than 5 years, are self-starter, and employee size of no more than 20 employees.

Hatch (2002) ascertained no direct relationship between the number of participants in the study and the quality of the study. The sample size of 20 participants selected for this study was in agreement with Babbie (2007) that the amount of participants in a phenomenological study can range from 5-25 individuals. Cunliffe (2011) recommended a more narrow range of sampling strategies for a phenomenological study.

In qualitative research, knowing when to stop collecting data is an important issue (Marshall & Rossman, 2010). Two criteria are typically used- saturation and sufficiency. Saturation is the point in the study at which the interviewer begins to hear the same

information reported (Marshall & Rossman, 2010). Sufficiency occurs so that others outside the sample would have a chance to connect to the experiences of those in it (Marshall & Rossman, 2010). Cain (2010) used sample of 11 in the phenomenological study of the beliefs and practices about implementing technology in physical education. Doll (2007) used a sample of 23 in the phenomenological study of United States Army General Officers' career ascension and leadership. The sample size of 20 provided the saturation or sufficiency point for this study as discussed in Section 3.

I conducted the interviews with the participants in the months of December 2012, January 2013, February 2013, and March 2013. The interviews conducted around pre-determined questions that provided a general framework to guide the discussions. The participants' identities kept confidential, and names coded to protect the identity of the participants for the study in accordance the ethical guidelines and framework set by Walden University. There was a conscientious attempt by me to see that responses and details of the interview and protocol writing reported from the participants' original own words (Giraudeau, Caille, Gouge, & Ravaud, 2012).

Data Collection

Instruments

I was the primary data collector for this study. In a qualitative research study, the researcher is the primary instrument in gathering data and attempts to capture the meaning of the topic under study in the participants' own words (Babbie, 2007). Moustakas (1994) described the unbiased attribute of the qualitative researcher in setting aside any personal views of the phenomenon and focusing only on the views of the

participants in their own words. In collecting data using an interview instrument, the researcher must be part of the test of validity and reliability.

In this study, I used the protocol writing and interviewing as instruments to help with the collection of data. With the protocol writing, I asked the participants to write their experiences on the phenomenon on a one-page note. The purpose of the protocol writing was to gather personal description of the experiences outside the interview protocol. I used the interview instrument by gathering narrative materials through face-to-face conversations providing insights on the implementation and application of technology on the everyday activities of the business owner.

Data Collection Technique

I used a digital recorder to record each interview. Before the interview and protocol writing, I requested each participant to sign the consent release form (see Appendix A). Each participant wrote a brief explanation (Protocol Writing) that described their experience in implementing technology in different levels of the organization's operation and how this has affected the sustainability, survivability, and competitiveness strategies of their businesses. I collected the interview data and the protocol writing for participants between the months of December 2012 and March 2013. Each participant met with me for a period not exceeding 60 minutes (Cain, 2010). The scheduled time and day for each interview was determined through mutual agreement between the participant and me with more priority given to the decision about time, place and date that was most convenient to the participant.

I read and explained to the participants the consent form so that each individual participating understood their rights as participants in this research study. Before conducting the interview and collection of the protocol writing, I discussed the ethical issues regarding the participant's privacy and confidentiality in the responses to the interview questions and the protocol writing. The interview tailored according to the interview protocol (see Appendix B) enumerating the interview questions. The interview questions were open-ended and preplanned questions.

The identity of the participants remained confidential through the study. As part of maintaining confidentiality, I assigned a pseudonym E1 to E20 to ensure the privacy of each participant's comment from the interview or in the protocol writing. The direct quotations from the participants own words used in reporting the findings with the assigned pseudonym. The participants were encouraged to be honest and open minded about their experiences and concerns.

Data Organization Techniques

Before the collection of data from the interview and protocol writing, the participants were asked to complete and sign the consent forms (see Appendix A), which express the voluntary nature and willingness to participate in the study. I explained to the participants that the interview recorded and transcript of the interview was available for review; making sure no misrepresentation (see Appendix A). The identity of each participant in this study was kept anonymous and confidential with the use of pseudonyms. The use of pseudonyms according to Levis (2010) helps in preserving the

confidentiality of the participants. I used the pseudonyms during data collection, transcription, data analysis, and discussion of findings in this entire study.

Record of the interview, transcripts of the interview recordings, and the protocol writings done on paper with actual names of the participants kept confidential in a safe and secure container together with other research documents including recording materials for a period of 5 years. No names of participants used in the final report of this study. Final disposition of material used in this study involving paper materials will be shredded and other documents or files including the digital recording of the interview will be burned, and permanently disposed of after the five years period.

Data Analysis Technique

Polit and Beck (2010) contended that data collection and data analysis must be a simultaneous process in a qualitative research. During data analysis, data are categorically and chronologically organized, reviewed repeatedly, and coded continually. Arnold and Lane (2011) ascertained that preparing and organizing data in qualitative research consisted of organizing the data into themes by coding, condensing the codes and finally making sense from the data through figures, tables or in discussions.

In this study, I searched for thematic elements through significant statements from the data that relate to the phenomenon. These statements were in the form of few words, phrases, and sentence or sentences that were relevant to the phenomenon. I described the fundamental features of the experience that the participants experienced to determine if there existed a commonality among the experience of the participants as related to the phenomenon. The application of both the interview and the protocol writing provided

part of the triangulation for validity check needed in a qualitative study. Themes embedded in the data emerged. Inductive analysis coding was used to discover themes from the data.

The qualitative software program called NVivo 10 was used to aid in the data analysis process of the transcriptions of the recorded interviews. NVivo is a qualitative data analysis program that import, sort, and analyze digital audio files, Word, and PDF documents. NVivo10 was the latest update of the NVivo software at the time of this research study.

<div align="center">**Reliability and Validity**</div>

Reliability

In a qualitative research study, reliability is dependent upon a systematic protocol that allows the replication of the study in a different setting (Cain, 2010; Moustakas, 1994). According to Moustakas, explaining the data collection process makes it easier for others to replicate the study. Moustakas further indicated that for achieving reliability systematically compiling the data is important.

Babbie (2007) ascertained that the uniqueness of a study within a specific context militates against replicating it exactly in another context. The implication of Babbie's assertion is that when participants are different in a replicated study, the result of the replicated research study is different. For reliability of this qualitative study, the information gathering, and documentation process need to be consistent throughout the research to prevent research bias and subjective interpretation (Babbie, 2007). To ensure reliability of the study and the instruments used, I followed these outlines:

1. The participants had a clear understanding of the nature of the study before submitting to participate in the protocol writing and interview.

2. The consent form (see Appendix A) reviewed with each participant and any question that arises from the participant concerning the content form answered.

3. The participants reminded of the guarantee of confidentiality while honest answers to the interview questions were encouraged.

4. Each participant provided a verbal acceptance to audio recording of the interview. Audio recording of the interview ensured an accurate and word specific capture of the participants' responses to the open-ended questions used in the interview.

5. The identity of the participants coded for anonymity. Each participant identified with an individual number and pseudonym.

6. Each audio recording of the interview transcribed verbatim. The transcription of the recording provided the record used to analyze data for themes of the studied phenomenon by using the participant's personal and individual experiences of the phenomenon.

