

2015

# Marketing Strategies of Mobile Game Application Entrepreneurs

Talaya Waller  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Advertising and Promotion Management Commons](#), [Databases and Information Systems Commons](#), [Entrepreneurial and Small Business Operations Commons](#), and the [Marketing Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Talaya Waller

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

Review Committee

Dr. Robert Hockin, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Gina Smith, Committee Member, Doctor of Business Administration Faculty

Dr. Richard Snyder, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2015

Abstract

Marketing Strategies of Mobile Game Application Entrepreneurs

by

Talaya C. Waller

MBA, Troy University, 2007

BBA, Georgia State University, 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2015

## Abstract

Mobile game application entrepreneurs can offer many benefits to the U.S. economy; however, 80% of the entrepreneurs in this study stated that marketing their mobile applications was a major business challenge. Successful strategies that entrepreneurs have used to overcome their mobile game application marketing challenges may be beneficial to other entrepreneurs. Based on Schumpeter's theory of economic development and new value creation of technological innovation, the purpose of this phenomenological study was to explore the strategies that entrepreneurs have used to market their mobile game application development businesses successfully. Twenty mobile game application entrepreneurs from northern California, who successfully sustained their businesses for 3 or more years, completed semistructured interviews. The entrepreneurs responded to open-ended questions designed to determine how they successfully marketed their mobile game applications. Moustakas's modified van Kaam method was used and included coding and organizing data into 5 primary themes that emerged from the analysis. The primary themes that emerged from the analysis were marketing challenges, social network influences, financing opportunities, innovative marketing approaches, and marketing strategies. The findings suggest that social media and networks are essential for marketing success, and mobile games should be innovative to ensure competitive advantages. The knowledge generated from this study may help mobile game entrepreneurs successfully market their mobile game applications and sustain their business. An increased number of businesses may lead to social change by helping to create jobs, thus reducing unemployment.

Marketing Strategies of Mobile Game Application Entrepreneurs

by

Talaya C. Waller

MBA, Troy University, 2007

BBA, Georgia State University, 2006

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2015

## Dedication

I dedicate this study to the many people who motivated and inspired me to attain my highest level of educational achievement. I dedicate this study to my parents, Gary and Dewonda Waller. I am forever indebted to them for their continued investment in my professional endeavors, spirituality, and constant pursuit of happiness.

I also dedicate this study to Malala Yousafzai, a student who served as an education and women's rights activist in Pakistan. In 2012, members of the Taliban shot Malala in the head and neck for speaking out against their attempts to ban girls from attending school in her town. Malala risked her life to speak out against the injustice of the Taliban. Malala is a young humanitarian, whose story reminds me that many people around the world do not have the right to obtain an education. Malala inspires me not only to appreciate education, but also to continue to use my research to improve and enrich the quality of life for others.

## Acknowledgments

This educational journey has introduced me to another level of intellectual fulfillment. I want to acknowledge God for blessing me with the will and determination necessary to pursue and earn a doctorate. I express gratitude to my parents and my grandparents for their unconditional love and encouragement. I thank my committee members for their guidance, time, and recommendations. To the participants of my interview process, a warm thank you for your time and assistance. I also thank the Walden University academic instructors and fellow scholars for sharing their knowledge and experiences.

## Table of Contents

Section 1: Foundation of the Study.....	1
Background of the Problem .....	1
Problem Statement .....	2
Purpose Statement.....	2
Nature of the Study .....	3
Research Question .....	5
Interview Questions .....	5
Conceptual Framework.....	6
Definition of Terms.....	7
Assumptions, Limitations, and Delimitations.....	8
Assumptions.....	8
Limitations .....	8
Delimitations.....	9
Significance of the Study .....	9
Contribution to Business Practice.....	10
Implications for Social Change.....	10
A Review of the Professional and Academic Literature.....	11
Entrepreneurship.....	12
Mobile Applications.....	13
Mobile Games.....	20
Marketing Strategies .....	22

