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Information Technology Adoption by Small Businesses Owners

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Walden University

College of Management and Technology

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Soha Ragab

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Walden University
2016

Abstract

Information Technology Adoption by Small Business Owners

by

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MBA, Keller Graduate School of Management, 2010

Bachelor of Law, Mansoura University, 2003

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

June 2016

Abstract

Small business owners need effective strategies to increase profitability. One such strategy is the adoption of information technology (IT). The purpose of this multiple case study was to explore the strategies used by small business enterprise (SBE) owners to implement IT solutions for increased profitability within 3 years of opening their business. The population consisted of 3 small business owners in Orange County Southern California who were profitable by their third year of business. The conceptual framework for this study was based upon general systems theory. Data for this study were collected through semistructured interviews and a review of company documents. Transcript review and member checking were included for validity and reliability purposes. Methodological triangulation, achieved through analysis of business plans, financial documents, and probability trends documents allowed identification of 4 emergent themes: Essential strategies small business owners use to implement IT solutions for increased profitability, the essential relationship between network orientation and successful IT implementation, the relationship between IT consultants and successful implementation, and the relationship between internal IT resources and successful implementation. The findings from this study could impact social change because when SBEs are profitable, SBE owners will contribute to the affluence of their workers, communities, local economies, and society.

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Dedication

I would like to dedicate this study to my loving husband Ahmed Ragab for his motivation and support of my educational goals, and his confidence in me completing this journey. I dedicate this work to my mom (Nosa Elaskalani) and my dad (Mohsen Elaskalani), for all the encouragement, confidence, and support that they have provided me; I am sorry that my dad did not get to see my completed dissertation. I also dedicate this work to our beloved children, Yousif and Sarah, for all the precious moments away from them that I used to complete this doctoral study. I hope that this accomplishment will inspire them to pursue their doctoral degree in the future. To all of you, I say thank you and I love you.

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To the folks who kept asking, “Are you done?” I can finally say, “Yes!”

I would like to thank my Walden University colleague and friend Dr. Solomon Aborbie; we met in our residency at Walden and since that time have developed a great friendship. I really appreciate your help and for assisting me along the way.

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Section 1: Foundation of the Study

Small businesses enterprises (SBEs) are the backbone of the United States economy (Bessick & Naicker, 2013). Ninety-eight percent of employer and nonemployer SBEs have fewer than 20 employees, yet they contribute 50% of the United States' nonfarm real gross domestic product (Small Business Administration, 2012). Between 2003 and 2013, SBEs contributed on average 70% of the net new jobs (Small Business Administration, 2013). SBEs rely on information technology (IT) to produce and deliver value to their stakeholders (Ertürk & Vurgun, 2014; Tahir, Mohamad, & Hasan, 2011). IT is the development, implementation, and repair of computer hardware and software systems to systematize information by electronic means (Lee, Kelley, Lee, & Lee, 2012). The disciplines of IT adoption consist of five major parts, and these are (a) organizational, which consists of management, culture, and knowledge; (b) suppliers relations; (c) customers relations; (d) external IT resources; and (e) internal IT resources, which consists of the IT abilities and capabilities of the firm (Ghobakhloo & Tang 2014; Newby, Thuyuyen, & Teresa, 2014).

Background of the Problem

IT adoption is a significant topic of study in many sectors including SBEs. SBEs account for over 97% of all businesses, 50% of the GDP, and over half of employment in the United States (Johnson & Schaltegger, 2015; Kobe, 2012). According to U.S. Census Bureau data, SBEs accounted for 63% of the jobs formed from 1993 to 2013. During the recession from 2009 to 2013, small businesses reported 60% of the net new created jobs (U.S. Small Business Administration, 2013). IT provides an opportunity for SBE owners

to advance their competence and efficiency and to gain competitive advantage (Abebe & Angriawan, 2014; Li, Veliyath, & Tan, 2013; Nguyen, Newby, & Macaulay, 2015).

Problem Statement

Between 2010 and 2013, SBEs lost \$83 billion that can be traced directly back to unsuccessful IT implementation and a slow IT adoption rate (Ghobakhloo & Tang 2014; Newby et al., 2014; Taneja, Pryor, & Hayek, 2016). In 2013, SBEs owners lost \$24 billion because of poor management of their internal and external IT resources (Brunswicker & Vanhaverbeke, 2014). The general business problem is SBE owners encounter a high IT adoption failure rate within SBEs. The specific business problem is some SBE owners lack sufficient strategies to implement IT solutions for increased profitability.

Purpose Statement

The purpose of this qualitative, multiple case study was to explore strategies SBE owners used to implement IT solutions for increased profitability. The target population comprised three SBE owners with more than 3 years of experience in two industry sectors (e.g., retail and manufacturing), located in Orange County, in Southern California. The participants were selected because they have achieved increased profitability after implementing IT solutions by year 3 of being in business. The implication for positive social change inherent in this research lies in the potential to help SBE owners and other interested persons gain practical insights regarding successful IT adoption processes. Furthermore, the study's findings provided insight into IT adoption in SBEs and

emphasized the importance of shaping the evolving relationship between business and society.

Nature of the Study

Qualitative research is a method that uses common themes from detailed experiences through identifying a person's actions and intentions (Yin, 2014). Researchers using the qualitative methodology explore complexities in individual behaviors from the viewpoint of the participants regarding a contemporary phenomenon (Marshall & Rossman, 2016). The quantitative method is appropriate when the researcher seeks to explain the relationship between and among variables (Walsh, 2012). Therefore, the quantitative method was not appropriate because in this study, I did not examine the relationship among variables; hence, a qualitative approach was appropriate. In addition to the qualitative approach, using a multiple case study as opposed to a single case study facilitated the engagement of a variety of perspectives. I selected the multiple case study because the intent of the study met the following three criteria expected of the case study: (a) the focus of this study is to answer the questions of *what* and *how*, (b) this was a contemporary problem, and, (c) as the researcher, I had no control over the participants.

As the intent of this study was to explore strategies SBE owners used to implement IT solutions for increased profitability, an ethnographic research would not have supported the doctoral study because such a design would concentrate on a cultural group from a single data source, not a process within a group of individuals. Other designs such as phenomenology, content analysis, and narrative design would not have proven cost effective and would not have met the purpose of the study. Ethnography and

phenomenological research would not have supported the doctoral study for the reason that the design concentrates on a cultural group from a single data source, not a process within a group of individuals (Knoblauch & Schnettler, 2012). Additionally, narrative design is through the author's descriptions, and the process might overlook details and themes from the participants (Fayolle & Gailly, 2015; Hanson et al., 2011). The multiple case study design incorporates multiple methods to collect data and the capability to develop common factors among the data (Walsh, 2012). Ethnography research would not have supported the doctoral study for the reason that the design concentrated on a cultural group from a single data source observation in the specific cultural environment (Knoblauch & Schnettler, 2012). The intent of the phenomenological design is to explore lived experiences of participants about a specific phenomenon (Marshall & Rossman, 2016). A phenomenological design would not have fit the intended purpose of this study. Narrative design is through the author's descriptions and the process might overlook details (Marshall & Rossman, 2016). Narrative design is through the author's descriptions and the process might overlook details and themes from the participants (Hanson et al., 2011). The multiple case study design incorporates multiple methods to collect data and the capability to develop common factors among the data (Walsh, 2012).

Research Question

The purpose of using a qualitative multiple case study was to explore strategies that SBE owners use to implement IT solutions for increased profitability. The overarching research question for this study was the following: What strategies do SBE owners use to implement IT solutions for increased profitability?

Interview Questions

Participants in the study asked to address the following questions in an interview setting:

1. What strategies did you use that were most effective in adopting IT in your SBE?
2. What are the main factors that led directly to successful IT implementation in your SBE?
3. How did you use different strategies to implement IT solutions to increase profitability in your SBE?
4. In your experience, what barriers prevent SBE owners from being successful with IT solution implementation?
5. What other information can you share that was not addressed in the interview questions to help others to increase profitability after implementing IT solutions?

Conceptual Framework

The focus of this study was on the exploration of strategies that SBE owners used to implement IT solutions for increased profitability. The conceptual framework informing this study guided the exploration of strategies that SBE owners use to stay competitive. I chose the conceptual framework of general systems theory for this study.

Von Bertalanffy introduced general systems theory in 1937; the inspiration behind systems theory is the idea of a system's entirety (von Bertalanffy, 1968). Accordingly, von Bertalanffy's theory focuses on absolute organizational systems with human beings, social interaction, and technology working in sync to guarantee the implementation of organizational goals (von Bertalanffy, 1968). General systems theory grounded the

conceptual framework of this study. The focus of this study was strategies SBE owners used to implement IT solutions for increased profitability by implementing best practices using a general system approach. The structure of the literature review shaped a hierarchical configuration approach to build an understanding of IT adoption into SBEs topic through a system theory lens (Knoblauch & Schnettler, 2012; Medvedeva, 2012).

There are five concepts of general systems theory. Hierarchical structures should exist in all systems, all systems have distinct boundaries, and all systems have internal relations to the additional parts of the big system. Furthermore, each system is defined as a whole, and all systems have a feedback loop for self-communications (Stephens, 2013; von Bertalanffy, 1972). The systemic approach to innovation identifies operational basics to determine the internal and external dependencies of innovation (Knoblauch & Schnettler, 2012; Stephens, 2013).

Ghobakhloo and Tang (2014) argued that SBEs owners require adopting new technology and new strategies to increase profitability. For instance, changes align the latest technology with the organizational objectives of the corporate structure. Additionally, adaptability to the new technology requires a basic structure by an open-source technological approach to innovation (Allen & Geller, 2012; Medvedeva, 2012; Stephens, 2013).

Thus, integration of an open-source management system accounts for the adaptability of SBEs processes with advanced technology (Ghobakhloo & Tang 2014; Newby et al., 2014). This organizational support included all systems and subsystems within SBEs in technical, operational, and business areas (Ghobakhloo & Tang 2014).

One branch of general systems theory is general systems logical theory, which emphasizes an input-output model by means of class theory concepts (Stephens, 2013; von Bertalanffy, 1968). General systems logical theory is complementary to and has similar aims as the general systems problem solver, an extension of general systems theory that is suitable for management problem-solving activities (Medvedeva, 2012; Stephens, 2013; von Bertalanffy, 1968; White & Fortune, 2012).

Definition of Terms

Information technology (IT): IT involves the use of computers and telecommunication networks for the processing and distribution of data (Sears & Hoetker, 2014).

Small business enterprise (SBE): A SBE, for the purpose of this study, is a small business that operates independently with 500 or fewer employees (U.S. Small Business Administration, 2012).

Assumptions, Limitations, and Delimitations

Assumptions

Qualitative research starts with assumptions, the possible use of a conceptual framework, a worldview, and the study of researching problems searching into the meaning of those who attribute to a social problem (Denzin & Lincoln, 2011). This study has three main assumptions. The first assumption was that Orange County in Southern California would be a rich ground for recruiting adequately diverse owners of SBEs. The second assumption was that the participants offered their genuine, truthful, and detailed point of view to answer interview questions and gave detailed information without biased

responses. The third assumption was that a qualitative multiple case study was an appropriate method to explore strategies that SBE owners used to implement IT solutions for increased profitability.

Limitations

Limitations include potential weaknesses that can affect the study outcome (Denzin & Lincoln, 2011). Research in any social area is vulnerable to a variety of limitations (Unluer, 2012). The first limitation was small sample size, and the second limitation was that the selected industries represented manufacturing and retail that are geographically specific to Orange County in Southern California. Second, the results obtained from qualitative case study research designs could not reach statistical or theoretical generalization (Marshall, Cardon, Poddar, & Fontenot, 2013; Yin, 2014). However, using a multiple case study research design to achieve analytical transferability can mitigate this limitation (Denzin & Lincoln, 2011; Johnson & Schaltegger, 2015). Finally, SBE business owners use various internal, personal, and intrinsic factors to make business decisions; consequently, verification by multiple sources of evidence may not be possible (Yin, 2014). I used member checking to ensure the analysis of the participants' responses was accurate. I reviewed and interpreted the interview transcripts, then wrote each question followed by a succinct synthesis to ensure member checking. Then I provided a printed copy of the synthesis to the participant and asked if the synthesis represented the answer or if there was additional information they would like to add.

Delimitations

Delimitations are boundaries that researchers impose to focus the scope of a study (Denzin & Lincoln, 2011). The delimitations of a study include (a) sample size, (b) geographical location, and (c) business size (Yin, 2014). I focused on meeting with three SBE owners to gain an understanding about their strategies to adopt IT into their businesses to gain profitability rather than gathering information from a large population that may have different perspectives that might have affected other areas or other valuable information. The research population included IT business owners of SBEs who had succeeded in business for at least 3 years and had implemented IT solutions. Another delimitation of the study was that participants from the geographical area of Orange County, in Southern California.

Significance of the Study

Contribution to Business Practice

IT adoption was a significant topic of study in a number of areas, including among SBEs. IT can decrease costs, increase production, improve products and services, and augment a company's competitive advantage (Campbell, Heriot, Jauregui, & Mitchell, 2012; Jarrahi & Sawyer, 2015). Some researchers have shown that IT is a means to improve the business process (Adkins, Samaras, Gilfillan, & McWee, 2013; Lee et al., 2012). Tang and Murphy (2012) argued that IT provides an opportunity for IT business owners to improve efficiency and to gain competitive advantages. Business growth is an extra driver to IT adoption in SBEs, along with quality improvement, industry prerequisites, and investment. Such significant contributions have caused a

majority of businesses to adopt IT practices to advance the quality of their services or to surpass their customer expectations (Anderson, & Ullah, 2014; Newby et al., 2014).

Implications for Social Change

Social change is the capability to cause behavior changes of the people relevant to the researched phenomenon in a study (Besser, 2012). I suggested that IT adoption could be helpful if small businesses took a broad vision of what is desirable for success. There is no explanation for the success or failure of IT adoption rates in SBEs (Ghobakhloo & Tang, 2014). There are a number of consistent factors that are known as a market analyst of achievement (e.g., organization, internal IT resources, external IT resources, consultants, and customer relations [Besser, 2012; Ghobakhloo & Tang, 2014]. Understanding the aspects identified in this study can help SBEs reduce the risks in IT adoption by using designed strategies for IT adoption (Ghobakhloo & Tang, 2014). IT adoption has major impacts on the economy and society, and thus there is a contribution between the new technology and the economic growth (Nguyen et al., 2015). SBE owners must be very careful when making new decisions. Many choices made today can prove costly in the future. Consequently, the implementation of new technology can have positive effects on social change.

A Review of the Professional and Academic Literature

The intent of this qualitative, multiple case study was to explore strategies that SBE owners used to implement information technology solutions for increased profitability. In their IT implementation, SBE owners have to connect with five factors (Ghobakhloo & Tang, 2014; Nguyen et al., 2015): supplier relations, organization,

internal IT resources, external IT consultants, and customer relations (Newby et al., 2014).

The literature review includes descriptions of the research topic and the conceptual framework. The literature published on IT adoption in SBEs and its implementation in the fast-changing technological environment adds support to the topic. Literature research for the study included scholarly articles from peer-reviewed journals and searches in various databases, such as Business Premier, ProQuest Research, Walden Library, Sage Full Text Collection, Google Scholar, and Emerald Insight. The literature review contains 160 peer-reviewed resources published within 5 years of the completion of the study. The total number of references used in the doctoral study are 182, of which 160 (87%) are peer-reviewed and published within 5 years of graduation year.

Literature Review Map

In order to fully explore IT implementation by SBE owners, I conducted a multilayered approach to the literature review. I analyzed the conceptual lens upon which the idea of IT adoption in the SBE is the outcome pertaining to increased profitability. Five factors influencing IT adoption include (a) organization, (b) customer relation, (c) external IT consultants, (d) consultant relations, and (e) internal IT resources (Ghobakhloo & Tang 2014; Newby et al., 2014). I clarified the factors influencing information technology adoption (Figure 1). I attempted to outline specific issues and address the level of knowledge that SBE owners need to implement in SBEs.

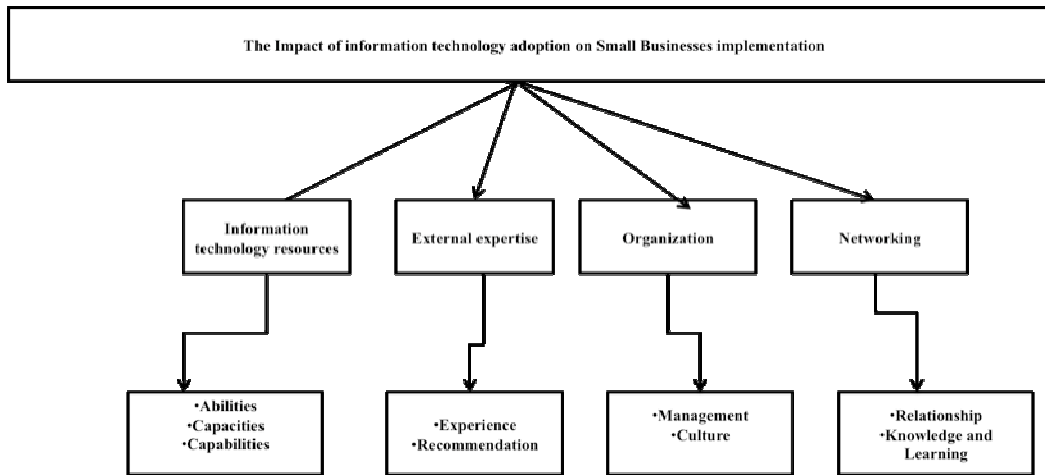


Figure 1. Factors influencing information technology adoption.

Conceptual Theory

The key theory discussed in this section is systems theory. SBEs owners should incorporate and use multiple different processes and components to implement IT solutions for increased profitability (White & Fortune, 2012). General systems theory includes centralized accountability for tasks, conditions, procedures, and boundaries (Medvedeva, 2012; von Bertalanffy, 1972; White & Fortune, 2012). In addition, recognizing and executing an advanced approach with a systematic pattern of thinking requires some process changes (Luiz & Sbragia, 2011).

General Systems Theory (GST)

GST, as described by von Bertalanffy (1950), focuses on the structure of a system rather than its functions, further proposing that complex systems share some basic organizing principles regardless of their purpose. Theorizing that laws and principles could be applied to different systems via the application of a common framework, von Bertalanffy (1968) asserted that scientists should be able to exchange their result together

to gain immense value of these results. Bertalanffy also developed general systems theory of the organism, now referred to as GST, which incorporated the following basic tenets, applicable to any entity (von Bertalanffy, 1972).

Von Bertalanffy (1968) argued that the basic characteristic of all living things is its organization; the usual analysis of sole processes could not present a complete rationalization of the basic phenomena. A system must function as a whole and not as a subsystem (von Bertalanffy, 1972). Consequently, his philosophy indicated that a system should be defined by using a holistic approach. Von Bertalanffy (1968) employed the example of the human body as a system, suggesting that the heart, brain, or any other body part does not define a system. On the whole, a system is characterized by having a defined goal to be attained. According to GST, nothing can be understood in isolation, but must be seen as part of a system (von Bertalanffy, 1972). GST helps to explore perceptions of interactive strategies of SBE owners to the whole concept of IT adoption. IT has significant effects on the productivity of SBEs (Piro et al., 2014). These effects could indicate how SBE owners use IT to increase profitability.

Regulations. Von Bertalanffy (1950) theorized that system laws manifest themselves as analogies of laws that are formally identical, although pertaining to somewhat different phenomena or even as emerging in dissimilar disciplines. Von Bertalanffy suggested that for a system to operate efficiently, laws must exist, and methods of feedback should be well-known. According to von Bertalanffy, a system should be hierarchical, meaning that whole systems are composed of lesser subsystems.

Von Bertalanffy's systems theory incorporates the idea that a system is made up of specialized units, each with specialized functions.

Multifinality. This is the final principle of von Bertalanffy's general systems theory. Multifinality describes a system in which some initial cause can produce many different outcomes depending on the circumstance. However, other options, objectives, and goals are attainable from similar inputs (von Bertalanffy, 1972).