Validity

Fisher and Stenner (2011) identified *description* among other factors as a threat to the validity of a qualitative study. In this study, ensuring that respondents answered all questions in the instrument averted problems that could arise because of inaccurate or incomplete data. In a phenomenological study, the validity of the data will depend on the

truthfulness, honesty, and accuracy of the participants sharing their perceptions and lived experiences (Babbie, 2007). Validity consists of both internal and external validity.

To validate this study, the instruments used were interview and protocol writing as a means of triangulating, validation, and credibility of the findings. To establish validity in this research study and provide maximum accuracy to the findings, the participants wrote one-page protocol writing and participated in a one on one interview with the researcher. The protocol writing involved the participant writing not more than a one-page document on their experience in implementing technology in the everyday operation of their respective business for sustainability, and an interview session with me not exceeding 60 minutes of interview time. The interview sessions provided me with the closeness to the participant in uncovering and identifying the experiences of the phenomenon. An analysis of the data collected from the interview and protocol writings provided validation from a crosschecking perspective of the findings.

In addition, the following internal validity guidelines followed to assist the validity of this research study. The internal validity of a research study allows the researcher to draw conclusions accurately concerning the data collected (Alasuutari, 2010). Internal validity established by ensuring that the lived experiences of the entrepreneur business owner of the phenomenon recorded in his or her own words, accurately transcribed, and any emerging themes matched reality. Some guiding factors used by Cain (2010) for internal validity and applied in this study were:

1. Did triangulation among the complementary methods of interview and protocol writing for data sources produce converging conclusions?

2. Are the findings internally coherent and are concepts systematically related?

3. Areas of uncertainty identified in the study?

4. The conclusions considered accurate by original informants in the study. If not, is there a coherent explanation?

5. Any predictions made in the study, and how accurate were they?

According to Leedy and Ormrod (2001), validity is the transferability of the conclusions and findings from the study to their situations or context. In a qualitative study according to Nenty and Adedoyin (2010), the intent is not to generalize findings but to form a unique interpretation of events. In this study, the questions and the responses from the participants considered valid and reliable for creditability.

Transition and Summary

In Section 2, I provided an overview of the research project that included the role of the researcher, the participants, the population and sampling, and the process by which data generated, gathered, and recorded. In addition, I described the research method, design, and data analysis technique. In Section 3, I presented the result of the study that included presentation of findings, analysis, and interpretation. I concluded by summarizing the result of the study as well as recommendations for future studies in Section 3.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this phenomenological study was to explore the experiences and perceptions of entrepreneurial business owners regarding technology insertion strategies for long-term sustainability. This section includes the study's data collection findings, along with information used to make those determinations. I conclude this section by summarizing the result of the study as well as recommendations for future studies, application to professional practice, and implications for social change.

Overview of Study

I conducted this qualitative phenomenological study to explore the experiences and perceptions of a purposive sample of entrepreneurial small business owners regarding the application and insertion of technology and IT tools in their respective businesses. The scope of the study was limited to questions defining sustainability and long-term sustainability, levels of technology insertions and applications as factors related to strategic initiatives for sustainability as a phenomenon. By applying a qualitative approach, an examination of the lived experiences of the small business entrepreneurs produced a better understanding of the phenomenon.

Hatch (2002) maintained that the phenomenological approach allows the researcher to explore lived experiences of the participants studied in the research. In this study, I established questions to capture the participant's perspectives on their lived experiences and understandings. The open-ended interview questions and protocol writings were conducted to allow participants to share as many lived experiences he or

she desired and to clarify any responses. Next, the data collected were analyzed using Hatch's nine-step inductive analysis process.

In the first step of the inductive analysis process, I read the data to identify frames of analysis. I identified frames of analysis by breaking the data into analyzable parts or smaller parts (Petty, Thomson, & Stew, 2012). Within this first step of identifying frames of analysis from the data, I used the qualitative analytical software NVivo10 to aid identify the frames of analysis or nodes. Throughout this first step, I reviewed the purpose of the study, research question, and the nature of the study to ensure that these three factors influenced identification of the frames of analysis.

The next step in the inductive analysis was to identify domains based on semantic relationships discovered within the frames of analysis or nodes (Petty, Thomson, & Stew, 2012). In this step, I reread the data and identified terms that explored relationships among the particulars within the nodes or frames of analysis. This step enabled me to understand the data by identifying the nodes or frame of analysis that had a significant meaning to the study and was able to put other meaningless data aside for future reading (Hatch, 2002; Petty, Thomson, & Stew, 2012).

I reread the data to identify data that supported the domains with semantic relationships. After a thorough analysis completed within the domains, I searched for themes across the domains and created a master outline, which created the final six recurring domains or themes. Five of the six domains and themes were significant to the research question. Findings of this study indicated that entrepreneurs in both the retail

and service businesses are in better competitive position when they employ technological tools, the Internet, and social media in their growth and sustainability strategies.

Presentation of the Findings

The purpose of this phenomenological study was to explore the lived experiences and perceptions of entrepreneurial business owners regarding technology insertion strategies for long-term sustainability. I selected 20 participants who best contributed to the proposed qualitative research study because they were living the experience of entrepreneurial business owner. Saturation of data occurs when the participants have answered the study research question (Alasuutari, 2010). The participants of this study were a purposive sample of self-made entrepreneurs who have been in business for 5 years, with employee size of no more than 20. The participants were randomly selected from the population of entrepreneurial business owners in the metro Atlanta area. Table 1 shows the demographic summary of the 20 participants.

Table 1

Participant Demographic Information

Participant	Position/Designation	Type of Business	Years in Business	Number of Employees
E1	Owner/President and Senior Instructor	Vocational Medical School	10	8
E2	Owner/CEO/Manager	Music and Entertainment	10	6
E3	Owner/Director of Business and Finance	Digital Solution Warehouse	12	4

Participant	Position/Designation	Type of Business	Years in Business	Number of Employees
E4	Owner/Agent/Broker	Insurance and Financial Services	5	4
E5	Owner/Manager	Beauty Shop	8	2
E6	Owner/ CEO	Computer Wholesale Retail and Service	15	10
E7	Owner/CEO	Landscaping and Maintenance	10	2
E8	Owner/CEO	Daycare and Child Development	12	10
E9	Owner/Sole Proprietor	Dry Cleaning and Clothing	10	3
E10	Owner/Manager	Auto Repair/ Tires Sale	7	5
E11	Owner/CEO/President	Beauty/ Barber Shop	10	5
E12	Co-owner/President	Health Care Service	12	7
E13	Owner/CEO	Financial/Accounting/ Taxes	5	3

Participant	Position/Designation	Type of Business	Years in Business	Number of Employees
E14	Owner/Program Director	Prep School (Online)	8	3
E15	Owner/Marketing Strategist	Marketing Company	25	5
E16	Owner/Manager	Furniture Retail	5	3
E17	Co-owner/Manager	Allied Health Training	9	8
E18	Owner/CEO	Real Estate	12	8
E19	Owner/President	Window/Blind Coverings	8	7
E20	Owner/President	Auto Sale	8	8

The interview of the participants structured around pre-determined questions (see Appendix B) that provided a general framework to guide the discussion. Protocol writings also collected from the 20 participants. The participants' identities remained confidential, and the names of the participants coded and represented with pseudonyms to protect the identities of the participants per the ethical framework set by Walden University. The protocol writing from each participants was also numbered E1 to E20 (see Appendix D). Reponses and details from the interviews reported in the participants' original own words. After each interview was completed, the participant given a number E1 to E20 to protect his or her identity and the interviews transcribed (see Appendix E).