Organizational Structure .....	25
Financing.....	28
Start-Up Business Opportunities and Challenges .....	30
Entrepreneurial Attributes.....	35
Transition and Summary.....	41
Section 2: The Project.....	42
Purpose Statement.....	42
Role of the Researcher .....	43
Participants.....	44
Research Method and Design .....	46
Research Design.....	48
Population and Sampling .....	50
Ethical Research.....	52
Data Collection Instruments .....	53
Data Collection Technique .....	55
Data Organization Technique .....	56
Data Analysis .....	57
Reliability and Validity.....	59
Reliability.....	59
Validity .....	60
Transition and Summary.....	62
Section 3: Application to Professional Practice and Implications for Change .....	63

Purpose Statement.....	63
Overview of Study .....	64
Presentation of the Findings.....	64
Research Themes .....	66
Applications to Professional Practice .....	78
Implications for Social Change.....	80
Recommendations for Action .....	81
Recommendations for Further Study .....	82
Reflections .....	83
Summary and Study Conclusions .....	84
References.....	87
Appendix A: Waller Study Consent Form.....	128
Appendix B: Waller Study Pilot Consent Form .....	131
Appendix C: Waller Study Introduction Letter .....	134
Appendix D: Waller Study Interview Protocol.....	135
Appendix E: Waller: Mobile Marketing Interview Questions.....	136
Appendix F: Talaya Waller National Institutes of Health Certification.....	137

## Section 1: Foundation of the Study

### **Background of the Problem**

Over the past 20 years, researchers have increasingly studied entrepreneurial business efforts (Cumming & Johan, 2013; de Jong, 2013; Judd & McNeil, 2012). Entrepreneurs are vital to the development of small businesses. The U.S. Small Business Administration Office of Advocacy (U.S. Small Business Administration [SBA], 2012) professionals defined businesses that employ fewer than 500 employees as small businesses. According to the U.S. Department of Labor (2012), start-up businesses had, on average, 4.7 employees per firm in 2011. Although most start-ups are small businesses, they contribute a number of jobs to the U.S. economy. In 2010, 394,000 start-up businesses produced 2.3 million new jobs (U.S. Census Bureau, 2012). These findings serve as evidence that small businesses are vital to the U.S. economy.

The technology industry has been leading the U.S. economy in job creation, business development, and innovation for more than 20 years (Coleman & Robb, 2012). Technology business owners consider innovation as a vital asset for the survival and advancement of businesses (de Jong, 2013). The technology industry has evolved into one of the strongest engines driving global economic growth (Groves, Vance, & Choi, 2011; Yong et al., 2012).

In this study, I sought to fill a gap in knowledge by providing mobile game application entrepreneurs, stakeholders, and researchers with more information on marketing mobile applications. Whether a new mobile application will develop into a successful product or service is always uncertain (Wang, Wuebker, Han, & Ensley,

2012). The mobile game application entrepreneurs who participated in this study provided insight into the strategies they used to market their mobile applications successfully.

### **Problem Statement**

Software technology businesses make significant contributions to the U.S. economy (Coleman & Robb, 2012; Yong et al., 2012). In the past 5 years, mobile application development has prompted the largest group of software entrepreneurs ever to enter the technology industry (Bresnahan et al., 2013). Two years ago, Apple, Inc. (2013) reported more than 50 billion downloads in its App Store of an estimated 900,000 different types of mobile apps. Only the top 20 mobile applications account for approximately 80% of this demand (Bresnahan et al., 2013). The general business problem motivating this study was that some entrepreneurs who start mobile application development businesses often fail to market their mobile applications successfully. The specific business problem was that some entrepreneurs who own mobile game application development businesses lack strategies to market their mobile applications successfully.

### **Purpose Statement**

The purpose of this qualitative phenomenological study was to explore the strategies mobile game entrepreneurs use to market their mobile applications successfully. This research study contains data gathered from profitable mobile game application development entrepreneurs who work in northern California. Northern

California has the largest number of technology companies in the world (Gill & Larson, 2014).