General Systems Theory Influence on the Modern Publicly Traded Entity

The principles of von Bertalanffy's GST as discussed above demonstrate how the systems framework is also deep-seated within organizational theory as organisms (i.e., organizations) are composite and dynamic goal-oriented processes. Von Bertalanffy's systemic vision of organizations is transdisciplinary and integrative (Laforet, 2016). Work in understanding systems has developed to the point that it incorporates many concepts within daily language (Medvedeva, 2012). For instance, one speaks of healthcare systems, information systems, banking systems, or political systems (Li et al., 2013). As an alternative to concentrating on fundamental building block substances, systems lean toward emphasizing the principles of organization. The organization is thus analyzed as a system, which might be identified by four fundamentals: inputs, revolution processes, outputs, and standpoints. According to Blackburn, Hart, and Wainwright (2013), the organization receives from the environment inputs such as the material, financial, human, and information resources. Through the advancement of technology and management resources, inputs are changed into outputs.

Outputs consist of product and service (tangible and intangible), employee behaviors, and the level of knowledge (Chung, 2014; Laforet, 2016).

Viewing the organization as a system allows for several critical concepts, including open systems, subsystems, synergy, and entropy (Ludovic-Alexandre & Marle, 2012). Most organizations are open systems, meaning that they interact with their environment. Subsystems play an integral role in many organizations today (Stephens, 2013). In contemporary organizations, for example, there are marketing, finance, human resources, and information technology subsystems (organizational units; Stephens, 2013). These subsystems are part of the overall system (organization) but are interdependent. A change in one subsystem may affect another subsystem and may impact the functioning of the overall system. Synergy is a crucial concept of the system. This concept suggests that organizational units (subsystems) thrive more when they work jointly rather than independently (Ludovic-Alexandre & Marle, 2012). For instance, in a Fortune 500 company, a marketing department might achieve better success working with an information technology department on an online advertising campaign (Li et al., 2013).

Furthermore, von Bertalanffy's concept of entropy is important. Entropy is a standard process that leads to a system's decline (Kovach & Mariani, 2012; Nag & Gioia, 2012). When organizational leaders fail to supervise feedback from the environment and make the right adjustments, failure may occur. It is imperative to mention that von Bertalanffy's GST's principle of systems laws (regulations) has become the norm among organizations today. As a result of organizational misconduct and massive financial losses, especially during this millennium, government regulations have created new

subsystems in the organization (Nguyen et al., 2015). As a result of systems laws, the concepts of synergy and entropy at the present play significant roles in the contemporary organization (Kovach & Mariani, 2012; Ludovic-Alexandre & Marle, 2012).

Drivers of Information Technology Adoption

IT is a necessary tool in enhancing the competitiveness of a country's economy (Abebe & Angriawan, 2014; Perrigot, et al., 2012). Moreover, IT has significant effects on the productivity of SBEs (Nguyen et al., 2015), and a number of research studies on the impact of IT adoption in SBEs have focused on factors that control the adoption of IT (Lanza & Passarelli, 2014; Lonial & Carter, 2015; Nguyen et al., 2015; Perrigot et al., 2012; Sousa, Lengler, & Martínez-López, 2014). Such factors include innovation, skills, member of staff attitudes, and IT skills (Nguyen et al., 2015). The choices to adopt IT into small businesses are controlled by external factors (Lonial & Carter, 2015; Nguyen et al., 2015).

However, small business owners see IT adoption as either an opportunity or a threat (Blackburn et al., 2013; Perrigot et al., 2012). Colombo et al. (2012) argued that using IT is not valuable to SBEs, while Sousa et al. (2014) argued that IT adoption it might be not suitable for all small business. Lee et al. (2012) have argued that IT adoption in SBEs often happens without preparation, resulting in failure of IT implementation.

According to Nguyen et al. (2015), SBEs, mostly new ones, often experience vagueness and improbability regarding IT adoption. Seghers, Manigart, and Vanacker (2012) examined the many complexities small business owners experience when

adopting new technology is deficient in fiscal, technological, and managerial resources to SBEs. From these sources, five inconsistent factors emerge to influence the success or collapse of IT adoption: (a) organizational, (b) internal IT resources, (c) consultants relations, (d) external IT resources, and (e) customer relations (Nguyen et al., 2015). Hence, in this study, I presented a dual approach: (a) I explored drivers and intentions to IT adoption in SBEs and (b) I established factors related to the achievements and accomplishment in the perspective of retail industry and manufacturing) in Orange County in Southern California (Figure 1).

A review of the extant literature illustrates the empirical research concerning the determinants of IT adoption in SBEs (Blackburn et al., 2013; Gronum, Verreyne, & Kastle, 2012; Roach, Ryman, & Makani, 2016). However, such studies tend to concentrate more on large business, so the findings of these studies are unlikely to be used with SBEs because of the organizational and structural differences between small and large businesses (Findikoglu & Manheim, 2014; Perrigot et al., 2012). Johnson and Schaltegger (2015) have indicated that the large amount of unsuccessful information technology implementation results from three main factors. First, management may be unclear on how and why to adopt IT (Gronum et al., 2012). Second, there may be a misconception regarding the IT adoption process as managers may not recognize the importance of IT adoption (Lasagni, 2012) or may have doubts about IT's opportunities (Chollet, Géraudel, & Mothe, 2014; Marvel, 2012). Third, SBEs may not have the qualifications to increase their IT internal and external resources due to the lack of business and IT strategy (Hasumi & Hirata, 2014).

Chesley (2014) suggested that IT adoption in SBEs often happens without a dependable understanding of what constitutes success. Paulino (2014) argued that SBEs, especially new ones, often have to face problems of ambiguity when it comes to IT adoption, mainly because of a lack of financial, technical, and managerial resources (Amit & Zott, 2012; Brettel, Chomik, & Flatten, 2014; Jänkälä & Silvola, 2012).

However, whether SBES sees IT as an opportunity or a threat remains ambiguous, so SBEs business owners cannot assume that adopting IT is always beneficial (Gangwar, Date, & Raoot, 2014; Ghobakhloo & Tang, 2014; Paulino, 2014). The failure is because of the disengagement between the vision and actions: Organizations have insufficient resources and preparation before implementing the new technology, which is caused from the poor management and unclear strategy about how and why their businesses should adopt new IT (Ghobakhloo & Tang, 2014; Paulino, 2014). Other evidence from the literature showed that many research studies on IT adoption by SBEs investigated the drivers and factors relating to successful IT implementations in small businesses. The drivers of IT adoption are the root of the process, and this is in the planned IT adoption model given in Figure 2.

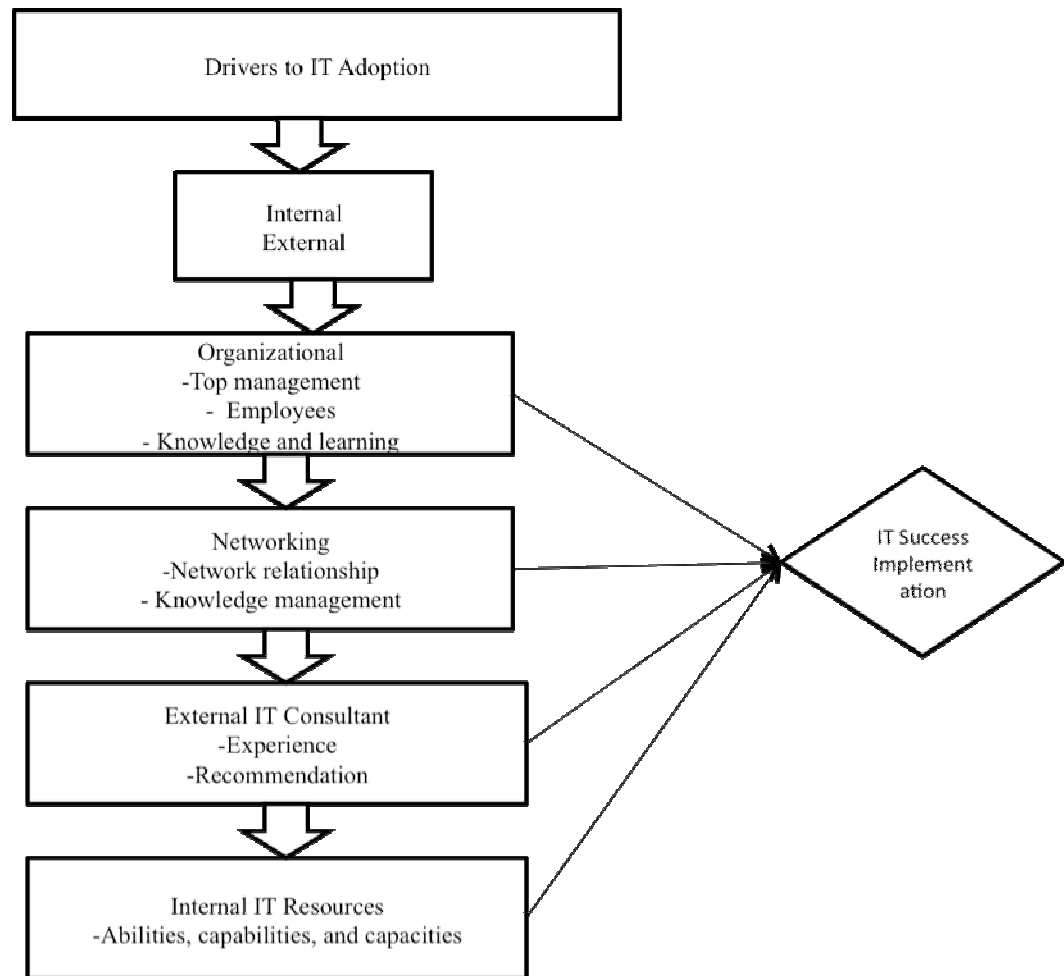


Figure 2. Drivers relates to successful IT implementation in small business.

Information Technology Adoption

The reasons for IT adoption are to enhance survival, stay competitive, and to advance innovation abilities in SBEs (Amit & Zott, 2012; Chollet et al., 2014). The process of IT adoption in SBEs is different (Brown, 2012), and they do not necessarily operate in the same way or have the same impact (Gangwar et al., 2014). Nguyen et al. (2015) argued that the move to IT is in response or reaction to an outcome, while others have suggested that such changes results from the pressure from customers and an

emphasis on improving efficiency (Roach, Ryman, Makani, 2016). Another argument is that the change is in response to pressures from internal and external environments (Brunswick & Vanhaverbeke, 2014; Ghobakhloo & Tang 2014; Newby et al., 2014; Prajogo & McDermott, 2014).

According to Brunswick and Vanhaverbeke (2014), a business analysis of strengths and weaknesses internally, or opportunities and threats externally, has been a primary focus for many research studies. These changes are, sometimes, rationalized as innovative or competitive (Evanschitzky, Caemmerer, & Backhaus, 2015). Lasagni (2012) found that small businesses go through changes within certain stages of their life cycle or in response to modification of their external environment. In contrast, Lofsten (2016) argued that SBEs look for IT adoption in response to changes, both internal and external. Internal changes include the lifecycle of the business and external changes are survival or stability in the market. As companies go through different stages in their life cycle, they become accustomed to situations that suit them (Armstrong, 2013; Lasagni, 2012).

There is no agreement amongst researchers as to how many stages there are within a business's lifecycle. SBEs go through different stages and respond to changes throughout those stages, including the need to adapt to a required improvement (Costanzo, Vurro, Foster, Servato, & Perrini, 2014). Prajogo & McDermott (2014) argued with this view and suggested that the businesses go through states instead of stages in term of growth. These states are related to managerial problems and are thus

changeable. Such problems include changes that confront SBEs and their absorptive capacity.

External changes refer to causes such as technology drive and market pull (Prajogo & McDermott, 2014). Technology drives or pushing describes innovations that are well-developed, so the market, beneath the pressure of this advanced technology, is essential to absorb it (Konsti-Laakso, Pihkala, & Kraus, 2012). Market pull indicates a social need whereby IT is designed to satisfy this need. The market pull adopters are the innovators (Chung, 2014). Market pull also indicates certain standards established by the industry. In order for a business to do the accepted thing according to newly established standards, it needs to implement certain features or changes in its process to address such changes (Prajogo & McDermott, 2014). In a similar perspective, IT adoption is also measured through competitiveness and innovativeness (Abebe & Angriawan, 2014). Innovation typically occurs when SBEs are determined to move forward, with growth and profitability being the inspiration (Konsti-Laakso et al., 2012).

Innovators symbolize alternatives between divergence and convergence external constraints (Paulin, 2014). Bessick and Naicker (2013) suggested that product and process innovations of businesses are associated with a broadening market and internationalization. For many companies, growth occurs via improvements in efficiency and effectiveness (Engelen, Flatten, Thalmann, & Brettel, 2014). Chesley (2014) confirmed this view by suggesting that to invest in growth and innovation, one of the necessary resources is technology. O'Donnell (2014) suggested that innovation is a result of an interaction between internal knowledge and external knowledge. Verbano, Crema

and Venturini (2013) suggested that, in SBEs, innovation is considered a management procedure that influences business performance.

Competitive advantage relates to the competence of an organization in learning from previous experience (Armstrong, 2013; Liao, Rice, & Lu, 2013). There are some concerns with ways in which SBEs create and maintain their skills in staying up to date (Johnson & Schaltegger, 2015; Peña, Jamilena, & Molina, 2015). This may also be the result of being influenced by external factors (Nieto, Santamaria, & Fernandez, 2013) or influenced by mixture of a variety of factors (Bessick, & Naicker, 2013; Kellermanns, Walter, Crook, Kemmerer, & Narayanan, 2014). To summarize, SBEs seek IT enhancement for a purpose: to affirm specific requirements or to respond to critical improvements, which could happen from pressures from internal and external IT resources (Fayolle & Gailly, 2015; O'Donnell, 2011).

Factors Influencing Information Technology Adoption

The five factors influencing IT adoption and relating to the successful execution—organizational, internal IT resources, consultant's relations, external IT resources, and customer relations, these factors have a great impact on the implementation of new technology (Frey, Bayón, & Totzek, 2013). Figure 1 illustrates the organizational factors directly related to the success of IT implementation. These factors is parallel with the internal IT resources of the business, which includes the business's IT capability, ability, and capacity; therefore, resources require being sufficient, assisted by employees' information and an optimistic approach from business owners (Ghobakhloo & Tang 2014; Lee & Kwon, 2014; Newby et al., 2014). The

distinctive characteristic of management lies not only in the IT business owner's characteristics, but also his or her commitment to and support of the new IT adoption and implementation (Lonial & Carter, 2015). However, in line with Linton and Walsh (2013), Voss and Brettel (2014), and Cragg, Mills, and Suraweera (2013), the association of management and employees relate to the success of IT adoption.

Management commitment and connection are part of internal IT resources, and thus, are related to gaining outstanding operation (Lonial & Carter, 2015). Consequently, key stakeholders should be aware of the project leading the information technology adoption into SBEs (Gangwar et al., 2014), what resources are obtainable (Lonial & Carter, 2015), teamwork and acceptance (Chen, 2012; Frey et al., 2013), and knowledge sharing and training (Marvel, 2012). Other than internal resources, the utilization of external resources is extremely extensive in SBEs (Prajogo & McDermott, 2014). Since most of the time SBEs do not have enough expertise, they look for external experts with IT skills and knowledge before starting the IT adoption (Frey et al., 2013). External experts relates to a successful implementation result. Such positive outcomes may result from consultants being independent of the business, thus offering unbiased recommendations (Deligianni, Dimitratos, Petrou, & Aharoni, 2015). Consultants often remain on even after the business has sufficient expertise of its own. Moreover, SBE owners can obtain support from their external resources as suppliers and business partner, as they are typically larger and have additional resources; thus, if they be capable of collaborate more competently, then it will advance their profitability (Ertürk & Vurgun, 2014; Ibrahim, 2012). New IT adopted within SBEs must be incorporated with the

suppliers' IT, not only in terms of technology compatibility, as well for the learning opportunities, which can lead to better competence (Fahed-Sreih & Morin-Delerm, 2012).

Customers are additional aspects that contribute to the IT adoption (Frey et al., 2013). A successful outcome demonstrates the successful relations between customers and suppliers results in a superior model's shape (Gialuisi & Coetzer, 2013). Respondents see relationships with customers in a different way than relationships with suppliers (Brockman, Jones, & Becherer, 2012). The distinctive characteristics of excellent customer relations in the process of IT adoption environment reveal the significant importance of customer's devotion in these small businesses (Abii, Ogula, & Rose, 2013). Hence, SBEs must take their customers' needs into consideration when making any changes in daily IT communication. Brockman et al. (2012) argued that working together with clients can enhance the development of products or services; thus, the top driver for any business to successful IT adoption is their relationship with their customers. Firms should be proficient in exceeding their customers' expectations by identifying their customers' needs (Fensel, Toma, García, Stavrakantonakis, & Fensel, 2014). Therefore, involving the customers of the IT adoption process might lead to a successful implementation result (Abii et al., 2013).

Some of the reasons are important for IT business owners to understand the importance of IT adoption are the (a) goals, (b) plans, and (c) objectives have to be clear. SBE owners should assess the factors that are affecting the adoption surroundings, which can, in sequence, relate to successful implementation (Armstrong, 2013; Brockman et al.,

2012; Fensel et al., 2014). These factors are (a) organizational, which includes managing their knowledge and contribution; (b) the internal IT resources, which are the business's information technology skills and capabilities; (c) the external resources, who put in their expertise to raise profitability; (d) the suppliers, who can offer support for better efficiency; and (e) the customers relations, who are the influential force of the business success. Therefore, SBEs should engage and implement successfully with each of these factors (see Figure 1).

Organizational Factors

Previous studies have recognized numerous organizational factors that control and affect the information technology adoption process on these factors, including the size of the business; the knowledge, competence of employees; and the organizational culture and structure (Brettel et al., 2014; Engelen et al., 2014; Gangwar et al., 2014). Therefore, in a supple culture, the adoption of IT is possible to succeed (Lonial & Carter, 2015). Organizational cultures in SBEs are influenced by the SBEs owner's attitude, character, values, and principles (Engelen et al., 2014). Within SBEs, small business owners make the critical decisions (Brettel et al., 2014), and these decisions are consequential of their existing information, communication skills, and knowledge (Chesley, 2014). The SBEs owner's decisions influence the IT adoption, as well as their dedication to the adoption process (Gangwar et al., 2014).

Moreover, employees' information and form of participation relate to the success of the IT adoption (Chesley, 2014). In addition, employees must recognize the valuable reasons behind the information technology implementation, their responsibility within the

acceptance of new technology, and their contributions to it (Gangwar et al., 2014; Tang & Murphy, 2012). Therefore, communication between supervision and employees concerning about change is necessary. Failure to communicate the importance of IT adoption can be reason of uncertainty among employees as regards the influence of the change, resulting in panic about job security, an unconstructive impact towards the change, and a decrease the level of support (Seghers, Manigart, & Vanacker, 2012). Management must guarantee that there is an awareness and information sharing among everyone in the business, as the IT adoption development needs the spirit of teamwork and approval across all functions within a business (Hauschildt, 2012). Hence, technological learning can promote entrepreneurial development and growth (Yang, 2012).

Culture. Corporate culture exists within SBEs and can be an organization's core competency (Brettel et al., 2014). It is the method by which people do and share things by following definite meanings, values and beliefs within SBEs (Abii et al., 2013). A study by Brunswick and Vanhaverbeke (2014) recommended that culture is an internal factor, which includes the characteristics of human resources and the degree of openness to change.

According to Adkins et al. (2013), SBE owners are resistant to change, a resistance determined by their culture causes them to have doubts about innovation. If a culture is open to accepting new, activities and embrace learning, it will be ready for the change; at the same time, a traditional culture is not likely to accept change (Engelen et al., 2014; Lofsten, 2016). Changing or shaping the culture is a process that requires

strategic planning (Brettel et al., 2014). Brettel et al. (2014) observed that, within SBEs, especially in a family business, culture is determined by the founders' or SBE business owners' values and belief systems. Accordingly, culture exposes the way people do and beliefs within a business (Verreynne, Meyer, & Liesch, 2014).