Data Analysis

Hatch (2002) ascertained that qualitative research has an emphasis on inductive rather than deductive processes. Hatch described inductive analysis as analysis model used by researchers so what had been learned in the study could be communicated to others by beginning with particular pieces of evidence, and gradually pulling them together into a meaningful whole. Hatch further explained that inductive thinking proceeds from the specific to the general and connects the findings among them.

The inductive analysis implemented for this study includes: read the data and identified frames of analysis, created domains based on semantic relationships discovered within frames of analysis, identified salient domains, assigned them a code, and put others aside, reread data, refining the salient domains (Hatch, 2002). In addition, decided whether the domains supported the data. Finally, I completed the analysis within the domains for themes (Hatch, 2002).

In the first step of the inductive analysis process, I read the data to identify frames of analysis or nodes. The identification of frames of analysis required the breakdown of the data into analyzable parts or smaller parts. I identified fifteen initial frames of analysis or nodes within the data. The use of qualitative analytical software NVivo10 aided to identify the frames of analysis or nodes.

The next step of the data analysis was to create domains based on semantic relationships discovered within the frames of analysis. In this step, I reread the data while reflecting on the frames of analysis. From the frames of analysis, categories created to break up the data into smaller pieces called terms (Hatch, 2002; Petty,

Thomson, & Stew, 2012). The organization of the terms depended solely on specific relationships that I related to the data and the purpose of the study, research question, and the nature of the study.

The next step of the data analysis was to identify salient domains, assigned codes and put others aside (Hatch, 2002; Petty, Thomson, & Stew, 2012). In this step, I reread the data in relation to the purpose of the study, research questions, and the nature of the study to determine which domains will be salient to the study. From the initial fifteen frames of analysis or nodes created in step 1 of the analysis, seven eliminated and put aside for later analysis (Hatch, 2002; Petty, Thomson, & Stew, 2012). The remaining eight domains reread and assigned a code for the terms to keep track of the domains in an outline format. I marked the codes directly on the paper copies by using codes with a roman numeral to each domain and a capital letter to each included term.

The next step in the analysis achieved completion by continuing to reread the data, refining the salient domains, and keeping a record of which relationships found in the data. While rereading the data, marks made of which elements of the domain were in both the data and domain sheets. I identified those marks in the data by underling the data and placing brackets in the margin related to the code assigned to that domain. I was able to eliminate any domains not supported by the data. This process eliminated two more domains.

In Step 6, I reviewed each domain to identify complexity, richness, and depth by looking across domains for the same like qualities (Hatch, 2002; Petty, Thomson, & Stew, 2012). After reviewing terms in a specific domain, I organized further categories

further down each included term. Step 6 of the analysis completed by revisiting each domain including the terms, relationships, and cover terms in the data.

In Step 7, search for themes across domains, I was able to look for connections among the individual domains to bring the pieces together, searching for patterns that repeated themselves and showed linkages among different parts of the data. I created different themes based off the domains. The following is the list of six major themes and domains that emerged.

1. Forces that drive the introduction of technology for the entrepreneurial business owner (Drive).

2. Types of Technology used to reach potential/existing customers (Technology Types).

3. Obstacles that inhibit the use of technology by the small business entrepreneur (Inhibit).

4. Technology helps create a competitive advantage (Competitiveness).

5. Most commonly used and implemented technology (Implementation).

6. Belief and value about using technology for the small business entrepreneur (Beliefs and Values).

Step 8 brings the previous steps together in a master outline that expresses relationships within and among domains. This step provided me with a readymade option for organizing all the data collected (Hatch, 2002; Petty, Thomson, & Stew, 2012). The last step 9 in the analysis was to select data excerpts to support elements in the outline (Hatch, 2002; Petty, Thomson, & Stew, 2012). I tracked down these excerpts in the data and placed stars next to the quotes in the data that was relevant to the purpose of the study, research question, and the nature of the study.

Findings

The problem addressed with this study was the effect of technology, and technological application as a factor in the loss of market share, competitiveness, and sustainability of the small business entrepreneur. Six domains or major themes emerged from this study based on each participant's in-depth interview, and protocol writings and an inductive analysis of the data. Table 2 shows the six domains that emerged from the data after the analysis and a description of the domains with assigned roman numerals and relation to the research question.

Table 2

Domains: Description / Relation to Research Question

Domain	Relation to Research Question	Description
I	Yes	Drive
II	Yes	Technology Types
III	No	Inhibit
IV	Yes	Competitiveness
V	Yes	Implementation
VI	Yes	Beliefs and Values

Themes/Domains

The six major themes that emerged from the participant's interviews and protocol responses categorized through the term called domains for relationships to the study research question (Polit & Beck, 2010). The main research question that guided this

study was what are the perceptions and experiences of small business entrepreneurs regarding technology insertion and application strategies for long-term sustainability. I collected data through in depth interviews and protocol writings from 20 entrepreneurial business owners in the Atlanta metropolitan area to explore the experiences and perception of the phenomenon.

Domain I: drive. The forces that drive the introduction of technology for the entrepreneurial business owner was a recurring theme. I asked participants in this study what forces drive them to introduce technology in their respective establishments. Through this question, I was able to explore the perception of the participants regarding why they introduce or implement technology in their respective businesses. Participants in this study indicated that the needs to be competitive and grow their businesses were the most dominant reason and driving force in the introduction of technology in their establishments.

For the majority of the participants, competition was a driving force for the implementing and application of technology. The participants believed that without been up to date with technology constituted a disadvantage in product and service offerings to customers. Some of the participants stated that improving efficiency in their product and service offerings was the determining factor in the application of technology in their respective businesses. E20 and E17 indicated that improving efficiency in their respective businesses was the driving force in introducing technology. E20 said, "The factors that drives me to introduce technology, is anything that make things easy and more efficient in my business" while E17 stated, "Bottom line, we try to use technology

for the efficiency of our processes." Participant E11 described his experience, "Survival was the main driving force in introducing technology" which he equated to profitability. Participant E6 echoed the same sentiment as E11 when he stated that, "With the help of technology, we have been able to move more products and have been able to reach more customers and places we could otherwise not have been able to reach to do business." The forces that drive the introduction of technology for the entrepreneurial business owner was a recurring theme as evidenced by the responses of the participants when asked about their experiences on the use of technology.

Domain II: technology types. The researcher asked participants in this study the types of technology they used in reaching potential/existing customers. Participant E8 stated that emailing was the only main type of technology used in communicating with existing customers. Majority of the participants indicated social media, cell phone with text messaging, and Internet as the most effective ways in reaching their potential and existing customers.

When participants in this study were further asked what type of technology they used within the internal operation and activities of their organizations, the participants indicated that the use of computers and computer programs: Microsoft Office and QuickBooks, word processing were computer programs used in the daily operations and activities of their organizations. Participants also indicated the use of emailing, text messaging, and the social media as the form of technology used for communication. The use of these various technological tools for efficiency was a recurring theme from the participants' response. According to the participants, the use of Internet catalyzed an

improvement in efficiency and operation with advertisements and marketing done primarily through the Internet. E2 indicated that the computer and use of the Internet was factor for success. E2 said, "Computer does it. Web developments and programs available to me do help in my business growth." Participants in this study when asked what type of technology they used within the internal operation and activities of their organizations, the majority of the participants indicated the use of computers and computer programs such as Microsoft Office and QuickBooks, and word-processing in running the daily operations and activities of their organizations.

Participants also indicated the used of emailing, text messaging, and social media in communication within the business departmental units. The use of social media leveraged importance for both internal and external communication within the organization. For advertising and marketing initiatives, most of the participants relied on the social media. E3 emphasized this point by describing his experience:

> We use technology within the internal operation of our organization by reaching all the partners, all the associates of the organization. We communicate via the outlook of using the Internet, emails, and software. We also communicate via the social networking media: Twitters, Facebook, and all of the others.

As evidence from the responses given by the participant, the use of social media, cell phone with text messaging, and Internet were the overwhelming technological tools used in reaching potential and existing customers.

Domain III: inhibit. The recurring theme within the Inhibit domain was obstacles that inhibit the use of technology in the participants' businesses. This recurring

theme of money, as inhibiting factor in the application of technology, was a general concern to the participants. The majority of the participants thought that application and insertion of technology was important for the daily operation of their respective businesses but indicated how expensive it was to implement.

Seven of the participants expressed concerns about the cost of implementing technology in their businesses. These seven participants, when asked about the obstacles that inhibit the use of technology in their respective establishment, stated that money was inhibiting factor in implementing technology. E1 said, "Many of the programs used administratively are linked to government sites to access information on financial aid and regulations." E1 also said, "Our greatest inhibitor to the application of technology is money, which can be expensive." E7 reiterated the same sentiment, "External limitation factor is capital. I cannot reach many customers because I have only one means: for instance, only one landscape truck." While E10 said, "Some external factors is that technology is very expensive, which invariably can affect the progress of the business." Within the same experience E13 indicated, "The only thing that will inhibit the use of technology would be our finances; to be able to afford everything we need requires money." Participants E2, E4, E9, E12, E14, and E19 could not think of any factor that inhibited the use of technology in their respective businesses. These six participants believed that technological application was important in the daily operation of their business and could not figure out any disadvantage or any inhabiting factor or factors in the use of technology.

Domain IV: competitiveness. Because of the competitiveness that existed in the participant's respective business market, it was important exploring the live experience of the participants regarding the effect of technology in remaining competitive. Competiveness was a recurring theme. Participants when asked how they would describe the competition in their market, 20 participants expressed the competitiveness in their respective market.

Participants in this study, when further asked if technology helped create a competitive advantage in their business, participants but E8 expressed the competitive nature of their respective business and the effect of technology as positive. In answering to the question whether technology helped in creating a competitive advantage, the participants stated that, they believed that implementing technology created a competitive advantage. Participant E8 did however, acknowledged that technology was an added advantage for competitiveness when she said, "Not necessarily so, this is a caring business. However technology is an added bonus for efficiency." Participants in this study unanimously agreed that application and implementation of technology helped create a competitive advantage in their respective business. However, E8 specified that in her business industry, competitive advantage was a factor of the quality of care provided and customer service rendered. E8, however, acknowledged that technology was an added advantage for competitiveness when E8 stated, "Not necessarily so, not in this business. This is a caring business; however, technology is an added bonus." Answering the question whether technology helped to create a competitive advantage, the

participants reiterated repeatedly their belief that implementing technology created a competitive advantage in their respective business in moving forward.

Domain V: implementation. In this theme, participants in this study expressed their experiences about the most commonly used and implemented technology in their respective business. When asked if they have engaged in or implemented any form of technology insertion or application within the last 3 years in their business, 20 participants responded with a positive answer and gave reasons why they implemented technology as need for growth, efficiency in operation, and marketing among the aforementioned reasons. Participants in this study when further asked what type of technology insertion and application they have inserted or implemented, participants reiterated the use of various technological equipment and tools, the Internet, and social media. Participant E1 shared, "New equipment for the classroom: overhead projectors and electronic equipment. Updated computer programs to keep up with enrollment growth." E2 summarized the experience of the participants when he stated that, "Well, everything is technology for my business." The participants in this study, when asked the question about their experience in implementing technology in the various functional areas of their operation, 20 participants responded positively to the question.

When asked about their experience in implementing technology in the various functional areas of their operation, participants responded positively. The 20 participants reiterated that technological application has been an asset in growth and improved efficiency and agility in their product offerings. E1 shared, "Technology has made

operation easier" while E4 indicated that for growth and marketing initiative, the use of social media has been invaluable.

Participants in this study when asked the question regarding their philosophy in implementing technology, the 20 participants also responded positively. The participants' summarized in their responses, the importance they attributed to the use and application of technology as: the need for keeping up to date with technological trends, and advancing the use and application of technology in moving forward. E3 summarized their experience implementing technology by stating,

> Any business that is not embracing technology in present age, should be really looking to either just pack it up because technology is a huge, and it is a huge advantage to have technology in this present day and world in your operation.

Implementation of technology and the application of technological tools was an overreaching theme for growth as evidenced from the participant responses.

Domain VI: beliefs and values. In this domain, the recurring theme was the belief and values attributed to the use and application of technology by the participants. When asked their beliefs about the value of using technology in their respective business, majority of the participant believed the use and implementation of technology was very valuable in enhancing productivity, staying competitive, maintaining market share, and sustainability of their business. The participants placed significant value to application of technology in their respective business. E2 shared, "I think is a plus, because whenever you implement a technology, from the use of telephone, fax machine, scanner, and copier, it brings value to the company." The participants in this study when asked about

the effect of technology on the sustainability of their business responded positively to the question. The participants responded that technology and its application affect the sustainability and growth of their respective business positively. E3 summarized his experience implementing technology stating that, "In the business we are in, technology is either you improve and grow with technology or you remain stagnant, ineffective and just die." The responses from the participants, in the application of technology show the importance of implementing technology for growth and sustainability initiatives.

Discrepant and Nonconforming Data

E7 was the only participant that did not use any form of technology in reaching potential and existing customers. However, E7 expressed the need to do more marketing with the use of the Internet stating,

> Potential customers in the past have been the word of mouth. However, I know that I have to do more marketing through the medium we have in the Internet. I have not been doing that as much as I should.

Evidence of Quality

Fisher and Stenner (2011) recommended that qualitative researchers use multiple methods for data collection to enhance the validity of their findings. In this study, I used triangulation: the use of in-depth interviews, and writing protocols. I provided detailed and rich descriptions that allowed the readers of this study to make decisions on how this data transferred to other entrepreneurial business settings because of the shared experiences among the entrepreneurial business owners. Each participant assigned

specific number E1 to E20 that identified him or her to his or her data. This ensured a
detailed analysis description of each participant experience of the phenomenon.

Interpretation of Findings

The main research question that guided this study was what are the perceptions
and experiences of small business entrepreneurs regarding technology insertion and
application strategies for long-term sustainability. To answer this question, data collected
through in depth interviews and protocol writings from the purposive sample of
entrepreneurial business owners in the Atlanta metropolitan area. The open-ended
interview questions and protocol writings allowed the participants to share as much lived
experiences he or she desired. Next, the data from the participants' responses analyzed
through an inductive analysis process. After a thorough analysis as explained in the Data
Analysis Section of this study, six recurring domains and themes emerged.