Top management. In small business enterprises, management makes all the decisions from daily operations to future investments (Voss & Brettel, 2014), so their roles directly influence the IT adoption process (Harper, 2012; O'Donnell, 2014). In SBEs, the important role of IT business owners is vital to SBEs as their choices influences all actions of the business, both present and future (Basford, Offermann, & Wirtz, 2012; Findikoglu & Manheim, 2014). A better understanding of IT adoption within SBEs may be critical for successful implementation (Aykol & Leonidou, 2014; Paulino, 2014). Management's innovation is no less important as it represents creativity and motivation for growth (Gangwar et al., 2014; Harper, 2012). Johnson and Schaltegger (2015) suggested that SBEs who are innovative and have a constructive approach to IT simultaneously with a capable IT skill possibly to be fortunate and acknowledged in adopting new information technology. Johnson and Schaltegger argued that managers identify opportunities through knowledge and experience acquired through a social relationship network, not by individual psychological traits.

Purkayastha and Sharma (2016) observed that resources like human capital play a significant role in SBEs' knowledge environment, functioning as part of the cognitive social capital. In SBEs human capital is the foundation of growth portability and survival. Currently, the characteristics and behavior of top management influence the daily

activities as well as the future of the business (Besser, 2012; Phipps, 2012). The more positive perception they have toward IT, the higher the chance that they will adopt and implement new IT (Carsrud & Cucculelli, 2014). Their understanding of IT and innovation skills contribute significantly to the chances of IT adoption (Evanschitzky, Caemmerer, & Backhaus, 2015). Their management administrative abilities and knowledge also contribute to the adoption process (Carsrud & Cucculelli, 2014; Harper, 2012).

Employees. It is obvious that, among most SBEs, SBE owners are not the only group who contribute to the accomplishment of the business. Employees also contribute, and they have a primary impact on the rise or fall of the business (Bishara & Westermann-Behaylo, 2012; Schlosser, 2015). From this perspective, employees are resources, and SBEs' success depends on them (Darcy, McCarthy, Hill, & Grady, 2012; Shuck & Herd, 2012). Schlosser (2015) suggested that keeping employees informed or conscious of new IT tools and techniques allows them to exploit the resources that can assist in being more productive. Other studies have shown that having employees as part of the project or involving them has several advantages (Chesley, 2014).

Colombo, De Massis, Piva, Rossi-Lamastra, and Wright (2014) provided evidence that employees' involvement in new projects or changes of practices produces a higher success rate. To the employees, on a personal level, it makes them feel that they are part of the team and that they are important and responsible for the success of the project. Prajogo and McDermott (2014) argued that employee knowledge is an SBE's human capital, and employees' involvement in the adoption process yields higher success

rates. Clear communication with employees of the SBEs' current situation as well as their status in the firm before, during, and after the implementation of change are also necessary to ensure that they all work cooperatively, sharing common goals and resources to achieve them (Colombo et al., 2014; Darcy, McCarthy, Hill, & Grady, 2012; Shuck & Herd, 2012). Management should make sure that employees are fully aware of and understand the impact of changes.

However, if a company starts to change to a new computer system, employees may have doubts about job security (Bengtsson & Hand, 2013). Some employees may not consider that the new system will enhance the way the business functions (Mowbray, Wilkinson, & Tse, 2014). Because of the possibility of negative attitudes, Campbell, Ganco, Franco, and Agarwal (2012) suggested that it could be more effective to hire new staff rather than train existing staff, yet the cost of hiring new staff is sometimes higher than providing training to the current ones (Bryant & Allen, 2013). Training must be provided to existing employees if there is a substantial change in the IT. Currently, many management books and policies suggest how to achieve effective communication, provide training to employees on the new systems, and help management to deliver or transfer knowledge successfully to others (Armstrong, 2013; Shuck, Twyford, Reio, & Shuck, 2014).

While employees are part of the progress, they can provide input for activities that they are dealing with daily and with which SBE owners are not involved (Brown, Kulik, Cregan, & Metz, 2015; Bryant & Allen, 2013; Edwards, 2015). Even though, in SBEs, employees do not have the same perspective toward the businesses as owners, their

information is still the company's capital (Lanza & Passarelli, 2014). The employees give a business the absorptive capacity through which it can advance and adapt to changes.

Absorptive capacity refers to the capability that SBEs have to move forward and adapt to change through the circle of absorbing knowledge, transforming knowledge, creating new information, and generating competitive advantage (Abebe & Angriawan, 2014; Bryant & Allen, 2013). The construction of this capability includes the everyday routines and processes that the SBE uses to acquire process and develop SBEs' knowledge. Lasagni (2012) suggested that there is a connection between absorptive capacity and organizational responsiveness in terms of growth in SBEs. The directly related factors are the acquisition of external knowledge and the transforming and disseminating of internal knowledge (Lasagni, 2012).

Bengtsson and Hand (2013) suggested that technological learning and IT promote entrepreneurial development and growth. People from different groups, coming from different backgrounds, interpret, and do things in different ways (Lanza & Passarelli, 2014). This diversity, united with external knowledge and information, leads to the creation of new knowledge and therefore to competitive advantage (Abebe & Angriawan, 2014). The IT adoption requires business owners' support, clear communication with employees, and employees' acceptance of the changes (Colombo, De Massis, Piva, Rossi-Lamastra, & Wright, 2014). Management must make sure that there is well-organized knowledge distributed among individuals within SBE (Prajogo & McDermott, 2014).

Networking

The core characteristic of SBEs is their networks' relationship (O'Donnell, 2014). These networks emerge through many connections, which take place among supplier and customers. They might be business or personal networks, and they are not controlled by organizational restrictions (Pollack, Coy, Green, & Davis, 2013; Su, et al., 2015). Positive customer relationships can smooth the progress of the improvement of products or services (Jarrahi & Sawyer, 2015; Johansen & LeRoux, 2013; O'Toole, 2014). Engaging with these external networks can be very beneficial and can bring learning opportunities, knowledge creation, and competitive advantages (Bumgardner, Buehlmann, Schuler, & Crissey, 2011; Ebbbers, 2014; Konrad, 2013). Because SBEs often lack IT resources and talents (O'Donnell, 2014), when it comes to IT adoption, they can obtain an advantage from network membership (Lanza & Passarelli, 2014), as networking can provide SBEs with necessary resources (Jarrahi & Sawyer, 2015).

Network relationship. Semrau and Werner (2014) suggested that involvement in small business is necessary, and there are different strategies and meanings for each type of relationship that SBEs have developed. The SBE owners of small businesses interact with their stakeholders. There are five types of relationship: network, contract, personal service, personalized, and strategic development (Maes & Sels, 2014; O'Toole, 2014). These relationship strategies represent how people behave, interact, and deal with each type of stakeholder based on the necessity and benefit of their daily activities. Piro et al. (2014) suggested that the principal benefit of networking include sharing of risk, gaining access to new markets and technology, faster delivery of products to the market,

gathering complementary skills, and safeguarding property rights when contingent contracts are not possible.

The networks are a means for attaining access to external knowledge (Brunswicker & Vanhaverbeke, 2014). Maes and Sels (2014) explained that the networking or external environmental factor in small business to include vendors, partners, competitors and IT. For IT, the emphasis of the external environmental perspective is concentrated under the competitive pressure of the market where a certain IT has shown positive results for numerous other competitors (Pollack et al., 2013).

Knowledge and learning. Brunswicker and Vanhaverbeke (2014) suggested SBEs' competitiveness is strongly influenced by internal collaboration. Collaboration among SBEs and customers is common and this can be a route to survival and gain in knowledge sharing (Tang & Murphy, 2012). Seghers et al. (2012) argued that many SBEs fail to recognize the managerial complexity of collaboration between SBEs and their external environment, so they are unable to keep up with the requirement. SBEs also depend on other external resources and knowledge (Maes & Sels, 2014). As absorptive capacity is part of the external relationship network (Carter, Rogers, & Choi, 2015), it provides an opportunity to exchange information that can create new knowledge (Connelly, Ketchen, & Hult, 2013). Valentim et al. (2015) demonstrated that SBEs with high relational competence often become innovative and competitive. Following this point, Maes and Sels (2014) argued that skills relating to learning from beginning to end, a network environment, and ability to work with external resources are essential. Real et al. (2014) suggested that, by appropriately learning, managing and developing the

network of relationships, the SBE owner can create a competitive advantage for the businesses and differentiate the business from its competitors (Abebe & Angriawan, 2014; Carsrud & Cucculelli, 2014).

Small business enterprises are different from large business in that, within those SBEs, personal success is socially rather than psychologically constituted (Carsrud & Cucculelli, 2014; Fayolle & Gailly, 2015). Hence, SBEs can become more innovative and entrepreneurial by developing links with external sources of knowledge (Prajogo & McDermott, 2014). SBEs rely on a relationship network or personal networks (Valentim et al., 2015). SBEs have access to information, knowledge, and learning opportunities for themselves as well as for their employees. It is also a means for the IT business owner to strengthen his or her business by providing access to certain resources that are not obtainable to others (Prajogo & McDermott, 2014). It is crucial that SBEs establish and maintain the connection to this network because it is the source for information, knowledge, and opportunities (Fayolle & Gailly, 2015; Valentim et al., 2015).

External IT Consultants

Some SBE owners delegate responsibility to consultants to advance the effectiveness of IT adoption and increasingly competitive advantages (Prajogo & McDermott, 2014). SBEs rely on professional consultants when starting IT adoption (Real, Roldán, & Leal, 2014). It has been suggested that recommendation from experts like consultants can be supportive for SBE owners, particularly when they do not have sufficient experience or perception of IT themselves (Tang & Murphy, 2012). Research by Buyl, Boone, and Hendriks (2014) revealed that consultants play a key role in the

information technology implementation processes. Jarrahi and Sawyer (2015) acknowledged that consulting companies have acquired knowledge and information from supporting their customers, and consequently can present this knowledge and information to other business that seeks their support. IT expertise offers benefits for SBEs when it starts IT adoption; nevertheless, not all SBEs exploit these external resources, it requires financial abilities and many SBEs are not in a good financial situation to carry on new technology (Sawang, Parker, & Hine, 2014). It is important for SBEs to consider the assistance of external consultants if they do not have adequate IT skills to implement and apply the new technologies (Armstrong, 2013; Prajogo & McDermott, 2014); their professional skills are important because, as indicated by different studies, there is a lack of IT expertise within most SBEs (Adams, Khoja, & Kauffman, 2012; Jarrahi & Sawyer, 2015; Tang & Murphy, 2012).

Experience. Adams et al. (2012) argued that experts from both software vendors and IT consultants, claim that by working with other SBE within the same market they have acquired the knowledge of these businesses and would be able to provide efficient recommendations about certain IT applications (Roach et al., 2016). One component in the recursive learning model by Hardwick, Cruickshank, and Anderson, (2012) pointed out the significance of external advice and resources. Vendors and IT consultants, whose position is to shape their services to support business development, are the bridges that connect the business users and the suppliers at the same time as supporting the learning process of the business.

Adams et al. (2012) recommended that most consulting SBEs have vast knowledge acquired and absorbed from assisting their clients. For SBEs, seeking external expertise is a solution to the problem of adopting IT (Latif, Jan, & Shaheen, 2013). External IT expertise plays a significant role in the information technology implementation process (Roach et al., 2016). In small businesses, support from top management, even though it is essential, is not as important as effective external support from IT consultants (Latif et al., 2013). Given the lack of expertise in a small business environment, the provision of high-quality external expertise should be considered in the planning process for IT adoption. Shin (2006) argued that businesses benefit from having no in-house experts. The reason for this benefit is that it gives the small business the flexibilities to utilize external consultants. Not all SBEs are successful using external consultants (Roach et al., 2016), nor is every software package suitable for a specific company (Shin, 2006). Shideler and Badasyan (2012) argued that one cannot assume that IT is practical for every small business because the functions within a small business vary one from another (Di Marco, Alin, & Taylor, 2012). In accumulation, there is a great dissimilarity among sales representatives and technical support even in the similar IT (Bull, 2003; Shideler & Badasyan, 2012). For these reasons, before deciding upon any software package, SBEs should make a judgment to the best of their knowledge (Shideler & Badasyan, 2012).

Negotiating a performance related contract is also essential as problems might arise after implementation (Di Marco et al., 2012; Huggins & Weir, 2012). Usually, lack of IT expertise and skills affect on their implementation (Basford et al., 2012), it is highly

desirable when SBEs adopt a new technology to seek help from consultants with expertise and solid backgrounds in implementing new technology (Jarrahi & Sawyer, 2015; Wallgren & Hanse, 2011). Quality information from professional consultants is useful for SBE owners, as many of them do not have adequate experience in IT (Shideler & Badasyan, 2012). IT business owners should take into consideration that not all suggestions in shape with the needs of an individual business (Basford et al., 2012). Consequently, a clear purpose in pursuing new IT is necessary. Lack of such preparation can obstruct the success of the development (Hauschildt, 2012).

Internal IT Resources

Information technology resources focus on IT abilities, capabilities, and capacities of SBEs. IT abilities refer to the skills and knowledge, capabilities refer to the resources and strategies, and capacities refer to the ability of companies to adequately represent the information the company holds (Bianchi, Frattini, Lejarraga, & Di Minin, 2014; Laforet, 2016). According to Kibbeling, van der Bij, and van Weele (2013), managerial, organizational competencies; IT skills; and the distribution of resources contained by businesses are the input elements for accepting IT adoption in the small enterprise sector (Bianchi et al., 2014).

SBE owners must recognize the needs of their customers and suppliers (Kibbeling et al., 2013; Miles, 2013). Menguc, Auh, and Yannopoulos (2014) argued that the IT innovation competence of a small business could not be considered only by dimension, as it comprises technological, production, procedural, informational, experiential, and organizational infrastructures. It engages an articulation of internal knowledge and

includes a varied range of resources (Kibbeling et al., 2013). Therefore, the IT abilities, capabilities, and capacities of SBEs engage in the IT adoption procedure (Valentim et al., 2015).

IT helps firms to rationalize their business processes by changing the way people behave and work (Valentim et al., 2015). In addition, IT enhances the way people capture and distribute information (Kibbeling et al., 2013), lowers production and labor costs, adds value to products and services, and increases the company's competitive advantage (Bianchi et al., 2014). This perspective focuses on IT ability, capability, and capacity of SBEs as well (Valentim et al., 2015).

It is imperative that management should consider the appropriate application for SBEs when deciding whether or not to adopt new IT (Barrales-Molina, Martínez-López, & Gázquez-Abad, 2014; Ghobakhloo & Tang, 2014). These considerations include the size of the business, their employees' knowledge of IT, and the amount of information that the organization has (Bishara & Westermann-Behaylo, 2012; Brunswicker & Vanhaverbeke, 2014). Other areas to look into are cost, risk, and competitive advantage. Jarrahi and Sawyer (2015) defined guidelines for IT adoption via these areas. Their strategies included expanding existing IT and purchasing off-the-shelf applications, industry-standard software, or market leading IT. Information technology abilities and capabilities of the small business make up a significant task in the IT adoption process as well, as they must carefully examine the impact on the business as a whole (Lonial & Carter, 2015).

Abilities, capabilities, and capacities. The capability of a SBE includes employees' collaboration among themselves, among departments and with their suppliers and customers (Su, Ahlstrom, Li, & Cheng, 2013). SBE owners are not supposed to understand and appreciate business needs only, but also they must be able to meet or exceed customer's expectations (Ertürk & Vurgun, 2014; Miles, 2013). As mentioned earlier, IT is a resource that can help SBEs to improve their business practices, so the IT pursued should be defined before any decisions on IT adoption are made. According to Valentim et al. (2015), many businesses implement new and robust information systems because everyone else in the market does so. However, frequently, because there was no clear definition of the purposes of IT adoption, many projects do not succeed due to this management fad. There must be a clear definition for IT adoption before proceeding with the project (Ghobakhloo & Tang, 2014). It is necessary that business leaders have the skills and strategies to handle new IT and that management recognizes the need for new IT to avoid failure (Kabongo & McCaskey, 2011; Sears & Hoetker, 2014).

IT capabilities deal with an SBE's capability to implement and deploy IT (Valentim et al., 2015). Klein, Mahoney, McGahan, and Pitelis (2013) argued that the IT innovation ability of a small business cannot be measured by a solitary dimension, for it is an extraordinary asset comprising technology infrastructure, procedure, information, data, experiences and organization skills. Karatas-Ozkan, Anderson, Fayolle, Howells, and Condor (2014) suggested that business capability consists of different components such as organizational competencies, organizational process, technical skills, managerial, and the allocation of different resources within SBEs. These components contribute to the

accomplishment of IT adoption in manufacturing SBEs (Ezell, 2012; Löfsten, 2016). IT capacity refers to a business's ability to attract and handle information and has a direct influence on the adoption decision (Chung, 2014; Sicotte, Drouin, & Delerue, 2014).

However, IT improvement is not for the present stage of the business other than it has to be proper for future short-term business growth (Lee & Kwon, 2014). Accordingly, picking correct software packages to fit the business prerequisite is no less critical than the other factors. Sisaye (2012) suggested SBE must evaluate IT systems using dissimilar techniques prior to implementation. It is as if SBEs lack of financial support in accumulation to lack of IT knowledge. SBE owners do not have the skill to invest in large IT infrastructure or enterprise application packages (Jarrahi & Sawyer, 2015). As an alternative, SBE owners tend to seek off-the-shelf products that they can afford (Lee & Kwon, 2014). Lee and Kwon (2014) argued that SBEs capacity is insufficient, and allocation of resources can exploit its ability to absorb process and transform IT. Karatas-Ozkan et al. (2014) anticipated that SBEs need a new set of objectives if they decide to change or adopt new IT. Lee et al. (2012) suggested that changes in the process must happen eventually instead of instantly.

Barriers to IT Adoption

Directly affecting the way SBE owners manage their businesses is their educational and familial background (Johnson & Schaltegger, 2015; Klapper & Parker, 2011). Many of these business owners do not have strong technical skills (Parida, Westerberg, & Frishammar, 2012; Renko, Tarabishy, Carsrud, & Brännback, 2015). Their innovativeness influences the business performance (Piro, Grieco, Boggia, &

Chatzimisios, 2014) and the culture of the SBEs (Latif et al., 2013). SBE owners see their businesses as reflections of themselves or as personal accomplishment. A number of owners hold that their authority permits them to do whatever they desire because of their ownership of the businesses (Laforet, 2016). Some of these SBE owners recognize they will misuse their power, control, and influence when it comes to IT adoption (Piro et al., 2014). In businesses in which there are two or more SBE owners, there is frequently a conflict over who should play the central role (O'Donnell, 2011).

Many SBE owners use their personal possessions as guaranteed, so they do not act unconditionally on IT investments like bigger corporations (Newby et al., 2014). As suggested by Parida et al. (2012), implementing a new computer system of any type requires long-term investment. Financial commitments as the initial cost of software and hardware, the cost of personnel training and development, are crucial and must plan consequently (Voss & Brettel, 2014; Wallgren & Hanse, 2011). For these reasons, SBE owners often become micro-managers wanting to control every small detail of the daily operations. Moreover, they suppose to consider that new IT adoption will bring reward to their business (Johnson & Schaltegger, 2015). Many studies confirmed that management's perception of IT is that such tools can provide them with some advantage in their business environment (Parida et al., 2012).

Another factor that prevents the adoption of IT in SBEs is the cost of the project (Sears & Hoetker, 2014). Costs seem to be the problem for the majority of SBEs (Voss & Brettel, 2014), although others argue that both time and costs are fundamental issues (Sears & Hoetker, 2014). Therefore, SBEs that invest using internal finance are often

more successful than SBEs that acquire finance externally. The cost is still a fundamental issue when it comes to IT adoption and success (Voss & Brettel, 2014). SBE owners frequently have to have some suggestion or guarantee of a return on their investment (Piro et al., 2014). SBEs, when working with larger enterprises, are often incapable of keeping up with the IT efficiency of their larger partners, although there is an identification that knowledge benefits in supply chain management, Depends on the ability of the SBE owners to keep up with the rapid changes in the chain (Piro et al., 2014).

One more blockade is that IT adoption requires long-term planning and investment. For some companies, acquiring new IT is planned as providing a competitive advantage or an investment for growth in the future. However, for many others, acquiring IT is not planned (Parida et al., 2012), as SBE owners do not have enough time to focus on the long-term planning process (Newby et al., 2014). Chung (2014) suggested that most SBE owners are not safe in long-term or strategic planning, but they often benefit from adequate flexibility to develop innovation in short-term investment (Parida et al., 2012).