Research Question in Relation to Domains

In this qualitative phenomenological study, the main research question that guided
the study was what are the perceptions and experiences of small business entrepreneurs
regarding technology insertion and application strategies for long-term sustainability.
The six domains emerged. A brief discussion of the significance of the six domains to
the research question that include conclusions as they relate to each participant's lived
experience and understanding of the study phenomenon is outlined.

Drive. In this domain, the participants indicated that the need to be competitive
and grow their businesses was the driving force in the introduction of technology in
moving forward. Technology insertion and application strategy should also involve a

strategy for efficiency. Participants E20 and E17 indicated that improving efficiency in their respective businesses was the driving force in introducing technology. In this domain, participant E11 drove the point home when asked the forces that drive the introduction of technology. E11 stated "It is the survival; the money you are going to make. That is what that drives you to be on top of latest technology." The participants indicated that application and insertion of technology and technology tools were significant for competitiveness. Any growth strategy should incorporate the application and insertion of technology as echoed from the findings of this study.

Technology types. The next domain that emerged was the type of technology used in reaching potential and existing customers. Participants described the types of technology they used in reaching their potential and existing customers. The insertion and application of technology was significant for long time sustainability. Participants indicated that the social media, cell phone with text messaging, and Internet were the most effective ways in reaching their potential and existing customers; with advertisements and marketing primarily done through the Internet. Participants in this study, answering the question on type of technology used within the internal operation and activities of their organizations indicated the use of computer and computer programs such as Microsoft Office and QuickBooks in the daily operations and activities of their organizations. Strategies for inserting and applying technology for long time sustainability should include the use of technological tools such as computer software programs for effective running of the daily operations and activities of the business as echoed from the participants' responses in this study.

Inhibit. The obstacles inhibiting the use of technology was a recurring theme. Participants in this study described the obstacles that inhibit the use of technology in their respective businesses. Six of the participants did not see any obstacle inhibiting the use of technology. Seven of the participants stated that cost of implementing technology was an obstacle. Five of the participants stated that factors beyond their control, such as power outages and regulations, were obstacles inhibiting the use of technology in their respective businesses. This domain, though not directly tied to the research question, emerged as a recurring theme from the lived experiences of the participants. These inhibiting factors or obstacles expressed by the participants may represent an opportunity for further exploration regarding the implementation of technology for small business entrepreneurs in moving forward.

Competitiveness. This domain emerged from the analysis of the data regarding the question of, if technology helped create a competitive advantage. The participants when asked how they would describe the competition in their market, the participants described the nature of competition that existed in their respective markets as fierce and competitive. The participants, when further asked if technology helped to create a competitive advantage in their business, the majority of the participants responded positively. Participant E8 was the only participant who believed that in business, a competitive advantage was a factor of the quality of care provided and customer service rendered. E8 however acknowledged that technology was an added advantage for competitiveness.

The participants indicated that any effective strategy for long-term sustainability should include the implementation of technology and technology tools. Any strategy for competitiveness should include the design of a technology insertion and application strategy in moving forward.

Implementation. One domain that emerged from this study was that of the most used and implemented technology. This domain is significant to the research question because any technological insertion and application strategy for long-term sustainability should include implementation strategies for growth, efficiency and agility in operation, marketing, technological equipment and tools, the Internet, and the social media. Participants in this study when asked about the most used and implemented technology in their business 20 participants responded positively and gave reasons why they implemented technology as need for growth, efficiency in operation, and marketing. Participants of this study when further asked what type of technology they have inserted or implemented in their respective businesses, reiterated the use of various technological equipment and tools, the Internet, and the social media in everyday business operation. Participants in this study were asked about their experience in implementing technology in the different functional areas of their business, participants responded positively that various technological applications and implementation has been an asset in moving forward and aided in improving efficiency and agility.

Beliefs and values. The next significant domain that emerged from the inductive analysis of the data was the participants' beliefs and values about using technology. Participants in this study when asked their belief about the value of using technology in

their respective business, responded that the use and implementation of technology was very valuable: in enhancing productivity, staying competitive, maintaining market share, and sustainability of their respective businesses. Participants of this study when further asked if they believed implementing technology helped the success of their business agreed to the statement that implementing technology helped in the success of their business. Further, participants in this study, when asked if technology affects the sustainability of their businesses, stated that they believed technology and its application positively affects the sustainability and growth of their business. The significance of this domain to the research question is that any technological insertion and application strategy by the small business entrepreneur should include implementation strategy that enhances productivity, staying competitive, maintaining market share, and fostering success, growth, and sustainability.

Interpretations Associated with Conceptual Framework

Though not concerned with information technology exclusively, diffusion theory by Rogers (2003) offers a conceptual framework for this study's phenomenon regarding how small businesses in the Atlanta metropolitan area have employed technology insertions or applications at various levels of their organization for sustainability and growth initiatives. Diffusion theory includes five characteristics of innovations that affect their diffusion: relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). Each of these characteristics on its own is insufficient to predict rate of diffusion (Rogers, 2003). From the findings of this study, technology as a factor for sustainability for the small business entrepreneur provided affording

advantages, compatibility with existing practices and beliefs, low complexity, potential

trialability, and observability as ascertained by Rogers.

From the findings of this study, *implementation* was a fundamental factor in the

application and insertion of technology for sustainability that was in line with Rogers's

diffusion of innovation theory. The participants in this study, when asked if they have

engaged in or implemented any form of technology insertion or application within the

last 3 years in their businesses, responded with a positive answer and gave reasoning for

their implementation technology as need for growth, efficiency in operation, and

marketing. This approach of technological implementation from the findings of this

study had direct relevance to studies of IT acceptance in organizations and innovation

theory (Bros-Brouwers, 2010).

While diffusion theory provides a context in which one may examine the

diffusion or spread of information technology over a period of time in a social system,

diffusion theory does not explain in detail user acceptance of innovations (Rogers, 2003).

Many researchers in the fields of human-computer interaction and management

information systems have studies user acceptance. From this study's findings, a

relationship exist between implementation of technology, technology acceptance, and the

adoption of technology to growth and sustainability for the small business owner.

Relationship of Findings to the Literature

The findings of this study relate to literature on effective business practice

regarding the study topic: exploring technological factors for the sustainability of the

small business entrepreneur. The topic of sustainability remains a complex phenomenon.

For this study, sustainability defined as "a need to live in the present in ways that do not jeopardize the future" (Senge, Smith, Kruschwitz, Laur, & Schley, 2008, p. 9). Pearce (2008) discussed that sustainability involves finding the optimum balance within a complex system of independent issues. Pearce further suggested that sustainability could not survive and thrive without stakeholder input as it involves a complex system of entities. For sustainability to work in moving forward in the 21st century business environment and beyond, Pearce stated that sustainability strategies develop within a complex system. Pearce concluded that for long-term development of sustainability, the balance of the complex system components integrated to include the environmental, economic, social, technical, and political factors, each affecting the other. Pearce express that these different systemic components function together and be holistically integrated and interwoven with other factors for an effective sustainability strategy to work for the improvement of the value for stakeholders and survivability of the organization.