The choice to adopt new technology is also controlled by external factors such as professional consultants, and customers (Lonial & Carter, 2015). The literature review extends these discussions and suggests that there is no aspect for the failure rate of information technology adoption in SBEs. There are five interconnected factors that influence IT adoption: organization, supplier relations, internal IT resources, external IT resources, and customer relations. Thus, the literature review presents a twofold

approach: (a) searching of reasons for IT adoption in SBEs and (b) determining factors linking directly to an accomplishment in the particular two industries retail industry and manufacturing in Los Angeles and Orange Counties in Southern California. Von Bertalanffy explained through general systems theory how IT adoption is a subcomponent of a whole system that interacts to maintain competitive advantage and profitability.

Transition and Summary

Section 1 contains an introduction to the study and a problem statement, noting how some small business owners lack sufficient strategies to implement IT solutions for increased profitability. Research shows a lack of knowledge regarding profitability strategies that SBE owners can use to implement information technology solutions for increased profitability. For positive social change the study could provide SBE owners with a better understanding of the IT resources that they need to stay competitive and enhance profitability. The knowledge could facilitate SBE owners to enhance the profitability potential in their businesses. SBEs owners will benefit from this study by learning new strategies to use to implement IT solutions for increased profitability and contribute to the success of their employees, and dynamism of the community.

SBEs adopt IT for many reasons. The majority of the changes result from forces from both internal and external IT sources. There are also factors that influence the process either directly or indirectly. Derived from these different views the paper proposes a composed conceptual framework of those views that are related to the adoption of IT in SBEs. I focus on IT adoption in SBEs. As demonstrated, there is a large

body of literature covering concepts, theory, and frameworks developed in this subject; where the impetus for adopting IT is often the choice of being innovative or staying competitive in the market.

Section 2 contains (a) the restatement of the purpose, (b) the role of the researcher, (c) research participants, (d) research method and design, (e) population and sampling, (f) ethical research, (g) data collection instruments, (h) data collection techniques, (i) data organization techniques, and (j) reliability and validity of the study. Section 3 presented the finding of the study.

Section 2: The Project

The purpose of this qualitative multiple case study was to explore strategies that small business owners used to implement IT solutions for increased profitability. Using semistructured interviews, I collected data from SBE owners who have succeeded in adopting IT solutions and increasing profitability within the first 3 years of being in business.

Purpose Statement

The purpose of this qualitative, multiple case study was to explore strategies SBE owners used to implement IT solutions for increased profitability. The target population comprised three SBE owners with more than 3 years of experience in two industry sectors (e.g., retail and manufacturing), located in Orange County, in Southern California. The participants were selected because they have achieved increased profitability after implementing IT solutions by year 3 of being in business. The implication for positive social change inherent in this research lies in the potential to help SBE owners and other interested persons gain practical insights regarding successful IT adoption processes. Furthermore, the study's findings provided insight into IT adoption in SBEs and emphasized the importance of shaping the evolving relationship between business and society.

Role of the Researcher

The primary role of the researcher in a qualitative, multiple case study entails data collection, data organization, and analysis of the results (Draper & Swift, 2011; Grosseohme, 2014). I interacted with participants through semistructured face-to-face

interviews. The quality of the data depends on the researcher's ability to reduce bias and validate the correct interpretation of the phenomenon (Marshall & Rossman, 2016; Yin, 2014).

To preserve all ethical standards, I adhered to the protocols of the Belmont Report (1979) throughout the study. I pursued the fundamental tenets of research linked to human subjects in my study. Personal reflection and self-awareness are also very important considerations in qualitative research (Grossoehme, 2014). The quality of the data depends on the researcher's skill to reduce bias and properly interpret the data (Bernard, 2013; Cronin, 2014; Leech & Onwuegbuzie, 2011; Rubin & Rubin, 2011). I made every effort to ensure that the interpretations of the data accurately represented the participants' experiences and observations through member checking, or the process of confirming the meaning extracted from the participants by having them review the analysis of their responses and scheduled another time to do follow-up interviews. Qualitative researchers aim to decrease inaccuracy and researcher bias (Leedy & Ormrod, 2013). I summarized themes that emerged, reviewed data with participants, and asked the participants follow-up questions for clarification.

I selected companies that were SBEs in the retail and manufacturing sectors in Southern California that have engaged in the IT adoption process. I have personal familiarity with SBEs in Southern California. Because of previous experience that I had managing IT projects in SBEs, I have gained firsthand knowledge of what causes some businesses to cease operations. After the completion of data collection and member checking, I used NVivo software to identify themes and addressed the purpose of the

study. Qualitative researchers use interview protocols as a tool to achieve cohesion and add to the reliability (Marshall & Rossman, 2016). I followed the same interview protocol with each participant to ensure I did not neglect any requirements (see Appendix B).

Participants

The individual participants were owners of SBEs in the retail and manufacturing sectors who had successfully implemented IT solutions in their business. The criteria used to select the participants included (a) successful IT business owners with more than 3 years history, (b) focused on retail and manufacturing, and (c) located in Orange County in Southern California. The participants were selected based on their achievement of increased profitability after implementing IT solutions. Potential participants were identified from a public list presented by the SBA Orange County district and Orange County California Small Business Development Center Network. I e-mailed letters of invitation, detailing the objectives for the study and incorporating the consent form to the selected businesses (see Appendix A).

I followed ethical procedures and avoided human rights violations. I obtained approval from the Walden Institutional Review Board (IRB); the approval number for this study is 03-18-16-0237287. I chose the first three participants who replied to my e-mail. Next, I made phone calls to the three participants to plan interview times and dates that fit well for them and to advise them that their participation in the study was voluntary, and they were free to withdraw from the study any time. To establish the interview protocol, a good relationship should be established between the participants and

the researcher. Improved response quality might result if the participants feel relaxed via the creation of a shared relationship with the proper amount of professional distance (Yin, 2014). One winning strategy for building a successful relationship with study participants was through trustworthiness. Researchers should build trust with the participants by being honest about the intended purpose and result of the study (Rubin & Rubin, 2012). The use of the consent form and ensuring their confidentiality and anonymity reinforced our effective relationship.

Research Method and Design

The qualitative multiple case study enables a researcher to develop an appropriate answer to a research question and to explore the problem and purpose of a study. The selection of research design comes after the selection of the research method, to coordinate with the research problem statement and research questions (Phillips, 2012). A multiple case study design helps the researcher to explore the effects and the meaning of events (Eaton, 2014; Yin, 2014). A qualitative methodology was appropriate for this study in exploring strategies SBE owners used to achieve profitability by the end of the first 3 years of opening their business in Southern, California.

Research Method

Exploring social problems that are not easy to measure numerically requires the use of qualitative research methods (Anyan, 2013; Denzin & Lincoln, 2011; Phillips, 2012). Denzin and Lincoln (2011) noted that qualitative research builds on processes that are difficult to measure. A research method based on some form of quantitative

measurement is not appropriate when the researcher's interest is in gaining insights or understanding complex situations (Eaton, 2014).

Yin (2014) observed that, in qualitative studies, direct contact with participants in their natural environment is desirable to gain a thorough understanding of complex issues. A customized and flexible research design is suitable for exploratory research (Yin, 2014). Conducting this study with a quantitative research methodology would result in misalignment with the problem statement. Mixed-method research can exploit the benefits of both types of studies (Fielding, 2012), but mixed-method research normally includes extensive research experience to complete the study and creates further demands in terms of time and data processing (Venkatesh, Brown, & Bala, 2013). Qualitative research may generate richer insights regarding the underlying motivations of individual small business owners (Manolova et al., 2012). Thus, a qualitative research method was most appropriate for this study. Multiple case study research is suitable for (a) exploring *how* and *why* questions and (b) determining when events have contextual factors (Yin, 2014). Case studies include multiple sources of data, such as interviews, observations, artifacts, and documentation (Hortho & Champion, 2011; Yin, 2014). The sample for the study permits the greatest opportunity for replication and relevance of the findings. Leedy and Ormrod (2013) argued that the research design entails to an involved plan to explore research questions and illustration conclusions for a study to organize a report. According to Yin, in circumstances in which information is limited, multiple case study research is appropriate. A qualitative methodology was appropriate for this study in exploring

strategies SBE owners used to achieve profitability by the end of the first 3 years of opening their business in Southern, California.

Research Design

This study employed a qualitative, multiple case study strategy. Data saturation refers to the depth of the sample and the ability to find repetition in the data through interviewing participants (O'Reilly & Parker, 2012). When no new themes emerge from the data analysis process, it means the researcher reached data saturation (Marshall & Rossman, 2016; Walker, 2012). Data saturation was reached when I ensured that the data became repetitive and no more new information appeared.

Research studies based on single case studies can be subject to skepticism within the research community; consequently, multiple case research designs are preferred to reinforce the creditability of a study (da Mota Pedrosa, Näslund, & Jasmand, 2012; Hanson et al., 2011; Hortho & Champion, 2011; Yin, 2014). Studies using multiple cases offer an increased likelihood of study replication and more persuasive findings (Marshall & Rossman, 2016).

I considered other options including ethnographic, narrative, and phenomenological research designs. The phenomenological design is proper when the researcher explores lived experiences from the viewpoint of individual's participants (Shover, 2012). Rubin and Rubin (2012) argued that semistructured interviews are suitable when (a) researchers look for a detailed understanding, (b) the interview protocol includes open-ended questions with no fixed response categories, and (c) researchers require the freedom to follow up on intriguing lines of inquiry. While I conducted

semistructured interviews and reviewed company documents, the focus on company operations and performance metrics rather than individual experiences makes a phenomenological design inappropriate. Since I did not study a culture, an ethnographic study design was not relevant. A multiple case study design corresponds to a holistic investigative approach. Each case is separately evaluated and used to illustrate conclusions (Shover, 2012). A case study approach also offers an opportunity to address a specific concern or a specific context (Moll, 2012). In this situation, a case study design allowed me to explore success strategies through interview data and company documents obtained from small business owners.

Case study design. Marshall and Rossman (2016) noted that well-documented case study research encompasses three diverse concepts: (a) integrity, demonstrating a direct relationship between execution of the study and the research findings; (b) establishment of rigor, by paying attention to details when collecting data and by strict enforcement of the research protocol; and (c) vitality, demonstrated by giving the reader an insight into the boundaries of the event under study. The design of this study conforms to the general characteristics of an exploratory qualitative study as outlined by Marshall and Rossman (2016) and is consistent with the case study research methodology defined by Yin (2014). A multiple case study design enabled me to discover winning strategies some SBE owners implemented for increased profitability. An important characteristic of multiple case study based research is the iterative nature of the process, which increases the chance of uncovering information outside the original study design (Yin, 2014).

Population and Sampling

Individual participants were selected through purposeful sampling. Purposeful sampling permits a researcher to select participants who are likely to be able to provide information about the phenomenon of interest (Yin, 2014). Leedy and Ormrod (2013) argued that in purposeful sampling, researchers employ their judgment to select participants that meet the study criteria. Qualitative researchers have to use sampling methods that will achieve the goals of the study, such as to provide an understanding of the research problem, discover diverse perspectives, or generalize research findings (Barratt, Choi, & Li, 2011; Marshall & Rossman, 2016). Therefore, the aim of sample size is to estimate a proper number of participants for the study design selected (Yin, 2014). The number of interviewees should be enough to attain data saturation (O'Reilly & Parker, 2012; Walker, 2012). The participants included three SBE owners with more than 3 years of experience from potential industry sectors and they were from two different industries retail and manufacturing. I used 5 open-ended questions to perform semistructured interviews on the premises of each targeted company or through teleconferences, depending on the schedule and availability of each participant.

The criteria for selected participants included being over the age of 18, SBE owners in Orange County, in Southern California, and those who have been profitable in business by the end of their first 3 years of being open. All interviews were planned and approved at the convenience of the participants. The targeted SBEs for this study, which represented distinct knowledge-intensive environments, have their headquarters in Southern California and had fewer than 25 employees each. These companies presented

the opportunity to gain an understanding of IT adoption in SBEs functioning in several different knowledge-intensive business environments. The selection of three SBE owners permitted ease of tracking and mapping information flow throughout the organization, consequently fulfilling a fundamental assumption of this study.

Ethical Research

Ethical safeguards in research involving human subjects are necessary to protect the participants and to establish the credibility of the study (Akhavan, Ramezan, & Moghaddam, 2013; Qu & Dumay, 2011). After receiving IRB approval, I started participant requirements for performing data collection with sensitivity to ethical issues, verifying trustworthiness while sustaining the standards of quality research. Ethical principles guide the researcher to protect participants and to certify credibility during the research process (Aluwihare-Samaranayake, 2012; Yin, 2012). The following components of the proposal covered the consent process, including how participants may withdraw from the study, maintenance of data, and listing of agreement documents. According to Aluwihare-Samaranayake (2012), a researcher must ensure the confidentiality of participants as a fundamental guide in ethical research. Yin (2014) found that assurance of confidentiality and detailed intent of the study in the consent form is critical. One of the best ways to guarantee confidentiality and privacy is to mask the names of participants and the research organizations to maintain confidentiality (Marshall & Rossman, 2016).

Consent Process and Incentives

I provided a consent form (Appendix A) to the participants, giving them time to ask questions and understand the full purpose of the study. Participants were welcome to meet with me in-person or on the phone to discuss their participation and any details of the study. Participants signed the consent form when they felt prepared to move forward.

Participation and Confidentiality

I followed Walden University's ethical guidelines and the Belmont Report protocol to maintain ethical standards at all times (Aluwihare-Samaranayake, 2012; Marshall & Rossman, 2016; U.S. Department of Health and Human Services, 1979; Yin, 2014). I explained in the consent form that participation is voluntary, confidential, and without penalty, and that participants were free to withdraw any time from the study.

I am the only person with access to all the stored information in a locked cabinet safe, in my home office, and on a password-protected computer hard drive. An Excel spreadsheet was used to track each respondent by coding for data collection with the signed consent form, e-mails, date, and time of interview and communication recorded. All communications were confidential, and all documents I will shred or erase 5 years from the completion of the study. Walden University's approval number for this study is 03-18-16-0237287.

Data Collection Instruments

The sources of data collection included interviews with participants. Data for case six origins data for case studies and should be collected from as at least two of the following sources: (a) archival records, (e) participant-observation, (b) direct

observations, (c) physical artifacts, (b) documentation, and (d) interviews, (Yin, 2012).

Numerous sources of evidence through this study improved the validity and reliability of this study (Yin, 2014). The subsequent data collection section enclosed research instruments, data collection technique, data organization technique, and data analysis.

Instruments

I was the primary data collection instrument, using a semistructured interview process for data collection. The interview protocol (see Appendix B) consisted of five open-ended questions covering the data needed to fulfill the purpose of the study. The strategies addressing construct validity, internal validity, and reliability in case studies require the use of different methods at various phases of the research process (Yin, 2014). To ensure the reliability of the instrument, the researcher can use the expert validation strategy, which involves presenting the interview questions to experts for their views on the instrument as recommended by Ekekwe (2013).

Construct validity confirmation in case studies uses such tactics such as chains of evidence, key informant reviews, and the use of multiple sources of information in the data collection or final review stages of the study (Thomas & Magilvy, 2011).

Approaches such as pattern matching, explanation building, exploring rival explanations, and using logical models also ensure internal validity (Yin, 2014). Finally, demonstration of reliability in the data collection stage can occur by following a strict case study research protocol (Drost, 2011). The interview protocol (see Appendix B) remained constant for all the semistructured interviews, to ensure reliability and validity of the

study. The use of member checking gave all participants the chance to review the analysis and interpretations.

Semistructured Interviews

Open-ended questions semistructured interview process as the foundation to collect data and gain insights into how owners of SBEs use IT knowledge and assets to increase profitability. Interviews took place in one-on-one private meetings held on the company site or by teleconference, depending on each participant's schedule. The planned duration of each confidential interview was 60 minutes, to minimize the SBE owner's loss of productivity. However, individual interview lengths varied depending on the responses provided by participants.

Semistructured interviews provided a researcher with the chance to prepare questions ahead of time, allowing the interviewer to appear competent during the interview (Cronin, 2014). Semistructured interviews can present reliable, comparable qualitative data and support two-way communication (Marshall & Rossman, 2016), as those being interviewed can also ask questions of the interviewer. Therefore, participants can both confirm what is previously known and provide the chance for new learning. Frequently, the information obtained from semistructured gives not merely answers, but also the reasons for the answers (Cronin-Gilmore, 2012). A semistructured interview requires interviewing skills as well as a sufficient set of interviewees in order to make general comparisons (Chenail, 2011; Leech & Onwuegbuzie, 2011; Marshall & Rossman, 2016). Careful preparation was needed so that the questions did not become prescriptive.

Data analysis can be time-consuming and resource-intensive, and confidentiality must be protected (Coenen, Stamm, Stucki, & Cieza, 2012; Rabionet, 2011; Marshall & Rossman, 2016). I had to be careful not to project ideas, opinions, or perspectives to participants, so they felt able to speak freely about their own perceptions and ideas. I created an atmosphere of active participation using careful listening, nonverbal communication, and observation.

Documentation

Companies generate different types of documentation. Wang and Brennan (2014) collected data from reviewing company policies, management reports, training manuals, client contracts, minutes of meetings, and e-mails from key customers. Soderberg, Kalagnanam, Sheehan, and Vaidyanathan (2011) analyzed balanced scorecard documentation across five dimensions to obtain a better understanding of how organizations create value; the dimensions were (a) learning and growth, (b) business processes, (c) customers, (d) balance, and (e) linkages. I collected from SBE owners only those documents that pertained to profitability and assisted me in demonstrating a clear chain of evidence that helped to answer the research question. I worked with the SBE owners to obtain copies of the business plan, documents that pertained to financial strategies, and profitability trends. Financial records were obtained from publically accessible sources. All of these sources of evidence provided insights into the strategies that SBE owners used to implement IT solutions for increased profitability.

Data Collection Technique

I conducted semistructured and in-depth interviews, following the interview protocol contained in Appendix B. The interviews allowed me to gain valuable contextual insight into the topics of interest, and allowed respondents to describe what is important to them (Chenail, 2011). The data collected in the interviews combined with other company data, as well as information from external sources such as business magazines, sector sources, and Internet sites as recommended. Further advantages of using documents in research were that they are (a) available locally, (b) inexpensive, (c) grounded in the setting and language in which they are developed, (d) useful for determining value, positions, public attitudes, historical trends or sequences, (e) able to permit the study of trends over time, and (f) unobtrusive (Bekhet & Zauszniewski, 2012). Some disadvantages were that documents may be (a) curtailed, (b) erroneous, (c) of questionable authenticity, (d) difficult to access, and (e) time-consuming to analyze (Marshall & Rossman, 2016; Thomas & Magilvy, 2011).

I took notes on nonverbal expressions and key comments during each interview as well as audiotaping the conversation. As part of the interview protocol, I followed Chenail (2011) recommendation to test the recorder before the interview, the device must verify periodically to make sure that it is properly working. Interviews were scheduled in a neutral setting; allowing for an in-depth investigation, audio tape the interview conversations to facilitate note-taking, ask the participants for permission of taping, when it is time to ask another question inquire the interviewee, avoid neglecting use of time by managing time wisely, and reiterate contact phone numbers for allowing follow up

questions from participants. Upon obtaining signed consent forms (Appendix A), I scheduled face-to-face semistructured interviews with each participant, which was used to allow the respondents to tell their stories and elicited conversation. Semistructured interviews give participants the freedom to express their opinions. Semistructured interviews create an environment of active participation and obtained personal experiences (Coenen et al., 2012; Marshall & Rossman, 2016).

The duration of the semistructured interviews was 60 minutes, as pointed out in the consent form. The interview length should depend on how the participants respond to the questions and on the amount of detail given (Chenail, 2011; Leech & Onwuegbuzie, 2011). Each interview followed the same interview protocol and used the same questions. I recorded each interview and then transcribed it immediately afterwards using Dragon software. The NVivo software was used to code and highlight ideas and descriptions that help in understanding the nature of the phenomenon (Bergin, 2011; Cronin, 2014). Data files stored in a password-protected computer in a file cabinet in my home office, with hard copies are locked in a fireproof safe. To avoid any difficulties in understanding the transcripts, I transcribed each interview immediately. The hard copies that contain research data will not be accessible by anyone else.

To perform member checking, I provided my analysis and my interpretations for the participant's review to determine if the analysis accurately represented the collected data, and whether the themes uncovered appear accurate and credible. After the interviews, all participants received a letter of appreciation from me for participating in

the study. As directed by Walden University IRB, I will retain all data until 5 years after completion of the study when I will shred or electronically erase all data.

Data Organization Techniques

I recorded the participant interviews using Dragon software. Each interview followed the same interview protocol and used the same questions. I recorded each interview and then transcribed it immediately afterwards using Dragon software. The NVivo10 software used to code and highlight ideas and descriptions that help in understanding the nature of the phenomenon (Bergin, 2011; Draper & Swift, 2011). I stored electronic data on a password protected, and external hard drive and will be deleted 5 years after completion of the study. I stored the entire raw data in a locked cabinet drawer and it will be shredded 5 years after completion of the study. The data existed in several formats, including a series of NVivo 10 databases and electronic recordings. Documentation of the data was prepared in Word documents and Excel spreadsheets (Coenen et al., 2012; Grosseohme, 2014; Marshall & Rossman, 2016).

Data Analysis

The ability to do a complete review of documents pertaining to profitability allowed for the assessment of data from the interviews, checking for accuracy, and development of further information. Methodical triangulation is the utilization of multiple data sources to guarantee the collection of comprehensive data to answer the research questions (Grosseohme, 2014; Hanson, Balmer, & Giardino, 2011). The use of methodical triangulation when conducting multiple-case study research improves data analysis through accurate comparisons during data collection (Knoblauch & Schnettler,

2012). The small businesses' financial records were public, so I worked with the SBE owners to obtain copies of the business plan, documents pertaining to financial strategies, and profitability trends. These sources of evidence provided insights into the strategies that SBE owners used to implement IT solutions for increased profitability. After I reviewed and organized the data in NVivo software, I conducted a detailed analysis of the data to identify themes and relationships.

Yin (2014) defined a method for analyzing data in qualitative studies, including multiple-case study research designs. The process involved analyzing the data on a series of levels, from general to specific. The analysis of the interview data began with transcription of interview recordings into a text format and organization of the raw data. Analysis of the text transcripts used a coding scheme. I collected coding data from participant interviews by reviewing the interview questions and cautiously processing the transcripts through several iterations, searching for data that supported or contradicted themes in the literature. Given the combination of methods discussed by Denzin and Lincoln (2011), processing the interview transcript consisted of analyzing keyword repetitions, thought-unit classifications, and cross-tabulations by keyword similarity, and cluster analysis using NVivo software as suggested by Leech and Onwuegbuzie (2011).

Additionally, the data analysis methods consisted of comparing and contrasting themes that emerged from the data, the literature, and the conceptual framework (Grossoehme, 2014). The conceptual framework that grounded this study was the general systems theory. General systems theory is the scientific theory test of wholes (von Bertalanffy, 1972). I searched SBE owner strategies used, as a whole, to become

profitable after identifying the profitability strategies; I evaluated the strategies in comparison to previous literature findings.

Reliability and Validity

The concepts of validity and reliability form the basis for evaluating the quality of research designs. Qualitative researchers struggle to define truth, objectivity, reliability, and validity (Marshall & Rossman, 2016). In multiple-case study research, trustworthiness and credibility correspond to validity, and transferability connects to reliability (Street & Ward, 2012). The following section includes an explanation of the strategies I adopted to ensure reliability and validity.

Reliability

The purpose of reliability is to document detailed procedures reproducible by future researchers interested in replicating the findings of a study (Thomas & Magilvy, 2011; Cronin, 2014). Recording data precisely is critical to the credibility of a study (Drost, 2011; Marshall & Rossman, 2016). Researchers put procedures in place to record their actions in detail for reliability or procedural consistency (Cronin, 2014). Therefore, designing precautions to minimize bias improves reliability (Bernard, 2013; Thomas & Magilvy, 2011). Methods demonstrated to have high reliability included the following characteristics: (a) used a case study protocol, (b) recorded and accurately transcribed interview data, (c) documented data analysis techniques, and (d) disclosed the procedures used in the case study (Marshall & Rossman, 2016). The concept of reliability in a qualitative case study involves gaining dependable results that are transferable to other contexts (Bernard, 2013; Drost, 2011). Nevertheless, the transferability of a research

study is up to the reader to decide (Marshall & Rossman, 2016). To address reliability, I used several strategies such as methodical triangulation, member checking, and constant participation and feedback from participants throughout the research process.

I demonstrated methodical triangulation from the semistructured interviews and the collection of documents relevant to profitability. Methodical triangulation is the use of multiple data sources to assure the collection of comprehensive data that precisely answer the research questions (Phillips, 2012; Street & Ward, 2012). The use of member checking allows all participants the opportunity to review analysis of the responses and ensure the correct meaning was gleaned from the interviews (Gibbert & Ruigrok, 2010). Member checking is an in-depth analysis that represents a synthesis of participants' responses and verifies if the analysis represents the participants' intent (Gibbert & Ruigrok, 2010).

To maintain reliability, the researcher must be aware of biases throughout the research process (Fielding, 2012; Gibbert & Ruigrok, 2010; Street & Ward, 2012).). Through business experience gained in managing IT projects in small businesses, this experience assisted me in the development of the interview questions. Experience in the field of which qualitative research is taking place can add to a more reliable study (da Mota Pedrosa et al., 2012). I ensured that data collection was reliable by conforming to the same protocol and questions for all interviews. In addition, audio recordings and verbatim transcripts ensured accuracy of data, as does having participants review the data and the themes identified through thematic analysis using NVivo (Bergin, 2011). I

conducted member checking with the participants to enhance the dependability of the study results.

Validity

Credibility. One concept of validity refers to ensuring the trustworthiness and credibility of the data (Chenail, 2011). Construct validity entails the legitimacy of the concepts and the link between theory and the research measurements (Street & Ward, 2012). The reason for construct validity is to make sure that a relationship exists between the purpose of the study and the results of the data collection (Cahoon, Bowler, & Bowler, 2012). Construct validity engages the translation of information (Street & Ward, 2012). In a multiple-case study, the researcher achieves validation through a number of protocols such as triangulation, peer review analysis, and clarifying researcher bias (Bekhet & Zauszniewski, 2012). The researcher also addresses validity through methodological triangulation and member checking (Gibbert & Ruigrok, 2010). Data saturation allows evaluation of validity; in this study the repeated themes demonstrated high validity of the study by presenting consistency of responses within a multiple-case study design. I utilized methodical triangulation of data collected from the interviews and documents review to ensure that the collection of comprehensive data from multiple sources answered the research question. The use of triangulation allows for a comparative correlation and cross-examination of the data (Baumgartner & Schneider, 2010; Bekhet & Zauszniewski, 2012; Marshall & Rossman, 2016). Researchers establish validity using several approaches. First, accurate definitions, descriptions, and representations of the

case(s) under study demonstrate credibility as viewed by participants in the study (Chenail, 2011; Street & Ward, 2012).

Transferability. Transferability represents the extent to which the results of a study are transferrable to different contexts or settings (Drost, 2011). The evidence of transferability includes using a chain of evidence, accurately recording observations, and documenting the assumptions present in the study (Cahoon, Bowler, & Bowler, 2012). Assuring researchers, peers, and practitioners that the methods and findings accurately reflect the purpose of the study is the objective of validation in research (Street & Ward, 2012; Thomas & Magilvy, 2011).

Validity encompasses trustworthiness, authenticity, and credibility (Marshall & Rossman, 2016). Trustworthiness is determined by credibility, transferability, dependability, and confirmability (Cahoon, Bowler, & Bowler, 2012). Credibility is present when the researcher analyzes the data through a process of reflecting, exploring, judging the relevance of the data, and ultimately developing themes and essences that precisely depict the experience (Drost, 2011). Credibility takes place when analyzing my analysis of the responses through member checking, and when participants reviewed and verified accuracy of the transcripts. Dependability involves preserving all transcripts, notes, and other data. Authenticity refers to the reporting of each participant's experiences in a way that preserves the original context of the data and presents differing perspectives evenly, so that the reader can reach an impartial decision (Yin, 2014).

Dependability. Dependability is also enhanced when another researcher can pursue the same process of the current researcher (Ward, 2012). To ensure dependability,

I provided details of the procedures conducted throughout the study in addition to excerpts from actual participant responses. Member checking occurred after the data analysis, enabling participants to give input on the presentation of the results and to enhance the validity and reliability of the research (Harper & Cole, 2012).

Confirmability. Confirmability occurred by linking the data to their sources (Grossoehme, 2014). The intent of validity in case studies is to achieve analytical generalization, as opposed to the statistical generalization typically associated with quantitative research studies (Marshall & Rossman, 2016; Yin, 2014). Specifying a multiple-case study research design, which is methodologically equivalent to conducting multiple experiments in quantitative studies, is one approach to addressing the issue of validity in this study (Yin, 2014).

Transition and Summary

In Section 2, I included the (a) role of the researcher, (b) rationale for selecting a qualitative research design, (c) criteria for choosing participants, and (d) data collection and analysis techniques. I included an explanation of the link between the conceptual framework, the research design, and multiple-case study method, which supported the research objective. I concluded with methods used to demonstrate validity and reliability in this case study. Section 3 contains the findings, contributions to business practice, and implications for social change. It also included an overview in the narrative of the potential impact of these experiences on the results of this study.

Section 3: Application to Professional Practice and Implications for Change

Section 3 begins with an introduction including the purpose statement and the research question and ends with the findings of the research study. In addition, it includes an (a) overview of the study, (b) presentation of the findings, (c) application to professional practice, (d) implication for social change, (e) recommendation for actions, (f) recommendations for further study, (g) reflections, and (h) summary and study conclusion. I present the findings of the study by main themes.

Introduction

The purpose of this qualitative, multiple case study is to explore strategies SBE owners use to implement IT solutions for increased profitability. I conducted semistructured interviews with three small business owners in Southern California to obtain data and to answer the following research question: What strategies do SBE owners use to implement IT solutions for increased profitability? A multiple case study served as a helpful tool to explore a phenomenon in a real-life setting (Eaton, 2014). I selected small business owners who successfully increased profitability through IT adoption by the end of the first 3 years of being in business. Participants were asked to address the five semistructured interview questions that signified whether the strategies used by small business owners to implement IT business owners were successful. The results from interview questions established complete responses from each participant (Marshall & Rossman, 2016; Walker, 2012). Yin's (2014) method was used as the basis for data collection and analysis. Once I reached data saturation, I entered all the data into

the qualitative analysis software tool, NVivo 10. Triangulation of transcribed interview data with company documentation allowed identification of emergent themes. The following emergent themes were identified: essential strategies small business owners use to implement IT solutions for increased profitability, the essential relationship between network orientation and successful IT implementation, the relationship between IT consultants and successful implementation, and the relationship between internal IT resources and successful implementation.

Presentation of the Findings

The goal of this study was to answer the following overarching research question: What strategies do small business owners use to use to implement IT solutions for increased profitability? I used participant interviews and all the company documents, including statements of profit and loss in addition to cash flow, to finish my methodological triangulation of data for this study.

The largest amount of data was gained from the participant interview responses. The data reached saturation when the document review and interview data became repetitive and no extra information was added. Following the data collection and analysis through semistructured interviews, four themes emerged. The first theme related to the relationship between organizational factors and successful implementation. The second main theme related to the relationship between network orientation factors and successful implementation. The third main theme related to the relationship between external IT consultants and successful implementation. The fourth main theme referred to the relationship between internal IT resources and successful implementation.

The conceptual framework for this study was general systems theory. Many of the participants' responses supported the theory. General systems theory relevant to management practices when strategies and multiple factors within the business work mutually as a whole system to accomplish the business's goal of adopting IT (Ghobakhloo & Tang 2014; Newby et al., 2014). Put together as a whole, each individual strategy that the small business owners used determined the best strategies for increased profitability. In this study, I used the theory as a framework to help find correlations in the study's findings in order to obtain a better understanding of the best strategies to influence IT adoption in SBEs. Newby et al. (2014) noted that the development of information technology created a demand for businesses to adopt IT. IT adoption provides an opportunity for SBE owners to improve efficiency and gain a competitive advantage (Adkins et al., 2013; Gronum et al., 2012; Purkayatha & Sharma, 2016).

Interview Question 1

The first question was as follows: What strategies did you use that were most effective in adopting IT in your SBE? The purpose of this question was to gain insight into the best strategies use to adopt IT by participants in small retail and manufacturing businesses. Participants spoke of the effectiveness of IT adoption. Findings from this study indicated that the most effective strategies are communication with internal and external IT and engaging employees. P2 noted having conversations with IT employees on a regular basis to understand what they were experiencing professionally. P2 stated that a good leader must have the ability to express complex ideas in simple terms and have the relationship skills to interact well with decision makers. Additionally, within the

minutes of the company's meetings, I found numerous instances in which SBE owners communicated with employees, mainly relating to decision-making. P2 also noted that employee recognition was one of the most efficient strategies, which aligns with general systems theory (Adkins et al., 2013; von Bertalanffy, 1972).

P2 referred to the company's rewards program, noting that it provided management with an opportunity to recognize the IT employees who had done an excellent job. P2 explained, "We want our people setting at the business table, participating in a discussion of what key issues are, determining what information needs the business people have, and recommending actions to the business partner." I confirmed P2's assertion by a review of company records, including the employee handbook and meeting minutes. P3 specified that successful SBE owners gave employees a scorecard that is used to enter a larger drawing to win a monetary gift card. The balanced scorecard provides SBE owners with a comprehensive framework that translates a company's strategic objectives into a coherent set of performance measures (Findikoglu & Manheim, 2014; Perrigot et al., 2012). The employee handbook and meeting minutes confirmed that the SBE owners used efforts such as a reward programs on a company-wide basis to reward employees, including those in the IT department.

P3 stated that training and allowing IT employees to work on projects that they were not typically accountable for was an effective strategy because it involved IT employees learning a new skill. P3 also clarified that SBE's values are the standards by which employees set priorities that enable them to judge whether a customer important or not a new technology is important or not and so on, and prioritization decisions are made

by employees at every level. Training and development were important factors for retaining skilled employees, and this concept was established by P1's responses. In addition, P1 allowed employees to work on projects or to use technology that was not typically part of their jobs. P1 and P2 regarded training as an effective strategy so that when new job opportunities became accessible, trained IT employees were ready for advancement. Therefore, when addressing new technology SBE owner's goals are to create a new organizational space for these capabilities to develop (Gronum et al., 2012). All the participants indicated that the majority of businesses were likely to adopt IT to improve the quality of their services or to exceed their customers' expectations and stay competitive in the marketplace. Business expansion is an additional motivation driving IT adoption in small businesses, followed by quality enhancement, industry requirements, and investment (Hasumi & Hirata, 2014).

Interview Question 2

The second interview question was as follows: What are the main factors that led directly to successful IT implementation in your SBE? P1 and P2 identified customers as a main factor that contributed to the IT adoption environment, which in turn related directly to the success of the implementation. Moreover, P1 and P2 indicated that creating relationships with customers was very important and that these relationships were different than the relationship with the suppliers. P3 indicated that separating customers and suppliers within the relationship orientation resulted in a model with a good fit. P2 confirmed the distinguishing characteristics of customer relationship management in the IT adoption environment indicate the crucially important role of

customers in these small businesses. Thus, when it comes to changes in IT communication in their daily business operation, small business owners should take their customers' needs into consideration (Amit & Zott, 2012).

In addition, there were other critical factors that led to ineffective strategies affecting the IT adoption. Responses to interview questions revealed that barriers kept IT adoption strategies from being successful. P1 explained preparing to spend significant resources on technology such as customer relationship management or enterprise resource planning systems. P3 confirmed that the customer preferred the provider, and SBE owners should be the industry leader in providing the highest standards of safety and quality to the customer. He also mentioned that he developed a strategy to implement the vision. The five elements of his strategy were high quality employees, high levels of customer satisfaction, continuing improvement of safety, equipment reliability and cost effectiveness, and realization of stakeholder expectations. These elements were in turn developed into strategic objectives. Another factors—such as the value of an IT adoption (P1, P2, and P3), barriers such as supplier relationships (P1, P2), customer services, and ineffective strategies (P1, P2)—affect the adoption of new technology and therefore play a significant part in the general system of adoption. The conceptual framework directed the development of interview questions to explore the aspects of the participants' knowledge in relation to problem solving. Further discussion and propositions linked to the conceptual framework is included in the literature review section.

Interview Question 3

The third question was as follows: How did you use different strategies to implement IT solutions to increase profitability in your SBE? Two participants, P1 and P3, affirmed that in order to implement IT solutions to increase profitability, organizational factors, such as customer and supplier relationships, should be considered. Other factors became visible once the system was implemented, revealing that organizational relationships can affect its success. P2 explained that in order for an IT implementation to be successful, both management and employees must participate and contribute to the change through knowledge sharing. This participation and input directly contributed to effective strategies that led to successful implementation.

A successful management style does not rely on the owner's personal characteristics, but instead is based on a commitment to the adoption of new IT (Jänkälä & Silvola, 2012). P1 verified that the business's capacity to improve existing skills and adapt new ones is the most defensible competitive advantage of all, and the way to competitive revitalization implies a new view of strategy. However, all participants confirmed that it is essential for all SBE owners to be fully aware of what resources are obtainable, as well as the importance of teamwork, collaboration, acceptance, knowledge sharing, and training among employees.

Interview Question 4

The fourth question was as follows: In your experience, what barriers prevent SBE owners from being successful with IT solution implementation? P1 responded that "the need of improving customer relationship from within a well-documented culture of

risk adversity can minimize the risks inherent in IT adoption by using well planned strategies for IT adoption.” P2 added that “the key to the lack of success appears to be a disconnection and misalignment between the vision and the execution,” explaining that the business owners have limited time and businesses have limited resources and planning before implementing the new technology. This is often because management is unclear about how and why their businesses are adopting IT in the first place, so small business owners have to allocate time and resources in the best way possible to advance their businesses. P3 affirmed that project execution often failed from a lack of customer support, poor project management plans, or insufficient resources or skills to complete the project. At the same time, there is a significant impetus from customers who are becoming more demanding and constantly expect increasing standards of IT excellence. P3 remarked, “If customer influence goes unrecognized, and our business rushes into implementing IT, they will experience problems.” Although there certainly are strategies that are most effective in IT adoption process, there are also ineffective strategies, barriers, and other factors that prevent the successful implementation of strategies (Gangwar et al., 2014; Ghobakhloo & Tang, 2014; Paulino, 2014).

P2 indicated that all SBE owners should understand the factors that prevent strategies from being effective. One significant barrier was the inability to compensate IT employees fairly, which hurt the company’s ability to retain profitable. Therefore, SBE owners should make sure there are sufficient financial resources available before any IT adoption activities (Ghobakhloo & Tang, 2014; Paulino, 2014). Furthermore, operating in a leadership style opposite to what technology employees need hinders the effectiveness

of adoption strategies (Armstrong, 2013; Lasagni, 2012). All participants confirmed that there is a cynical view that mission statements are merely public relations statements, but in fact they can serve several positive functions; one is that they can clarify a firm's goals if there is a conflict among members of their business. All participants corroborated the view that the mission statement can help promote consistency between the views of the SBE owners and the company's strategy.

Responses from interviews revealed the strategies that are least effective in IT adoption. P1 expressed the idea that giving too much flexibility to IT employees is not an effective strategy. Under evaluating in the human side of adoption IT is another common mistake. SBE owners frequently put the best technical people in charge, not the best employee. These ideas neglect external communication. From P1's perspective, managing creative self-managed people and task-oriented people is not effective. Therefore, P1 indicated that hiring people who are task oriented is very beneficial. Brunswicker and Vanhaverbeke (2014) supported P1's argument, noting that every IT business owner should feel as if he or she is a natural fit for the organization. P1, P2, and P3 agreed that groups that are convened without attention to interpersonal skills find it difficult to embrace collective goals, take advantages of the different strengths various members bring, or communicate well enough to share the tacit knowledge that still unformed and hard to document while adopting new technology is under development.

P2 discussed over-communicating as a least effective strategy. There were some differences in P1 and P2's perspectives of least effective strategies; consequently, a realistic deduction is that the right amount of communication is helpful. P3 explained,

“Adopting new technology efforts can bog down when communication and relationship building outside the team are neglected. Having negative instead of positive culture can cost our business real money,” as he clarified that over-communicating is not effective in the process of adopting new technology. Additionally, while providing a self-managing environment for creative staff is effective, that strategy may not work as well for business owners who are more task-oriented (Adkins et al., 2013; Taneja et al., 2016).