Participants in this study expressed the holistic nature of integrating technological application and insertion as a factor for sustainability. The participants stated that technology affects the sustainability of their business, they believed technology, and its application affects the sustainability of their business positively in moving forward. The findings from this study, validated Pearce's assertion that different systemic components, must function together and be holistically integrated and interwoven with other factors for an effective sustainability strategy to work for the improvement of the value for stakeholders and survivability of any organization.

King (2008) stated that the goal of global sustainability is not just to manage the risk and challenges posed by innovations to the environment but to economic and social implications to the bottom line of future profitability to stake and shareholders. King further ascertained that achieving sustainability requires a swift reaction to changes within industry and market in meeting the threats from the dynamism of technology and a need to include strategies that encompasses a consideration of technology as an influence factor (King, 2008). The finding of this study supports King's assertion.

When participants in this study asked if technology affects the sustainability of their business, participants stated they believed technology and its application affects the sustainability and growth of their business in moving forward. E10 stated, "Technology is an evolving process; always growing and changing. It will always affect the business I am in: By applying newer technology definitely affect the sustainability of my business." To develop a technology innovation plan, organizations must include in their strategy for sustainability a plan to keep pace with evolving trends in technology, green product innovation (Dangelico & Pujari, 2010; Dwyer, 2009), and customer awareness created by the dot-com explosion for competitiveness (Parsons & Lepkowska-White, 2010). Ignoring this new wave of change created by dot-com evolution, and failing to adapt would result in competitive disadvantage especially with organizations operating in blue ocean market unsaturated with competition (Bughin, Chui, & Manyika, 2010; Kim & Mauborgne, 2004). The findings in this study support literature regarding the inclusion of competition and competitiveness in the design of a technology insertion and

application strategy for sustainability by the small business entrepreneur in moving forward.

With wireless solutions expanding and becoming more readily available and affordable, increased efficiency and time in reaching customers and the emergence of electronic commerce or e-commerce has provided opportunities for businesses and organizations to adopt more effective business strategy and new value-proposition that offered cost and speed advantages (Hicks, 2009). Hicks described this evolving trend in technology and media growth as significant in the business strategic initiatives for growth. The Internet continues to alter the purchasing process for buyers while decreasing cost because of increased efficiency (Parsons & Lepkowska-White, 2010). Wireless communications, sensors, and social networking such as Facebook have expanded and became an essential part of how organizations introduced their products and services to consumers and the demand generation. This new supply and demand has influenced how organizations incorporate strategic decision and model for survivability and sustainability. Ribeiro (2010) found that the survival of organizations in either mergers or acquisitions depends on the value given to this new trend in supply and demand. The findings of this study support these bodies of literature from the response given by participants when asked if they have engaged in or implemented any form of technology insertion or application within the last 3 years in their businesses. All 20 participants responded with a positive answer and gave reasons why they implemented technology as the need for growth, survivability, and increased efficiency in operation, and marketing.

Applications to Professional Practice

The small business entrepreneur's willingness to take a calculated risk plays a significant role in innovative creativity through the development of ideas from frontline interactions with customers to satisfy the needs of individuals or groups (Harvard Business Essentials, 2003). Entrepreneurs rely on networking opportunities created by the Internet and IT for agility in distribution, design for growth, and adapting to challenges and threat posed by environmental, cultural, and political factors (Chitakornkijsil, 2009). Inter-departmental networking and communication process enhanced by the use of technology applications in form of computer programs for agility in both deliverables to customer's needs and governance or management decision processes within the organization (Kanji & Chopra, 2010).

Technical innovations continue to create challenges for the small business entrepreneur through the global activities in marketplace where information technology (IT) and the technological innovations of the World Wide Web are driving global competitiveness in the marketing and penetration of product and services. The Internet also continues to play a role in the marketing strategy for businesses. These various technological applications and insertions have prompted the need to examine the effect of technology in the sustainability strategy of the small business entrepreneur, which was the focus of this study. The findings of this study provided valuable information for technology application and insertion strategy/strategies for sustainability of the small business entrepreneur in moving forward.

Entrepreneurship has long been the foundation of businesses in America, and small businesses continue to play an important role in the American economy. For the entrepreneurial small business to continue to thrive in the 21st century business environment dominated by technological innovations and applications, the need for growth and sustainability strategy that includes technological factors is essential. Applied business practices as echoed from the findings of this study for the small business entrepreneur should include application and implementation of technological equipment and tools, the Internet, the social media: Facebook, Twitter, and LinkedIn as part of the strategy for growth and sustainability

Implications for Social Change

A significant implication of this study is that entrepreneurs, as well as potential entrepreneurs in both the service and retail businesses in the Atlanta metropolitan area, have information for strategy in the insertion and application of technology for long-term sustainability. Scholars of business management, and entrepreneurship, should find the design, findings, and conclusions from this study informative. The outcome and findings from this study add to the knowledge pool on the study of the complex phenomena of sustainability.

The themes and domains from this study provided significant findings and conclusions valuable for the entrepreneurial business owner in embracing technology in the strategy for survivability and sustainability. The sustainability and survival of the entrepreneurial small business has economic and social implications to both the local and national economy of the United States for entrepreneurial small businesses employed

53% of the private workforce, and accounted for 47% of sales and 51% of private sector

gross domestic product of the US economy (Kuratko, 2009; Nieto, 2009). The

implications for positive social change include the potential for growth and sustainability

for the small business entrepreneur leading to stronger economies and job creation in

their local communities, and nation (Kuratko, 2005). When entrepreneurial business

strives and grows, these businesses provide employment to the individuals and

stakeholders leading to a more economically stable community, and increased tax

revenue for the local community and nation (Kuratko, 2005).

Recommendations for Action

The following are recommendations that entrepreneurs in the metro Atlanta area

should review and consider applying in their strategic planning initiatives for

competitiveness, sustainability, and growth in the 21st century business environment

dominated by technological innovation and globalization. Entrepreneurs should use the

findings and recommendations of this study by employing technological tools such as

computer programs, the Internet, and the social media such as Facebook, Twitter, and

LinkedIn, as part of their strategies for market penetration, increased market share, and

for competitiveness in moving forward. The participants in this study responded that the

insertion, application, and implementation of various technological tools have been an

asset to their respective success.

Small business entrepreneurs should implement technology insertion and

application strategy for long-term sustainability per the findings and recommendations of

this research. Participants in this study described themselves as self-starter entrepreneurs,

successful, and the competition in their respective market as fierce and competitive but

indicated that the various technological applications and implementation has been an

asset in their success. I recommend sharing the findings of this study with entrepreneurs

in the metro Atlanta area as well as other entrepreneurial settings for long-term

sustainability initiatives. I further recommend that the information and findings of this

study are made available to small business owners, and are informed. Local chapters of

the Small Business Administration represent the best avenue to disseminate the findings

of this study after approval and publication of this study by Walden University. The

findings and outcome of this study should provide interesting readings and insights for

publication in scholarly journals and high-quality magazines to the knowledge pool on

the topic of sustainability.