Interview Question 5

The fifth question was as follows: What other information can you share that was not addressed in the interview questions to help others to increase profitability after implementing IT solutions? P1 explained that there is no doubt that adopting new technology in a retail industry leads to higher sales, reduced expenses, and increased gross margins, which have eventually produced an augment in the overall profitability of this industry who not only have adopt the technology but have also learned how to use it. P2 confirmed that the key to these increases is P1’s statement. Retailers who have both spent the money and invested the time to train their employees on new technology gather the benefits of that technology. Many do not sufficiently learn their systems and, as a result, do not receive the level of performance increases that retailers who learn the systems do (Brunswicker & Vanhaverbeke, 2014). As P3 stated, “I believe small businesses will be left behind if they don’t take advantage of the emerging technologies available.” SBE owners should not ignore the opportunities linked with being able to distribute information in many locations and make it available instantaneously and whenever it is needed (Costanzo et al., 2014). Business owners should not postpone

change, because technological solutions may lead to profitability and increase competitive advantages (Prajogo & McDermott, 2014). All participants agreed the importance of IT adoption. P1, P2, and P3 indicated that all SBE owners must find the right resources and processes to support this adoption, and infusing it with the right resources, process, and values to increase profitability. I gained a deeper understanding of the issues that confront these industries. I planned the study and thoroughly analyzed the data collected, and I found four main themes related to the phenomenon. I provided descriptions of each theme below.

Emergent Theme 1: Essential Strategies Small Business Owners use to Implement IT Solutions for Increased Profitability

Within the first main theme, there are many subthemes as indicated by the responses of all participants, in company records, and reiterated by recent research. The participants' responses and company records, such as employee handbooks, were significant for my study because they described primary IT adoption strategies. The participants' responses and company documents showed that company owners recommended that a culture that is flexible to change is more innovative than one that is unwilling to change. In a flexible culture, IT is more likely to be adopted and succeed (Adkins et al., 2013). P1 and P2 noted that the culture in a small business is powerfully influenced by the owner's attitude, personality, mission, and values. P3 noted that small business owners make most of the key decisions, and these decisions are derived from their existing knowledge, personal judgment, and communication skills. It is not only

business owner's decisions that influence the adoption of IT, but their commitment to the adoption process as well (Abii et al., 2013).

P1 indicated that the employees' awareness, experience, and degree and form of involvement added to the success of IT adoption. Employees should realize the purpose behind the adoption of new technology, their role within the adoption, and their contribution to it (Brettel et al., 2014). The responses of P2 and P3 confirmed P1's statement regarding the importance of communication between the management and employees, causing awareness regarding the changes necessary. P1, P2, and P3 indicated that the small businesses are knowledge producers and distribution enterprises. SBEs ability to understand existing knowledge, use it, and produce new knowledge influenced the IT adoption process (Brettel et al., 2014). Management must ensure that there is efficient knowledge-sharing among individuals within the business, as the IT adoption process needs teamwork and acceptance across all business functions within a firm (Verreynne et al., 2014).

Technological learning can promote capitalist development and growth (Engelen et al., 2014). My analysis of company documents and participants' responses showed that strategy plays a vital supportive role in influencing IT adoption to increase profitability (Verreynne, Meyer, & Liesch, 2014). Building on the conceptual frameworks of this study—the general systems theory—the research findings of the first main theme indicated the need for a strategy to implement and increase profitably when adopting new technology. All internal and external factors must align to achieve a company's goal (Gangwar et al., 2014). All internal and external factors align with general systems

theory, since general systems theory requires multiple factors working together as a whole to ensure success (Adkins et al., 2013). As Table 1 indicates, the frequency of occurrence of the first theme affirmed that essential strategies are useful in IT adoption. Through the participants' responses and company documents the findings of the study indicated that essential strategies SBE owners use to implement IT solutions for increased profitability.

Table 1
Frequency of Themes for Essential Strategies Small Business Owners Use to Implement IT Solutions for Increased Profitability

Theme	<i>n</i>	% of frequency of
Customer requirement	31	29.25%
Business expansion	13	12.26%
Quality improvement	34	32.08%
Training and development	24	22.64%
Industry requirement	4	3.77%

Note. *n*= frequency

Emergent Theme 2: The Essential Relationship Between Network Orientation and Successful IT Implementation

A core characteristic of small businesses is their network relationships (Pollack et al., 2013). P1, P2, and P3 asserted that these networks appear through the numerous interactions that take place among business partners, vendors, suppliers, and customers. All three participants noted that these networks should work together and communicate, sharing knowledge and information. Cooperation with customers or suppliers can smooth the progress of the growth and development of services (Jarrahi & Sawyer, 2015). Ghobakhloo and Tang (2014) suggested that the relationship in SBEs is essential and there are many strategies in every type of relationship that businesses have developed

(Table 2). The SBE owners communicate with their stakeholders. There are three types of relationship: personal service, contract, and network. Building on the conceptual frameworks of this study, which was the general systems theory, the research findings of this theme indicated influential strategies and practices of small business owners to successfully implement IT adoption. According to O'Toole (2014), this is where knowledge is created, transferred, and transformed. P1, P2, and P3 affirmed that the partnership among these sectors brings learning opportunities, knowledge formation, and a competitive advantage. P1 clarified that small businesses can benefit from network memberships when it moves toward IT adoption, as networking can provide SBEs with necessary resources.

As table 2 indicates, the frequency of occurrence of the second themes revealed the essential relationship between network orientation and successful IT implementation. The highest frequency of occurrence ranged.

Table 2

Frequency of Themes for the Essential Relationship Between Network Orientation and Successful IT Implementation

Themes	<i>n</i>	% of frequency of occurrence
Personal service	1	14.29%
Contract	1	14.29%
Network	5	71.43%

Note. *n* = frequency

Emergent Theme 3: The Relation Between IT Consultants and Successful

Implementation

P1 and P2 stated that the small businesses usually lack IT expertise and skills, often searching for professional consultants when it comes to IT adoption. Likewise, P3 regarded seeking consultation from professional consultants as helpful for small business management. There was clear evidence for alignment with the general systems theory specifically by using IT consultants and successful implementation. The general systems theory requires systems of factors working together to achieve organizational goals. Within the third main theme, hiring IT consultants to help with IT implementation for increased profitability, the findings of this study indicated that hiring IT consultants are among the most effective ways for IT adoption, and external IT consultants are directly and positively related to a successful implementation. Professional external IT consultants play a significant role in the IT implementation process (Brunswicker & Vanhaverbeke, 2014; Jarrahi & Sawyer, 2015; Maes & Sels, 2014). All participants claimed that consulting firms gained information from assisting their clients, thereby providing this information to SBEs who seek their assistance. External consultants use a variety of tools to identify organizational problems and assess possible solutions (Nguyen et al., 2015). Consultant methods in the areas of strategy formulation, market research, operations, and performance management increased small business effectiveness and profitability (Table 3). All participants mentioned that not all SBEs use external resources or hiring consultants, as the knowledge comes at a cost, and some SBEs are not in a financial position to accommodate such expenses.

Table 3

Frequency of Themes for the Relation Between IT Consultants and Successful Implementation.

Themes	<i>n</i>	% of frequency of occurrence
Strategy formulation	3	9.09%
Market research	12	36.36%
Operations	13	39.39%
Performance management	3	9.09%

Note. *n*= frequency

Emergent Theme 4: The Relation Between Internal IT Resources and Successful Implementation

All participants stressed the relation between internal IT resources and successful implementation of IT. P1 referred to the employee's skills, P2 to the company's strategy, and P3 to the relations among business partners, vendors, and team leaders within the business. According to Pollack et al. (2013), the key ingredients for understanding IT adoption in SBEs include organizational competencies; organizational and technical processes; technical, time management, and managerial expertise; and the allocation of resources within firms. P1 and P2 explained that employees should recognize the reasons why IT needs to be implemented in their businesses, and that this recognition should consider the needs of customers. IT can assist SBEs in enhancing their business practices, so a clear purpose for pursuing new IT must be identified before any decision on IT adoption is made (Maes & Sels, 2014; O'Toole, 2014). Concepts of the general systems theory were also evident in the findings of the fourth main theme. I found that evaluations, management relationship between internal IT resources and successful implementation in SBE worked as a system of using strategies to implement

IT adoption for increased profitability. P1, P2, and P3 indicated that the IT adoption cannot be measured by a single factor, as it is comprised of technology infrastructure, production, process, knowledge, experiences, and organization. Furthermore, all participants believed that there is a relation between internal experience and successful implementation. As Table 2 indicates, the frequency of occurrence revealed the most relationship between internal IT resources and successful implementation. The highest frequency of occurrence ranged from 1-5. The emergent themes align with the conceptual framework of general systems theory. The research findings indicate successful strategies used by SBE owners to implement IT adoption. This indicates that one strategy alone is not sufficient for IT adoption, which aligns with the general systems theory, for the reason that the general systems theory requires many factors working together as a whole to guarantee success (von Bertalanffy, 1968).

Table 4

Frequency of Themes for the Relation Between Internal IT Resources and Successful Implementation

Themes	<i>n</i>	% of frequency of occurrence
Employee's skills	1	14.29%
Business partners	1	14.29%
Team leaders	5	71.43%

Note. *n* = frequency

Summary

The study findings were significant, fulfilled the purpose of the study, and related to general systems theory. All the main themes that emerged played a crucial role in understanding the research phenomenon in addition to addressing the central research question. This study has contributed to the understanding of the strategies small business

owners use to implement IT solutions for increased profitability. According to Newby et al. (2014), SBE owners should understand the importance of adopting technology. Therefore, when there are no strategies in place to adopt new technology, small business owners may have a greater challenge in staying competitive and maintaining profitability (Basford et al., 2012; Findikoglu & Manheim, 2014). The findings specify that one strategy is not enough for SBE owners in attaining profitability by the end of year 3 of being in a business, which aligns with the general systems theory, since the general systems theory entails many factors working together as a whole to ensure success (von Bertalanffy, 1968). Based on the four emergent themes consideration of common themes leads to solutions from an understanding of the problem as a whole (von Bertalanffy, 1968).

Applications to Professional Practice

The enthusiasm and devotion of the small business owner to their business, as well as the importance of adopting the right technology findings, are relevant to professional small businesses (Ghobakhloo & Tang 2014; Lee & Kwon, 2014; Newby et al., 2014). It is important to recognize the best strategies to implement IT adoption successfully (Lonial & Carter, 2015; Purkayastha, Sharma, 2016). Well-crafted strategies used by SBE owners can increase small business owners' rates of return, and, in turn, increase revenue and job creation (Gangwar et al., 2014). The data from the participant interviews and company documents show strategies for profitability that have possibly helped small business owners in many ways. The findings revealed in the study built upon existing literature and added to it. The study's findings have the potential to

advance business practice by increasing the success rates of IT adoption in SBEs, as well as helping SBE owners learn effective strategies to implement IT and increase profitability.

I will provide the participants a summary of my findings as a resource for the business owners to develop business strategies for their own use. This research is meaningful to small business owners in many ways. The main purpose of the study was to explore participants' views about the strategies SBE owners use to adopt IT. Small business owners have been increasingly aware of the importance of IT adoption (Brunswicker & Vanhaverbeke, 2014; Li et al., 2013; Newby et al., 2014). Moreover, the findings from this study are relative to general systems theory and indicate that SBEs adopt IT as a result of pressures from both internal and external sources. In addition to there are factors that influence the process either directly or indirectly. Based on different perspectives, the study offered a conceptual framework composed of the perspectives relevant to the adoption of IT in SBEs. My analysis of company documents and participants' answers showed that essential strategies play a crucial supportive role in influencing IT business owners. Building on the conceptual framework of this study, the general systems theory, and the research findings of the first major theme indicated the persuasive strategies and leadership practices of SBE owners that undergird the requirement for strategies to adopt IT to increase profitability.

The implementation of the strategies identified by all participants in the themes may assist IT business owners in adopting IT and sustaining the company's profitability. P1, P2, and P3 addressed the fact that the majority of small businesses are likely to adopt

IT to develop the quality of their services or to meet their customers' expectations.

Business expansion is another driver to IT adoption in small businesses, followed by quality improvement, industry requirements, and investment (Abebe & Angriawan, 2014; Li et al., 2013; Nguyen et al., 2015). As Ghobakhloo and Tang (2014) stated, successful adoption can be measured in terms of the rapid and effective use of new technology.

SBE owners who stay interested and loyal to their businesses and adopt appropriate technology may maintain themselves beyond 3 years and be profitable. Additionally, SBE owners who identify the significance of and the need to understand the benefit of adopting IT might have an advantage in being profitable and sustaining beyond their first 3 years of being in business. This study may fill a gap in knowledge regarding small retail and manufacturing services business strategies to improve and increase profitability in SBEs and to sustain their business beyond 3 years of business operation, improving communities and local economies. Specifically, this study's findings may be helpful to small business owners in Orange County, Southern California. The result of the study may assist SBE owners to gain a practical overview of the IT adoption process in SBEs.

Implications for Social Change

A significant implication of this research study is positive social changes in SBEs, which may increase IT adoption success rates, learn effective strategies to implement IT, and increasing the profitability of small businesses in Orange County, Southern California. SBEs reduce the risks in information technology adoption by using strategies designed for IT adoption (Anderson & Ullah, 2014; Besser, 2012; Ghobakhloo & Tang,

2014). Scholars of small business management will find the design, findings, and conclusions of this research to be informative.

The findings and outcome from this research study provide new knowledge to influence small business start-ups to increase their profitability. The study could provide SBE owners with a better understanding of the IT resources that they need to stay competitive and improve profitability. Business growth is an extra driver to IT adoption in SBEs, along with quality improvement, industry prerequisites, and investment. Such significant contributions have caused a majority of businesses to adopt IT practices to advance the quality of their services or to surpass their customer expectations (Anderson, & Ullah, 2014; Löfsten, 2016; Newby et al., 2014). Strategies that the participants shared through the interviews may help SBEs in community events, building community involvement, and support for small retail and manufacturing business owners, helping them increase profitability. If SBEs become profitable, they will contribute to the affluence of their workers, communities, local economies, and their families.

Recommendations for Action

The purpose of this qualitative multiple-case study was to explore strategies small business owners used to implement IT solutions for increased profitability by the end of the first 3 years of opening their business. SBEs accounted for more than half of the net new jobs created between 2010 to 2013 (SBA, 2013). By considering the factors identified in this study, SBE owners may be able to minimize the risks inherent in IT adoption by utilizing planned strategies for adoption.

I recommend that SBA Orange County district in Southern, California Small Business Development Center Network (SBDC) focus on the results and share these results with all SBE owners. SBE owners should focus on the results because they can profit from remaining dedicated about their small business, and hiring the right employees. The summary of the findings will be provided to the participants. As well as, I will advocate to the participants that the complete doctoral research studies will be published if they are interested in reading it. Lastly, I believe it would be better not only for local small business owners in Southern California to concentrate on the results and findings of this study, but SBE owners in all states in the United States could benefit as well. I will publish the findings in scholarly journals and present at conferences applicable to small business leaders. Since many small business leaders are Chamber of Commerce participants, I will seek opportunities to provide information from my findings at Chamber of Commerce monthly meetings.

Recommendations for Further Research

In this qualitative multiple-case study, the sample size of the participants was the first limitation. Recommendations for additional work embrace a study relating to a larger sample size of participants, which would enable application of the study findings to the entire population of small enterprises with greater confidence. For this study, data saturation was attained after interviewing three participants from two industries (retail and manufacturing). New participants were added to the study until the data set was complete, as indicated by redundancy or data replication. The findings from this study expand the understanding of IT adoption in small business and may increase IT adoption

success rates within SBEs, helping SBE owners gain effective strategies to implement IT solutions, increasing profitability.

The second limitation of this study was that the industries focused on were in retail and manufacturing in Orange County in Southern California. As this study was specific to Orange County in Southern California, future research must now be embarking on studies in other small business contexts (e.g., different locations and industries). This study was derived from a qualitative research method with a multiple-case study design; other methodologies and designs should be deliberate for more research on SBEs profitable strategies when adopting IT.

Reflections

My great experience was gained through the DBA Doctoral Study process. I have obtained information about small businesses in the United States and specifically small businesses in Orange County Southern California. As the researcher, I did all I possibly could to reduce researcher bias. I followed step by step the interview protocol (Appendix B), and prior to the interviews I mitigated the risk. I was not familiar with my participants (the SBE owners) personally, mitigating personal bias. Ensuring that the interview protocol was followed as designed, and doing my best to control my responses to the interview replies was also important to mitigate bias and I feel that this study was a great achievement. In interviewing with SBE owners, I changed my perspective about them and their roles. I never before realized the amount of time, inspiration, energy, insights and dedication they put into their SBE. Their strong loyalty and commitment was inspirational to me. Also, I intend to work for small business in the retail and

manufacturing industries after conducting this study, thus supporting the SBE owners in their mission, their workers, and partners, giving back a great contribution to the community, and improving the economy.

Summary and Study Conclusions

The purpose for this qualitative multiple case-study was to explore what strategies SBE owners used to implement IT solutions for increased profitability. I collected data and used methodological triangulation of two data sources. Semistructured interviews with three small business owners from two industries (retail, manufacturing) were accomplished to generate the first set of data. The secondary data included company financial statements, profit and loss statements, and the company's yearly cash flow statements related to profitability. I reached data saturation when the data became repetitive and no more information was added (O'Reilly & Parker, 2012; Walker, 2012). Four main themes were exposed after I coded and analyzed the data. I linked the analysis of each emergent theme back to the literature, the conceptual framework, the existing body of knowledge, and general systems theory. My findings of the study identified the factors that allow SBEs to minimize the risks intrinsic in IT adoption by using planned strategies for adoption and implementing IT solutions for increased profitability.