Recommendations for Further Study

Recommendations for further study include a qualitative study on monetary and

funding challenges in the implementation and application of technology for the small

business entrepreneur in moving forward as identified from the finding of this study. I

recommend that other researchers study the influence of regulations, compliances, and

other outside factors in the implementation and application of technology for the

entrepreneurial small business for sustainability. Other areas for further study would

include a study about technological factors for the sustainability of entrepreneurial

businesses with employee size of more than 20. A study using a target group of

entrepreneurial small business such as chiropractors, accountants, or other entrepreneurial

professionals could enable future researcher of generalizing the results of this study.

Finally, a study of small business owners' experiences regarding the application and implementation of technology in a different geographical region of the United States or an economically disadvantaged community.

Reflections

I had no personal biases or preconceived ideas and values that influenced the study data collection and findings. The findings from this study did not change my perception or thinking as relates to the influence of technology in products and services offerings, and business operations. The participants for this study were individual entrepreneurs with very busy schedules as Chief Executive Officers of their respective businesses. Taking the time off for the interview and writing of the protocol writing was not an easy task for the participants. Scheduling interviews and meeting times was also not easy. I collected data in December and March, which was holiday time for majority of the participants. I experienced some glitches in scheduling meeting times with the participants. However, when participants expressed the desire to cancel appointments, I immediately honored such request. I was very accommodative of any changes in scheduled appointments with priority given to the participants' decision for a rescheduled dated, time, and place for the meeting.

I had never used any qualitative software program before the start of this research study. I used the NVivo10 software to aid in the data analysis but highlighted and sorted the data more manually. However, I found that following Hatch's guidance regarding inductive analysis helpful with the data analysis process. If I do conduct future

qualitative research, I will once again use the same combination of qualitative software program, manually sort and highlight the data to discover themes.

Summary and Study Conclusions

The small business owner cannot ignore the dynamic trend and influence of technology in their daily business activities. The small business owner that recognizes this dynamic trend, with a strategy implemented for the application and insertion of technological tools in his or her business would be in an advantageous position to be competitive in the 21st century business environment. The entrepreneur who incorporates the social media such as Facebook, Twitter, and LinkedIn as part of a marketing strategy will continue to have success in market segmentation and increased market share as indicated from the findings of this study.

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Appendix A: Consent Form

You are invited to take part in a research study on the influence of technology on the sustainability of the small business entrepreneur. You were chosen for this study because you are one of the entrepreneurial small businesses in the metro Atlanta area where this study is to be carried out. Please read this form and ask any questions you may have before agreeing to be part of the study.

A researcher named Noghor Pessu, who is a doctoral student at Walden University, is conducting this study.

Background Information:

The purpose of this study is to explore the experiences and perceptions of entrepreneurial business owners regarding technology insertion strategies for long-term sustainability.

Procedure:

If you agree to be in this study, you will be asked to:

- Participate in a 20 to 40 minute interview not to exceed 60 minutes.

- Write a short explanation of not more than a page on how you implement technology in your establishment.

- The interview would be recorded by the use of a digital audio tape and transcribed. The transcript would be made available to you to be sure there are no misrepresentations

Voluntary Nature of the Study:

Your participation in this study is voluntary. Your decision to participate or not would be respected. If you decide to participate in the study now, you can still have the option to change your mind later. If you feel stressed during the study, you can decide to stop at any time. You may skip any questions during the interview that you feel are too personal.

Risk and benefits of being in the Study:

The benefit of this study is that it is the hope, that information obtained because of this study would benefit the small business entrepreneur on the effect of technology in the sustainability and survival initiatives in moving forward. In addition, it will be explained to the participants the satisfaction of knowing that they have contributed to the body of knowledge on how the small business entrepreneur in the metro Atlanta area is coping with the influence and application of technology in their overall sustainability strategy.

Compensation:

After the completion of the interviews and collection of the data, a thank you card will be sent to each participant by the researcher.

Confidentiality:

Any information identifying you that is provided during the course of this study will be used in a manner to guarantee you anonymity and kept confidential. The researcher will not use your information for any purpose outside of this research project. As part of assuring your confidentiality, the researcher will not include your name, anything identifying your business in any reports of the study.

Contacts and Questions:

The researcher conducting this study is Noghor Pessu. You may ask any questions you have now. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is **12-03-12-0159432** and it expires on **December 2, 2013.** The researcher would give you a copy of this consent form to keep.

Statement of Consent:

_____ I have read the above information. I have received answers to any questions I have at this time. I am 18 years of age or older, and I consent to participate in the study.

Printed Name of Participant _____

Participant's Written or

Electronic* Signature _____

Researcher's Written or

Electronic* Signature _____

*Electronic signature are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

Appendix B: Interview Protocol

Date:

Time:

Place:

Interviewer:

Interviewee:

Position of the interviewee:

Description of type of Business (retail or service):

Background Questions:

1. What is your designation/position in the company?

2. What is your primary responsibility with the company?

3. How many years have you been in business for yourself?

4. Will you describe yourself as an entrepreneur?

5. Did you start the business from the scratch?

6. What motivated you to start your own business?

7. How many employees do you presently have in your establishment?

8. Are you responsible for the overall decision making for the business for long term planning initiatives?

9. How would you describe the competition in your market?

10. What is your main competitive strength?

11. Will you describe yourself or your business as a successful entrepreneurial business?

Focus Question:

12.   What does technology insertion mean to you?

13.   Have you engaged in or implemented any technology insertion efforts in
       your business in the last 3 years? Why or why not

14.   What types of technology insertion have you inserted?

15.   How do you think technology affects the sustainability of your business?

16.   What are the forces that resist or drive you to introduce technology?

17.   What have you experienced regarding implementing technology in the
       different functional areas of your business?

18.   What are your believe about the value of implementing technology in your
       business?

19.   What do you believe about the following statement: Implementing
       technology helps in the success of my business.

20.   What do you believe about whether implementing technology could aid
       with creating a competitive advantage?

21.   What type of technology do you employ in reaching your potential and
       existing customers?

22.   What type of technology do you use within the internal operation and
       activities of your organization?

23.   Explain any external factor or factors that contribute or inhibit the use of
       technology for the everyday operation of your business

24.   Are there any changes that could be made to assist you in implementing

technology in your organization?

25. Do you consider technology as a threat to the success of the your business in moving forward?

26. Will you consider yourself as technology savvy?

27. What is your philosophy on implementing technology in your business?

Appendix C: Letter of Invitation

Noghor Pessu
Doctoral Candidate at Walden University, USA

noghor.pessu@waldenu.edu

Date:

To: Entrepreneurial Business Owner

Dear Sir or Madam:

Subject: Request to Participate in a Doctoral Study

I am a student at Walden University, School of Management and Technology, who is working on a research project for the university's academic requirement.

The project is to explore the experiences and perceptions of entrepreneurial business owners regarding technology insertion strategies for long-term sustainability.

You were chosen for this study because you are entrepreneurial small businesses in the metro Atlanta area where this study is been carried out. Please read the enclosed **consent form** and ask any questions you may have before agreeing to be part of the study.

Enclosed is a stamped, self-addressed envelope for you to return the consent form to me. You may also return the consent form via my email address. I sincerely hope you will be able to serve as a participant of this study because I believe that this study would benefit the small business entrepreneur in the metropolitan Atlanta area on the effect of technology in the sustainability and survival of their respective businesses in moving forward.

Sincerely,

Noghor Pessu
Walden University
Research and Doctoral Candidate

Appendix D: Protocol Writing

E1

My experience with implementing technology in my establishment:

I have to keep updated computer programs needed for administrative and operation of the school on a regular basis.

2. I have to create a Facebook account for the company for easy access to students in communicating with the school.

3. I created a web site. A valuable asset used in linking Government and Local regulatory bodies of the state.

4. The technology available helped to make the running of this school easy as compared to four or five years ago. The instructors and students have better communication through Facebook.

I must comment here that it takes money to keep up with applying modern and updated technology in this business. However, to be competitive and grow in this business, I do not have a choice.

Appendix E: Interview Transcript

E1

Position of the interviewee:
President and Senior Instructor

Description of type of Business (retail or service):
Vocational Medical School: preparing students for CNA and medical billing/coding
certifications

Background Questions:

Q1: What is your designation/position in the company?

I am the owner, President, and Senior Instructor.

Q2: What is your primary responsibility with the company?

General overseer and CEO. I am also the Senior Instructor (I am an RN by profession).

Q3: How many years have you been in business for yourself?

10 years, I started this school in 2002

Q4: Will you describe yourself as an entrepreneur?

Yes

Q5: Did you start the business from the scratch?

Yes. I started from a two-room office space. Is it not wonderful to have this facility today
with over 20 full time students?

Q6: What motivated you to start your own business?

Entrepreneurial drive: to be my own boss and achieve my dreams.

Q7: How many employees do you presently have in your establishment?

8. This includes administrative staffs together with the full and part-time instructors.

Q8: Are you responsible for the overall decision making for the business for long term planning initiatives?

Yes. I am training my eldest son to take over someday in the future. He is presently in the school of nursing.

Q9: How would you describe the competition in your market?

Very fierce: There are universities, community colleges, even hospitals offering the same or similar programs to students.

Q10: What is your main competitive strength?

Years as an RN, and administrative experience. My instructors are well qualified with related medical degrees. Our prices for the different certification programs are very competitive and we help students in facilitating the process of getting financial aids. We advertise aggressively.

Q11: Will you describe yourself or your business as a successful entrepreneurial business?

Yes. You can see the growth. I started this business with 2 students and now we have over 20 students on a regular basis. I have been in business for 10 years. I think that is good.

Focus Question:

Q12: What does technology insertion mean to you?

Applying technology in the form of equipment, programs or any related technological application.

Q13: Have you engaged in or implemented any technology insertion efforts in your business in the last 3 years? Why or why not

Yes. We need new and up to date equipment for our school. In addition, we have to update our computer programs to meet with the growth in our enrollment.

Q14: What kinds of technology insertion have you inserted?

New equipment for the classroom: overhead projectors and electronic equipment. Updated computer programs to keep up with enrollment growth.

Q15: How do you think technology affects the sustainability of your business?

A lot: You have to have up to date equipment and computer programs to effectively run this business. The Facebook and Internet for sure. The web site. All these technologies available to us have tremendously helped in our growth and helped in the sustenance of the growth we are experiencing.

Q16: What are the forces that resist or drive you to introduce technology?

Money can be a resisting factor. However, the need to be up to date with technology is very important as we grow in class enrollment. To be competitive with other institutions that offer similar programs for certification, we have to be up to date.

Q17: What have you experienced in terms of implementing technology in the different functional areas of your business?

It has made operation easier with growth administratively. The Facebook, Internet through our website and links with government regulatory agencies, accessing information on financial aids for students have been an asset in running the school and getting enrollment up.

Q18: What are your believe about the value of implementing technology in your business?

Very valuable, like I have just explained.

Q19: What do you believe about the following statement: Implementing technology helps in the overall success of my business?

Very true

Q20: What do you believe about whether implementing technology could aid with creating a competitive advantage?

Very correct. You cannot be out of date. You need to apply and use technology to be competitive. The Internet is a very important tool today.

Q21: What type of technology do you employ in reaching your potential and existing customers?

Of course the Internet. Our website has been very effective in getting students in.

Q22: What type of technology do you use within the internal operation and activities of your organization?

Computer programs: keeping updated files of enrolled students for administrative use. Websites: linking students to information on financial aids. The Facebook: for easy communication between students and instructors.

Q23: Explain any external factor or factors that contribute or inhibit the use of technology for the everyday operation of your business.

Many of our programs used administratively are linked to government sites to access information on financial aid and regulations. Our greatest inhibitor to the application of technology is money. It can be expensive.

Q24: Are there any changes that could be made to assist you in implementing technology in your organization?

Not really. We need money.

Q25: Do you consider technology as a threat to the success of the your business

in moving forward?

Of course I do not see technology been a threat at all. We have to keep up with the technology that helps us to increase and maintain our student enrollment. The Internet through our web site has been very effective.

Q26: Will you consider yourself as being technology savvy?

Not really. I know just enough to understand how technology affects my business.

Q27: What is your overall philosophy on implementing technology in your business?

I definitely have to keep up with technology as it affects my business. It changes so fast. Any program or programs that may help the effectiveness of our operation will always be embraced. You have to be on top of things these days especially with technology in order to be competitive and maintain student enrolment.

Curriculum Vitae

Noghor Pessu
norolis@bellsouth.net

PROFILE
- Extensive experience in sales and business management.
- Skilled in sales and risk management consulting.
- Detail, goal orientated, self-motivated, and a team player.

PROFESSIONAL MEMBERSHIP
- Member Association of MBA Executives

ACADEMIC HIGHLIGHTS
-DBA (Doctor of Business Administration), Entrepreneurship, Walden University, Minneapolis, MN. USA
Graduation: March 2015
Doctoral Study: Technological Factors for the Sustainability of the Small Business Entrepreneur

-MBA (Master of Business Administration), Marketing, Atlanta University Graduate School of Business, Atlanta, GA. USA
Graduation: July 1984

-BSc (Bachelor of Science), Biochemistry, University of Benin, Benin-City, Nigeria
Graduation: September 1978

WORK EXPERIENCE
- 2007- Present   Lota Resources, Int. LLC   Lawrenceville, GA, USA
  Consultant
  Consulting with small and medium sized businesses on sales, marketing and management initiatives

- 2004 – 06/2007   Mall of Georgia Chrysler/Dodge/Jeep   Buford, GA, USA
  Senior Sales Consultant
  Expertise in sales and marketing of Chrysler product lines
  Team leader for a team of five associates
  Responsible for training and development of new sales associates

- 2000 – 2004   Team Automobile Group   Stone Mountain, GA, USA
  Senior Sales Consultant
  Sales of new and pre-owned Dodge automobile products.
  Market includes individual and commercial retailers.

-1989 –1999   Courtesy Insurance Agency   Decatur, GA, USA
Agency Manager/Owner
Functioned as primary decision maker and Insurance Agent.
Responsible for training of new sales recruits, and development of the sales force.

- 1984 –1989   Metropolitan Life Insurance   Atlanta, GA, USA
Account Executive
Responsible for servicing existing accounts: using company's financial products

- 1980-1981   Imaguero College   Benin City, Nigeria
Science Instructor
Teaching advance courses in biology and chemistry from curriculum

- 1978-1979   Government College   Maiduguri, Nigeria
Science Instructor
Teaching introductory courses in chemistry and mathematics from curriculum