References

- Abebe, M. A., & Angriawan, A. (2014). Organizational and competitive influences of exploration and exploitation activities in small firms. *Journal of Business Research*, *67*, 339-345. doi:10.1016/j.jbusres.2013.01.015
- Abii, F. E., Ogula, D. C. N., & Rose, J. M. (2013). Effects of individual and organizational factors on the turnover intentions of information technology professionals. *International Journal of Management*, *30*, 740-756. doi:10.1057/jibs.2011.19
- Adams, J. H., Khoja, F. M., & Kauffman, R. (2012). An empirical study of buyer–supplier relationships within small business organizations. *Journal of Small Business Management*, *50*(18), 20-40. doi:10.1111/j.1540-627X.2011.00342.x
- Adkins, C. L., Samaras, S. A., Gilfillan, S. W., & McWee, W. E. (2013). The relationship between owner characteristics, company size, and the work–family culture and policies of women-owned businesses. *Journal of Small Business Management*, *51*, 196-214. doi:10.1111/jsbm.12014
- Akhavan, P., Ramezan, M., & Moghaddam, J. Y. (2013). Examining the role of ethics in knowledge management process: Case study: An industrial organization. *Journal of Knowledge-Based Innovation in China*, *5*, 129-145. doi:10.1108/JKIC-04-2013-0008
- Aluwihare-Samaranayake, D. (2012). Ethics in qualitative research: A view of the participants' and researchers' world from a critical standpoint. *International Journal of Qualitative Methods*, *11*, 64-81. doi:10.1177/1077800407301175

- Amit, R., & Zott, C. (2012). Creating value through business model innovation. *MIT Sloan Management Review*, 53, 41-49. Retrieved from <http://sloanreview.mit.edu/issue/2012-spring>
- Anderson, A. R., & Ullah, F. (2014). The condition of smallness: How what it means to be small deters firms from getting bigger. *Management Decision*, 52(12), 23-31
doi:10.1108/MD-10-2012-0734
- Anyan, F. (2013). The influence of power shifts in data collection and analysis stages: A focus on qualitative research interview. *Qualitative Report*, 18, 130-136. Retrieved from <http://www.nova.edu/ssss/QR/index.html>
- Armstrong, C. E. (2013). Competence or flexibility? Survival and growth implications of competitive strategy preferences among small US businesses. *Journal of Strategy and Management*, 6, 377-398. doi:10.1008/JSMA.06-012-0034
- Aykol, B., & Leonidou, L. C. (2014). Researching the green practices of smaller service firms: A theoretical, methodological, and empirical assessment. *Journal of Small Business Management*, 3, 112-124. doi:10.1111/jsbm.12118
- Barrales-Molina, V., Martínez-López, F. J., & Gázquez-Abad, J. C. (2014). Dynamic marketing capabilities: Toward an integrative framework. *International Journal of Management Reviews*, 16, 397-416. doi:10.1111/ijmr.12026
- Barratt, M., Choi, T. Y., & Li, M. (2011). Qualitative case studies in operations management: Trends, research outcomes, and future research implications. *Journal of Operations Management*, 29(14), 329-342.
doi:10.1016/j.jom.2010.06.002

- Basford, T. E., Offermann, L. R., & Wirtz, P.W. (2012). Considering the source: The impact of leadership level on follower motivation and intent to stay. *Journal of Leadership & Organizational Studies*, 19, 202-214.
doi:10.1177/1548051811436279
- Bekhet, A. K., & Zauszniewski, J. A. (2012). Methodological triangulation: An approach to understanding data. *Nurse Researcher*, 20(2), 40–43. Retrieved from <http://www.nursing-standard.co.uk>
- Bengtsson, O., & Hand, J. R. M. (2013). Employee compensation in entrepreneurial companies. *Journal of Economics & Management Strategy*, 22, 312-340.
doi:10.1111/jems.12014
- Bergin, M. (2011). NVivo 8 and consistency in data analysis: Reflecting on the use of a qualitative data analysis program. *Nurse Researcher*, 18(3), 6-12.
doi:10.7748/nr2011.04.18.3.6.c8457
- Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Besser, T. L. (2012). The consequences of social responsibility for small business owners in small towns. *Business Ethics: A European Review*, 21, 129-139.
doi:10.1111/j.1467-8608.2011.01649.x
- Bessick, J., & Naicker, V. (2013). Barriers to tacit knowledge retention: An understanding of the perceptions of the knowledge management of people inside and outside the organisation. *South African Journal of Information Management*, 15(2), 1-8. doi:10.1007/s11187-012-9459-3

- Bianchi, M., Frattini, F., Lejarraga, J., & Di Minin, A. (2014). Technology exploitation paths: Combining technological and complementary resources in new product development and licensing. *Journal of Product Innovation Management*, *31*, 146-169. doi:10.1111/jpim.12198
- Bishara, N. D., & Westermann-Behaylo, M. (2012). The law and ethics of restrictions on an employee's post-employment mobility. *American Business Law Journal*, *49*, 1-61. doi:10.1111/j.1744-1714.2011.01128.x
- Blackburn, R. A., Hart, M., & Wainwright, T. (2013). Small business performance: Business, strategy and owner manager characteristics. *Journal of Small Business and Enterprise Development*, *20*, 8-27. doi:10.1108/14626001311298394
- Brettel, M., Chomik, C., & Flatten, T. C. (2014). How organizational culture influences innovativeness, proactiveness, and risk-taking: Fostering entrepreneurial orientation in SMEs. *Journal of Small Business Management*, *22*, 119-123. doi:10.1111/jsbm.12108
- Brockman, B. K., Jones, M. A., & Becherer, R. C. (2012). Customer orientation and performance in small firms: Examining the moderating influence of risk-taking, innovativeness, and opportunity focus. *Journal of Small Business Management*, *50*, 429-446. doi:10.1111/j.1540-627X.2012.00361.x
- Brown, R. S. (2012). The role of legitimacy for the survival of new firms. *Journal of Management & Organization*, *18*, 412-427. doi:10.5172/jmo.2012.18.3.412

- Brown, M., Kulik, C. T., Cregan, C., & Metz, I. (2015). Understanding the change Cynicism cycle: The role of HR. *Human Resource Management, 4*, 25-30. doi:10.1002/hrm.21708
- Brunswick, S., & Vanhaverbeke, W. (2014). Open Innovation in small and medium-sized enterprises (SMEs): External knowledge sourcing strategies and internal organizational facilitators. *Journal of Small Business Management, 28*, 10-21. doi:10.1111/jsbm.12120
- Bryant, P. C., & Allen, D. G. (2013). Compensation, benefits and employee turnover HR strategies for retaining top talent. *Compensation and Benefits Review, 45*, 171-175. doi:10.1177/0886368713494342
- Bumgardner, M., Buehlmann, U., Schuler, A., & Crissey, J. (2011). Competitive actions of small firms in a declining market. *Journal of Small Business Management, 49*, 578-598. doi:10.1111/j.1540-627X.2011.00337.x
- Buyl, T., Boone, C., & Hendriks, W. (2014). Top management team members' decision influence and cooperative behavior: An empirical study in the information technology industry. *British Journal of Management, 25*, 285-304. doi:10.1111/1467-8551.12004
- Cahoon, M. V., Bowler, M. C., & Bowler, J. L. (2012). A reevaluation of assessment center construct-related validity. *International Journal of Business and Management, 7*(9), 3-19. doi:10.5539/ijbm.v7n9p3
- Campbell, B. A., Ganco, M., Franco, A. M., & Agarwal, R. (2012). Who leaves,

where to, and why worry? Employee mobility, entrepreneurship and effects on source firm performance. *Strategic Management Journal*, 33, 65-87.

doi:10.1002/smj.943

Campbell, N. D., Heriot, K. C., Jauregui, A., & Mitchell, D. T. (2012). Which state policies lead to U.S. firm exits? Analysis with the economic freedom index. *Journal of Small Business Management*, 50, 87-104. doi:10.1111/j.1540-627X.2011.00345.x

Carter, C. R., Rogers, D. S., & Choi, T. Y. (2015). Toward the theory of the supply chain. *Journal of Supply Chain Management*, 22, 455-457.

doi:10.1111/jscm.12073

Carsrud, A., & Cucculelli, M. (2014). Family firms, entrepreneurship, and economic development. *Journal of Small Business Management*, 52, 189-191.

doi:10.1111/jsbm.12104

Coenen, M., Stamm, T. A., Stucki, G., & Cieza, A. (2012). Individual interviews and focus groups in patients with rheumatoid arthritis: A comparison of two qualitative methods. *Quality of Life Research*, 21, 359-370.

doi:10.2307/41411730

Chen, J. L. (2012). The synergistic effects of IT-enabled resources on organizational capabilities and firm performance. *Information &*

Management, 49, 142-150. doi:10.1016/j.im.2012.01.005

Chenail, R. J. (2011). Interviewing the investigator: Strategies for addressing and researcher bias concerns in qualitative research. *Qualitative*

Report, 16, 255-262. doi:10.5465/AMJ.2011.60262792

- Chesley, N. (2014). Information and communication technology use, work intensification and employee strain and distress. *Work, Employment & Society*, 28, 589-610. doi:10.1177/0950017013500112
- Chollet, B., Géraudel, M. & Mothe, C. (2014). Generating business referrals for SMEs: The contingent value of CEOs' social capital. *Journal of Small Business Management*, 52, 79-101. doi:10.1111/jsbm.12034
- Chung, J. E. (2014). Does small retailer market orientation matter for long-term oriented relationships with suppliers? *Journal of Small Business Management*, 15, 790-807. doi:10.1111/jsbm.12061
- Colombo, M. G., Laursen, K., Magnusson, M., & Rossi-Lamastra, C. (2012). Introduction: Small business and networked innovation: Organizational and managerial challenges. *Journal of Small Business Management*, 50, 181-190. doi:10.1111/j.1540-627X.2012.00349.x
- Colombo, M. G., De Massis, A., Piva, E., Lamastra, C., & Wright, M. (2014). Sales and employment changes in entrepreneurial ventures with family ownership: Empirical evidence from high-tech Industries. *Journal of Small Business Management*, 52, 226-245. doi:10.1111/jsbm.12100
- Connelly, B. L., Ketchen, D. J., & Hult, G. T. M. (2013). Global supply chain management: Toward a theoretically driven research agenda. *Global Strategy Journal*, 3, 227-243. doi:10.1111/j.2042-5805.2013.01041.
- Costanzo, L. A., Vurro, C., Foster, D., Servato, F., & Perrini, F. (2014). Dual

- mission management in social entrepreneurship: Qualitative evidence from social firms in the United Kingdom. *Journal of Small Business Management*, 52, 655-677. doi:10.1111/jsbm.12128
- Cragg, P., Mills, A., & Suraweera, T. (2013). The influence of IT management sophistication and IT support on IT success in small and medium-sized enterprises. *Journal of Small Business Management*, 51, 617-636. doi:10.1111/jsbm.12001
- Cronin, C. (2014). Using case study research as a rigorous form of inquiry. *Nurse Researcher*, 21(5), 19-27. doi:10.7748/nr.21.5.19.e1240
- Cronin-Gilmore, J. (2012). Exploring marketing strategies in small businesses. *Journal of Marketing Development and Competitiveness*, 6, 96-107. Retrieved from <http://www.na-businesspress.com>
- Da Mota Pedrosa, A., Näslund, D., & Jasmand, C. (2012). Logistics case study based research: Towards higher quality. *International Journal of Physical Distribution & Logistics Management*, 42, 275-295. doi:10.1108/09600031211225963
- Darcy, C., McCarthy, A., Hill, J., & Grady, G. (2012). Work–life balance: One size fits all? An exploratory analysis of the differential effects of career stage. *European Management Journal*, 30, 111-120. doi:10.1016/j.emj.2011.11.001
- Deligianni, I., Dimitratos, P., Petrou, A., & Aharoni, Y. (2015). Entrepreneurial

- orientation and international performance: The moderating effect of decision making rationality. *Journal of Small Business Management*, 3, 310-316.
doi:10.1111/jsbm.12152
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Di Marco, M. K., Alin, P., & Taylor, J. E. (2012). Exploring negotiation through boundary objects in global design project networks. *Project Management Journal*, 43, 24-39. doi:10.1002/pmj.21273
- Draper, A., & Swift, J. A. (2011). Qualitative research in nutrition and dietetics: Data collection issues. *Journal of Human Nutrition & Dietetics*, 24, 3-12.
doi:10.1111/j.1365-277X.2010.01117.x
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives*, 38, 105-124. Retrieved from <http://erpjournal.net>
- Ebbers, J. J. (2014). Networking behavior and contracting relationships among entrepreneurs in business incubators. *Entrepreneurship Theory and Practice*, 38, 1159-1181. doi:10.1111/etap.12032
- Edwards, M. R. (2015). The Olympic effect: Employee reactions to their employer's sponsorship of a high-profile global sporting event. *Human Resource Management*. 68, 131-156. doi:10.1002/hrm.21702
- Ekekwe, O. J. (2013). *Relationship between institutional frameworks and growth of SMEs in Nigeria's petroleum industry* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3554901)

- Engelen, A., Flatten, T. C., Thalmann, J., & Brettel, M. (2014). The effect of organizational culture on entrepreneurial orientation: A comparison between Germany and Thailand. *Journal of Small Business Management*, *52*, 732-752. doi:10.1111/jsbm.12052
- Ertürk, A., & Vurgun, L. (2014). Retention of IT professionals: Examining the influence of empowerment, social exchange, and trust. *Journal of Business Research*, *67*, 1-13. doi:10.1016/j.jbusres.2014.05.010
- Evanschitzky, H., Caemmerer, B., & Backhaus, C. (2015). The franchise dilemma: Entrepreneurial characteristics, relational contracting, and opportunism in hybrid governance. *Journal of Small Business Management*, *15*, 20-22. doi:10.1111/jsbm.12145
- Ezell, S. (2012). Revitalizing U.S. manufacturing. *Issues in Science and Technology*, *28*, 41-50. Retrieved from <http://www.issues.org>
- Fahed-Sreih, J., & Morin-Delerm, S. (2012). A perspective on leadership in small businesses: Is the need for achievement a motive in predicting success? *International Journal of Entrepreneurship*, *16*, 1-23. doi:10.1111/jsbm.12080
- Fayolle, A., & Gailly, B. (2015). The Impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, *53*, 75-93. doi:10.1111/jsbm.12065
- Fensel, A., Toma, I., García, J. M., Stavrakantonakis, I., & Fensel, D. (2014). Enabling customers' engagement and collaboration for small and medium-sized enterprises

in ubiquitous multi-channel ecosystems. *Computers in Industry*, 65, 891-904.

doi:10.1016/j.compind.2014.02.001

Fielding, N. G. (2012). Triangulation and mixed methods designs: Data integration with new research technologies. *Journal of Mixed Methods Research*, 6, 124-36. doi:10.1177/1558689812437101

Findikoglu, M. N., & Watson-Manheim, M. B. (2014). Do small and medium sized IT firms form service partnerships with nonlocal IT firms? An assessment of facilitators. *Journal of Small Business Management*, 19, 110-112.

doi:10.1111/jsbm.12117

Frey, R.V., Bayón, T., & Totzek, D. (2013). How customer satisfaction affects employee satisfaction and retention in a professional services context. *Journal of Service Research*, 16, 503-517. doi:10.1177/1094670513490236

Gangwar, H., Date, H., & Raoot, A.D. (2014). Review on IT adoption: Insights from recent technologies. *Journal of Enterprise Information Management*, 27, 488-502. doi:10.1108/08-2012-0047

Ghobakhloo, M., & Tang, S.H. (2014). The role of owner/manager in adoption of electronic commerce in small businesses. *Journal of Small Business and Enterprise Development*, 20(4), 34-25. doi:10.1080/02681102.2014.996201

Gialuisi, O., & Coetzer, A. (2013). An exploratory investigation into voluntary employee turnover and retention in small businesses. *Small Enterprise Research*, 20, 55-68. doi:10.5172/ser.2013.20.1.55

Gronum, S., Verreyne, M. L., & Kastle, T. (2012). The role of networks in

- small and medium-sized enterprise innovation and firm performance. *Journal of Small Business Management*, 50, 257-282. doi:10.1111/j.1540-627X.2012.00353.x
- Grossoehme, D. H. (2014). Overview of qualitative research. *Journal of Health Care Chaplaincy*, 20, 109-122. doi:10.1080/08854726.2014.925660
- Hanson, J., Balmer, D., & Giardino, A. (2011). Qualitative research methods for medical educators. *Academic Pediatrics*, 11, 375-386. doi:10.1016/j.acap.2011.05.001
- Hardwick, J., Cruickshank, D., & Anderson, A. R. (2012). Innovation in small business: Comparing face-to-face with virtual networking. *Journal of Business Strategy*, 33, 51-58. doi:10.1108/02756661211282795
- Harper, S. (2012). The leader coach: A model of multi-style leadership. *Journal of Practical Consulting*, 4, 22-31. Retrieved from <http://www.regent.edu>
- Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy. *The Qualitative Report*, 17, 510-517. Retrieved from <http://www.nova.edu/ssss/QR/index.html>
- Hasumi, R., & Hirata, H. (2014). Small business credit scoring and its pitfalls: Evidence from Japan. *Journal of Small Business Management*, 52, 555-568. doi:10.1111/jsbm.12049
- Hauschildt, K. (2012). The effect of self-leadership on work role performance in teams. *Leadership*, 8, 145-168. doi:10.1177/1742715011429588
- Huggins, R., & Weir, M. (2012). Intellectual assets and small knowledge

- intensive business service firms. *Journal of Small Business and Enterprise Development*, 19, 92-113. doi:10.1108/14626001211196424
- Ibrahim, N. A. (2012). Formalized business-planning decisions in small firms. *International Journal of Business Strategy*, 12, 81-86. doi:10.5539/ijbm.v6n5p100
- Jänkälä, S., & Silvola, H. (2012). Lagging effects of the use of activity-based costing on the financial performance of small firms. *Journal of Small Business Management*, 50, 498-523. doi:10.1111/j.1540-627X.2012.00364.x
- Jarrahi, M. H., & Sawyer, S. (2015). Theorizing on the take-up of social technologies, organizational policies and norms, and consultants' knowledge-sharing practices. *Journal of the Association for Information Science and Technology*, 66, 162-179. doi:10.1002/asi.23161
- Johnson, M. P., & Schaltegger, S. (2015). Two decades of sustainability management tools for SMEs: How far have we come? *Journal of Small Business Management*, 14, 30-32. doi:10.1111/jsbm.12154
- Kabongo, J. D., & McCaskey, P. H. (2011). An examination of entrepreneurship educator profiles in business programs in the United States. *Journal of Small Business and Enterprise Development*, 18, 27-42. doi:10.1108/14626001111106415
- Karatas-Ozkan, M., Anderson, A. R., Fayolle, A., Howells, J., & Condor, R. (2014). Understanding entrepreneurship: Challenging dominant perspectives and theorizing entrepreneurship through new post positivist epistemologies. *Journal of Small Business Management*, 52, 589-593. doi:10.1111/jsbm.12124

Kellermanns, F., Walter, J., Crook, T. R., Kemmerer, B., & Narayanan, V. (2014).

The resource-based view in entrepreneurship: A content-analytical comparison of researchers' and entrepreneurs' views. *Journal of Small Business Management*, *10*, 40-43. doi:10.1111/jsbm.12126

Kibbeling, M., van der Bij, H., & van Weele, A. (2013), Market orientation and innovativeness in supply chains: Supplier's impact on customer satisfaction. *Journal of Product Innovation Management*, *30*, 500-515.

doi:10.1111/jpim.12007

Klapper, L. F., & Parker, S. C. (2011). Gender and the business environment for new firm creation. *World Bank Research Observer*, *26*, 237-257.

doi:10.1093/wbro/lkp032

Klein, P. G., Mahoney, J. T., McGahan, A. M., & Pitelis, C. N. (2013).

Capabilities and strategic entrepreneurship in public organizations. *Start Entrepreneurship*, *7*, 70-91. doi:10.1002/sej.1147

Knoblauch, H., & Schnettler, B. (2012). Videography: Analyzing video data as a 'focused' ethnographic and hermeneutical exercise. *Qualitative Research*, *12*, 334-356. doi:10.1177/1468794111436147

Kobe, K. (2012). Small business GDP updates 2002-2010. (SBAHQ-10-M-0258).

Retrieved from the Small Business Administration website: <http://www.sba.gov>

Konrad, E. D. (2013). Cultural entrepreneurship: The impact of social networking on success. *Creativity and Innovation Management*, *22*, 307-319.

doi:10.1111/caim.12032

- Konsti-Laakso, S., Pihkala, T., & Kraus, S. (2012). Facilitating SME innovation capability through business networking. *Creativity and Innovation Management*, 21, 93-105. doi:10.1111/j.1467-8691.2011.00623.x
- Kovach, J. V., & Mariani, J. (2012). Exploring quality initiatives' success and failure. *Journal for Quality and Participation*, 35, 24-28. Retrieved from <http://asq.org/pub/jqp/>
- Laforet, S. (2016). Effects of organizational culture on organizational innovation performance in family firms. *Journal of Small Business and Enterprise Development*, 23, 379-407. doi:10.1108/JSBED.0020
- Lanza, A., & Passarelli, M. (2014). Technology change and dynamic entrepreneurial capabilities. *Journal of Small Business Management*, 52, 427-450. doi:10.1111/jsbm.12042
- Lasagni, A. (2012). How can external relationships enhance innovation in SMEs? New evidence for Europe. *Journal of Small Business Management*, 50, 310-339. doi:10.1111/j.1540-627X.2012.00355.x
- Latif, K. F., Jan, S., & Shaheen, N. (2013). Association of training satisfaction with employee development aspect of job satisfaction. *Journal of Managerial Sciences*, 7, 159-178. Retrieved from <http://www.qurtuba.edu>
- Lee, H., Kelley, D., Lee, J., & Lee, S. (2012). The impact of internationalization, technology resources and alliances. *Journal of Small Business Management*, 50(11), 1-19. doi:10.1111/j.1540-627X.2011.00341.x
- Lee, J. S., & Kwon, Y. (2014). Exploring key factors of application software

- services and their relationships for organizational success in SMEs. *Journal of Small Business Management*, 52, 753-770. doi:10.1111/jsbm.12053
- Leech, N., & Onwuegbuzie, A. (2011). Beyond constant comparison qualitative data analysis: Using NVivo. *School Psychology Quarterly*, 26, 70-84. doi:10.1037/a0022711
- Leedy, P. D., & Ormrod, J. E. (2013). *Practical research: Planning and design* (10th ed.). Upper Saddle River, NJ: Pearson Education.
- Li, W., Veliyath, R., & Tan, J. (2013). Network characteristics and firm performance: an examination of the relationships in the context of a cluster. *Journal of Small Business Management*, 51, 1-22. doi:10.1111/j.1540-627X.2012.00375.x
- Liao, T.-S., Rice, J., & Lu, J.-C. (2013). The vicissitudes of competitive advantage: Empirical evidence from Australian manufacturing SMEs. *Journal of Small Business Management*, 53, 469-481. doi:10.1111/jsbm.12078
- Linton, J., & Walsh, S. (2013). The effect of technology on learning during the acquisition and development of competencies in technology-intensive small firms. *International Journal of Entrepreneurial Behavior & Research*, 19, 165-186. doi:10.1108/13552551311310365
- Lofsten, H. (2016). Organizational capabilities and the long-term survival of new technology based firms. *European Business Review*, 28, 312-332. doi:10.1108/EBR-0041
- Lonial, S. C., & Carter, R. E. (2015). The impact of organizational orientations on

- medium and small firm performance: A resource-based perspective. *Journal of Small Business Management*, 53, 94-113. doi:10.1111/jsbm.12054
- Ludovic-Alexandre, V., & Marle, F. (2012). A systems thinking approach for project vulnerability management. *Kybernetes*, 41, 206-228. doi:10.1108/036849212
- Luiz, A. B., & Sbragia, R. (2011). Design thinking model as inducer of business innovation: An empirical study. *Revista De Gestão e Projetos*, 2(1), 3. Retrieved from <http://www.revistagep.org/ojs/index.php/gep>
- Maes, J. & Sels, L. (2014). SMEs' radical product innovation: The role of internally and externally oriented knowledge capabilities. *Journal of Small Business Management*, 52, 141-163. doi:10.1111/jsbm.12037
- Manolova, T. S., Brush, C. G., Edelman, L. F., & Shaver, K. G. (2012). One size does not fit all: Entrepreneurial expectancies and growth intentions of US women and men nascent entrepreneurs. *Entrepreneurship & Regional Development*, 24, 7-27. doi:10.1080/08985626.2012.637344
- Marvel, M. (2012). Knowledge acquisition asymmetries and innovation radicands. *Journal of Small Business Management*, 50, 447-468. doi:10.1111/j.1540-627X.2012.00362.x
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research? A review of qualitative interviews in is research. *Journal of Computer Information Systems*, 54(1), 11-22. Retrieved from <http://iacis.org/jcis/articles/>

- Marshall, C., & Rossman, G. (2016). *Designing qualitative research* (6th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Medvedeva, T. A. (2012). Developing an innovative style of thinking and innovative behavior. *Systemic Practice and Action Research*, 25, 261-272. doi:10.1007/s11213-011-9221-9
- Menguc, B., Auh, S., & Yannopoulos, P. (2014). Customer and supplier involvement in design: The moderating role of incremental and radical innovation capability. *Journal of Product Innovation Management*, 31, 313-328. doi:10.1111/jpim.12097
- Miles, P. C. (2013). Competitive strategy: The link between service characteristics and customer satisfaction. *International Journal of Quality and Service Sciences*, 5, 395-414. doi:10.1108/IJQSS-03-2013-0007
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Moll, S. (2012). Navigating political minefields: Partnerships in organizational case study research. *Work*, 43, 5-12. doi:10.3233/wor-2012-1442
- Mowbray, P. K., Wilkinson, A., & Tse, H. M. (2014). An integrative review of employee voice: Identifying a common conceptualization and research agenda. *International Journal of Management Reviews*, 23, 11-28. doi:10.1111/ijmr.12045
- Nag, R., & Gioia, D. A. (2012). From common to uncommon knowledge: Foundations of firm-specific use of knowledge as a resource. *The Academy of Management Journal*, 55, 421-457. doi:10.5465/amj.2008.0352

- Newby, M., Thuyuyen, H., & Teresa S. (2014). Understanding customer relationship management technology adoption in small and medium-sized enterprises. *Journal of Enterprise Information Management*, 27, 541-560. doi:10.1108/JEIM-11-2012-0078
- Nguyen, T. H., Newby, M., & Macaulay, M. J. (2015). Information technology adoption in small business: Confirmation of a proposed framework. *Journal of Small Business Management*, 53, 207-227. doi:10.1111/jsbm.12058
- Nieto, M. J., Santamaria, L., & Fernandez, Z. (2013). Understanding the innovation behavior of family firms. *Journal of Small Business Management*, 53, 382-399. doi:10.1111/jsbm.12075
- O'Donnell, A. (2011). Small firm marketing: Synthesizing and supporting Received wisdom. *Journal of Small Business and Enterprise Development*, 18, 78-805. doi:10.1108/14626001111179802
- O'Donnell, A. (2014). The contribution of networking to small firm Marketing. *Journal of Small Business Management*, 52, 164-187. doi:10.1111/jsbm.12038
- O'Toole, L. J. (2014). Networks and networking: The public administrative agendas. *Public Administration Review*, 75, 361-371. doi:10.1111/puar.12281
- Parida, V., Westerberg, M., & Frishammar, J. (2012). Inbound open innovation activities in high-tech SMEs: The impact on innovation performance. *Journal of Small Business Management*, 50, 283-309. doi:10.1111/j.1540-627X.2012.00354.x
- Paulino, V. S. (2014). Influence of risk on technology adoption: Inertia strategy in

the space industry, *European Journal of Innovation Management*, 17, 41-60.

doi:10.1108/E.07-2012-0075

Perrigot, R., Kacker, M., Basset, G., & Cliquet, G. (2012). Antecedents of early adoption and use of social media networks for stakeholder communications: Evidence from franchising. *Journal of Small Business Management*, 50, 539-565.

doi:10.1111/j.1540-627X.2012.00366.x

Phillips, P. (2012). Writing up qualitative research. *Qualitative Research*, 12, 102

103. doi:10.1177/1468794111421237

Phipps, K. (2012). Spirituality and strategic leadership: The influence of spiritual Beliefs on strategic decision making. *Journal of Business Ethics*, 106, 177-189.

doi:10.1007/s10551-011-0988-5

Piro, G., Grieco, L. A., Boggia, G., & Chatzimisios, P. (2014). Information centric networking and multimedia services: present and future challenges. *Trans Emerging Tel Tech*, 24, 392-406. doi:10.1002/ett.2741

Peña, A. I., Jamilena, D. M., & Molina, M. Á. (2015). The effect of customer orientation on smaller sized service firms and on the Market: A multilevel application embracing firms and customers. *Journal of Small Business*

Management, 12, 115-127. doi:10.1111/jsbm.12158

Pollack, J. M., Coy, A. E., Green, J. D., & Davis, J. L. (2013). Satisfaction, investment, and alternatives predict entrepreneurs' networking group commitment and subsequent revenue generation. *Entrepreneurship Theory and Practice*, 29,

64-89. doi:10.1111/etap.12075

- Powell, G. N., & Eddleston, K. A. (2013). Linking family-to-business enrichment and support to entrepreneurial success: Do female and male entrepreneurs experience different outcomes? *Journal of Business Venturing*, 28, 261-280. doi:10.1016/j.jbusvent.2012.02.007
- Prajogo, D., & McDermott, C. M. (2014). Antecedents of service innovation in SMEs: comparing the effects of external and internal factors. *Journal of Small Business Management*, 52, 521-540. doi:10.1111/jsbm.12047
- Purkayastha, A., Sharma, S. (2016). Gaining competitive advantage through the right business model: Analysis based on case studies. *Journal of Strategy and Management*, 9, 138-155. doi:10.1108/JSMA.0060
- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8, 238-264. doi:10.1108/11766091111162070
- Real, J. C., Roldán, J. L., & Leal, A. (2014). From entrepreneurial orientation and learning orientation to business performance: Analyzing the mediating role of organizational learning and the moderating effects of organizational size. *British Journal of Management*, 25, 186-208. doi:10.1111/j.1467-8551.2012.00848.x
- Renko, M., El Tarabishy, A., Carsrud, A. L. & Brännback, M. (2015). Understanding and measuring entrepreneurial leadership style. *Journal of Small Business Management*, 53, 54-74. doi:10.1111/jsbm.12086
- Roach, D., Ryman., Makani, J. (2016). Effectuation, innovation and performance in

- SMEs: An empirical study. *European Journal of Innovation Management*, 19, 214-238. doi:10.1108/EJIM.0119
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Sawang, S., Parker, R., & Hine, D. (2014). How small business advisory program delivery methods (Collective Learning, Tailored, and practice-based approaches) affect learning and innovation. *Journal of Small Business Management*, 120, 81-93. doi:10.1111/jsbm.12142
- Schlosser, F. (2015). Identifying and differentiating key employees from owners and other employees in SMEs. *Journal of Small Business Management*, 53, 37-53. doi:10.1111/jsbm.12066
- Sears, J., & Hoetker, G. (2014). Technological overlap, technological capabilities, and resource recombination in technological acquisitions. *Strategic Management*, 35, 48-67. doi:10.1002/smj.2083
- Seghers, A., Manigart, S., & Vanacker, T. (2012). The impact of human and social capital on entrepreneurs' knowledge of finance alternatives. *Journal of Small Business Management*, 50, 63-86. doi:10.1111/j.1540-627X.2011.00344.x
- Semrau, T., & Werner, A. (2014). How exactly do network relationships pay off? The effects of network size and relationship quality on access to start-up resources. *Entrepreneurship Theory and Practice*, 38, 501-525. doi:10.1111/etap.12011
- Shideler, D., & Badasyan, N. (2012). Broadband impact on small business growth

- in Kentucky. *Journal of Small Business and Enterprise Development*, 19, 589-606.
doi:10.1108/14626001211277415
- Shover, N. (2012). Ethnographic methods in criminological research: Rationale, reprise, and warning. *American Journal of Criminal Justice*, 37, 139-145.
doi:10.1007/s12103-012-9160-8
- Shuck, B., & Herd, A. M. (2012). Employee engagement and leadership: Exploring the convergence of two frameworks and implications for leadership development in HRD. *Human Resource Development*, 11, 156-181. doi:10.1177/1534484312438211
- Sicotte, H., Drouin, N., & Delerue, H. (2014). Innovation portfolio management as a subset of dynamic capabilities: Measurement and impact on innovative performance. *Project Management Journal*, 45, 58-72. doi:10.1002/pmj.21456
- Sisaye, S. (2012). An ecological analysis of four competing approaches to sustainability development. *World Journal of Entrepreneurship, Management and Sustainable Development*, 8, 18-35. doi:10.1108/20425961211221606
- Stephens, A. (2013). Principled success. *International Journal of Managing Projects in Business*, 6, 199-209. doi:10.1108/17538371311291099
- Street, C. T., & Ward, K. W. (2012). Improving validity and reliability in longitudinal case study timelines. *European Journal of Information Systems*, 21, 160-175.
doi:10.1057/ejis.2011.53
- Soderberg, M., Kalaganam, S., Sheehan, N. T., & Vaidyanathan, G. (2011).

- When is a balanced scorecard a balanced scorecard? *International Journal of Productivity and Performance Management*, 60, 688-708.
doi:10.1108/17410401111167780
- Sousa, C. M. P., Lengler, J. F. B., & Martínez-López, F. J. (2014). Testing for linear and quadratic effects between price adaptation and export performance: The impact of values and perceptions. *Journal of Small Business Management*, 52, 501-520. doi:10.1111/jsbm.12046
- Su, Z., Ahlstrom, D., Li, J., & Cheng, D. (2013). Knowledge creation capability, absorptive capacity, and product innovativeness. *R&D Management*, 43, 473-485. doi:10.1111/radm.12033
- Su, Z., Xie, E., & Li, Y. (2011). Entrepreneurial orientation and firm performance in new ventures and established firms. *Journal of Small Business Management*, 49, 558-577. doi:10.1111/j.1540-627X.2011.00336.x
- Su, Z., Xie, E., & Wang, D. (2015). Entrepreneurial Orientation, Managerial Networking, and New Venture Performance in China. *Journal of Small Business Management*, 53, 228-248. doi:10.1111/jsbm.12069
- Tahir, P. R., Mohamad, M. R., & Hasan, D. B. (2011). A short review of factors leading to success of small medium enterprises. *Interdisciplinary Journal of Contemporary Research in Business*, 2, 519-529. Retrieved from <http://ijcrb.webs.com/>
- Taneja, S., Pryor, M.G., Hayek, M. (2016). Leaping innovation barriers to small business longevity. *Journal of Business Strategy*, 37, 44-51. doi:10.1108/J.0145

- Tang, J. & Murphy, P. J. (2012). Prior knowledge and new product and service introductions by entrepreneurial firms: The mediating role of technological innovation. *Journal of Small Business Management*, 50, 41-62.
doi:10.1111/j.1540-627X.2011.00343.
- Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, 16, 151-155.
doi:10.1111/j.1744-6155.2011.00283.x
- Unluer, S. (2012). Being an insider researcher while conducting case study research. *The Qualitative Report*, 17, 1-14 Retrieved from
<http://www.nova.edu/ssss/QR/index.html>
- U.S. Department of Health and Human Services. (1979). The Belmont Report. Retrieved from <http://www.hhs.gov/ohrp/humansubjects/guidance/belmont.html>
- U.S. Department of Commerce, Bureau of the Census, Business Dynamics Statistics (2012). *Frequently asked questions about small business*. Retrieved from
<http://www.sba.gov/ADVO/stats/sbfaq.txt>
- U. S. Small Business Administration (SBA). (2013). Small business administration, office of advocacy. *Michigan Small Business Profile*, 22, 61-82. Retrieved from <http://www.sba.gov/advo/research>
- U.S. Small Business Administration (SBA). (2012). *Advocacy small business statistics and research*. Washington, DC: Author.

- Valentim, L., Lisboa, J. V., & Franco, M. (2015). Knowledge management practices and absorptive capacity in small and medium-sized enterprises: Is there really a linkage?. *R&D Management*, 2, 30-56. doi:10.1111/radm.12108
- Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative divide: Guidelines for conducting mixed methods research in information systems. *Management Information Systems Quarterly*, 37, 21-54. Retrieved from <http://www.misq.org>
- Verbano, C., Crema, M., Venturini, K. (2013). The identification and characterization of open innovation profiles in Italian small and medium-sized enterprises. *Journal of Small Business Management*. 27, 601-610
doi:10.1111/jsbm.12091
- Verreynne, M.-L., Meyer, D. and Liesch, P. (2014). Beyond the formal–informal dichotomy of small firm strategy-making in stable and dynamic environments. *Journal of Small Business Management*, 24, 3-12. doi:10.1111/jsbm.12143
- von Bertalanffy, L. (1968). *General systems theory: Foundations, developments, applications* (Revised edition). New York, NY: George Braziller, Inc.
- von Bertalanffy, L. (1972). The history and status of general systems theory. *Academy of Management Journal*, 15, 407-426. doi:10.2307/255139
- Voss, U., & Brettel, M. (2014). The effectiveness of management control in small firms: Perspectives from resource dependence theory. *Journal of Small Business Management*, 52, 569-587. doi:10.1111/jsbm.12050
- Walker, J. L. (2012). The use of saturation in qualitative research. *Canadian*

Journal of Cardiovascular Nursing, 22(2), 37-46. Retrieved from
<http://www.cccn.ca>

Walsh, K. (2012). Board editorial: Quantitative vs. qualitative research: A false dichotomy. *Journal of Research in Nursing*, 17(1), 9-11.
doi:10.1177/1744987111432053

Wallgren, L. G. & Hanse, J. J. (2011). The motivation of information technology consultants: The struggle with social dimensions and identity. *Human Factors Management*, 21, 55-70. doi:10.1002/hfm.20259

Yang, N. (2012). Small businesses and international entrepreneurship in the economic hard time: A global strategic perspective. *International Journal of Entrepreneurship*, 16, 113-131. Retrieved from
www.alliedacademies.org/Public/Journals/JournalDetails.aspx?jid=7

Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Appendix A: Informed Consent for Participants Over 18 Years of Age

You are invited to take part in a research study of the strategies small business owners in Orange County, Southern California to determine what strategies small business owners use to implement information technology solutions to achieve profitability by the end of the first 3 years of being in business. The researcher is inviting small business owners that have been profitable in Orange County, Southern California. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Soha Ragab, who is a doctoral student at Walden University.

Background information:

The purpose of this study is to explore strategies small business owners use to implement IT solutions and achieving profitability by the end of the first 3 years of being in business.

Procedures:

If you agree to be in this study, you will be asked to participate in one, approximately 60 minute audio recorded interview, Provide archival records such as (profit & loss and cash flow statements) for collection, and perform member checking of the results. You will be provided the results and findings via e-mail. Respond to follow-up questions if further explanation is needed to confirm understanding of your answers. I estimate the follow-up interviews will require approximately 30 minutes and member checking will last for approximately another 30 minutes.

Voluntary nature of the study:

This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at the various organizations will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and benefits of being in the study:

The time commitment related to this study is that you will be to complete the 60 minute interview during or after normal work hours. You will receive a 1-2 page summary of the findings of this study for your personal information. There are no other risks related to this study. Being in this type of study will not involve any risks of discomforts. Being in this study would not pose risk to your safety or well-being. Potential benefits of this study include providing new insights and your participation will contribute to the knowledge base relevant to strategies small business owners in the small business enterprises (SBEs) can use to increase profitability.

Compensation:

No compensation will be provided for your participation in this study.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. If you reveal information in which criminal activity or child/elder abuse is disclosed, I am obligated to report such information to the proper authorities. Also, the researcher will not include your name, organizations name, or anything else that could identify you in the

study reports. Written data will be kept secure in a locked cabinet drawer and electronic data will be kept secure on a personal, password-protected, external hard drive. Data will be kept for a period of at least, but no longer than 5 years, as required by the university.

Contacts and questions:

You may contact [REDACTED] If you want to talk privately about your rights as a participant, you can call [REDACTED] [REDACTED] She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 3121210. Walden University's approval number for this study is 03-18-16-0237287 and it expires March 17, 2017.

Please print or save this consent form for your records.

Statement of consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By replying to this email with the words, "I consent", I understand that I am agreeing to the terms described above.

Appendix B: Interview Protocol

Part I: Notes for the Interviewer

Overview

1. Tape-record the interviews if permission is granted
2. Interview in a neutral setting.
3. The interview duration is approximately 60 minutes.

Interview Methodology

Interviews will be implemented with a customized approach allowing for an in-depth investigation. The interviewer will use a semistructured interview design.

Interviews will contain:

1. A predetermined set of 5 questions

Designation of Interviewee:

Location of Interview: The meetings will hold on the company site or by teleconference, depending on each participant's schedule.

Date: To be determined

Start Time: Interviews time will be arranged between the participants and me.

The participants will be asked if they have specific time in mind for the interview.

Finish Time: Interviews will last 60 minutes.

I will make every effort to ensure that the interpretations of the results accurately represent the participants' experiences and observations through member checking. I will use the following steps:

- I will review and interpret the interview transcripts

- Write each question followed by a succinct synthesis
- Provide a printed copy of the synthesis to the participant
- Ask if the synthesis represents the answer or if there is additional information
- Continue member checking process until there is no new data to collect

Part II: Components of the Interview

1. Components of the Interview

- a. Introduction (5-10 minutes)
- b. Review confidentiality and consent form.
- c. Create a relaxed environment
- d. Dialogue
- *Question:* Have you received my introductory correspondence explaining my research and the format that will be used?
- *Question:* Are there any questions?

2. Explain the purpose of the interview

- The purpose of this interview is to explore factors that influence your decisions.
- During the time we have together I would like to get an understanding of your experiences and observations pertinent to the subject matter of the study.

3. Ask permission to record interview

- With your authorization, I would like to tape-record our discussion to get an inclusive record of what is said, since the notes I take will not be as comprehensive as I will require. No one other than I will listen to anything you say to me. Only I will have access to the records. The research results will

describe what you and others have said predominantly in summation. No responses will be ascribed to you by name.

- The open-ended questions are intended to obtain your personal experience and perceptions.
- Would you give me permission to tape the interview?
- Do you have any questions before we begin?
- Begin interview with question #1; follow through to final question. Follow up with additional questions.
- End interview sequence; discuss member-checking with participant(s). Thank the participant(s) for their part in the study. Reiterate contact numbers for follow up questions and concerns from participants.
- End protocol.