The population for this study was entrepreneurs who have started profitable mobile game application development businesses. Game applications are the largest and most lucrative application category (Hyung-Min, 2013). Despite the growth of the mobile application industry, it is still unclear how additional mobile application entrepreneurs can create economic growth (Bresnahan et al., 2013). Researchers such as Bacq and Janssen (2011) have explored entrepreneurship, but only a few researchers (Gartner & Shaver, 2012) have compared the performances of entrepreneurs who succeed and those who fail. The knowledge yielded by this study may lead to social change by helping to create jobs in this competitive field, thus reducing unemployment. Gaining a deeper understanding of the strategies used by successful mobile application entrepreneurs may benefit entrepreneurs, investors, and policy makers during their business protocols processes (Choudrie & Culkin, 2013).

### **Nature of the Study**

Researchers use qualitative methods to explore issues from people's lived experiences and perspectives (Boet, Sharma, Goldman, & Reeves, 2012; Trotter, 2012). Because qualitative researchers ask open-ended questions (Denzin & Lincoln, 2011; Trotter, 2012), they provide participants with the opportunity to explore and fully describe a phenomenon, which enables qualitative researchers to gather complex textual descriptions (Iphofen, 2011; McDermott, Kidney & Flood, 2011). Quantitative researchers, on the other hand, gather data using numbers to test a hypothesis (Belk,

2013; Plonsky & Gass, 2011). Because I wanted to gather detailed information about the opinions, lived experiences, and marketing strategies of entrepreneurs who have successful mobile game application businesses, I deemed qualitative research the appropriate choice for this research study. I decided not to use a mixed method design because (Bak, 2011) noted that the mixed method designs require an extended process of collecting, interpreting, and analyzing data in a research study. Because I wanted to explore entrepreneurial business strategies and to develop themes based on the lived experiences of participants from multiple groups, I decided to use a phenomenological research design. Phenomenological researchers explore the significance of the research findings, classify similar data, and develop conclusions, where researchers seek to understand life experiences (Finlay, 2012).

I also considered using the grounded theory my research study design. Grounded theory includes analyzing, gathering, and using several data collection techniques over an extended period to develop a new theory (Hutchison, Johnston, & Breckon, 2010). Because my purpose was to explore how entrepreneurs market their mobile game applications rather than develop a new theory, I opted against a grounded theory design, which would involve analyzing, gathering, and using several data collection techniques over an extended period to theorize a social phenomenon.

Yagi and Kleinberg (2011) noted that the ethnographic design is suitable for researchers studying the cultures of specific groups. Ethnography researchers also examine the shared patterns of beliefs and language within a cultural phenomenon (Petty et al., 2012), which was not the intent of this research study. Researchers use a case

study design when the purpose is to understand a particular event of a single unit or multiple cases (Petty et al., 2012; Wahyuni, 2012). Similarly, the case study design involves the study of unique or longitudinal cases for a defined period (Leedy & Ormrod, 2013). Because my intent was not to focus on a particular event or multiple cases, I decided not to use a case study design for this research study.

#### Research Question

The research question for this study was the following: What are the strategies that entrepreneurs use to market their mobile game applications successfully?

#### Interview Questions

1. What are some marketing challenges that you experienced when launching your mobile application?
2. How do you market your mobile game application business?
3. How have social networks influenced how you market your mobile game application start-up?
4. How have financing opportunities, or the lack of financing opportunities, affected how you market your mobile game application business?
5. What marketing approaches have been the most successful for your mobile game application start-up?
6. How do you determine the success of your marketing strategy?
7. What other information would you like to share about your mobile game application marketing strategies that may be helpful to other entrepreneurs?

## Conceptual Framework

The key concepts that I used for this phenomenological study were innovation and entrepreneurship. Schumpeter (1949) presented five stages of economic development: (a) introducing a new consumer product or service, (b) introducing a new product that have not been tested by the technology industry, (c) opening a new market that no one else have previously opened, (d) procuring a new source of supply, and (e) creating a new organization. In theorizing economic development and the new value creation of technological innovation, Schumpeter (1942) acknowledged numerous sources of innovation, such as a new businesses and inventions, the establishment of new markets, the sourcing of supplies, and the reorganization of industries. According to Schumpeter (1942), technological innovation is a source of value creation that provides new services and products that lead to economic development. Similarly, the development of new products allows entrepreneurs to adapt to uncertain environments and remain competitive (Schumpeter, 1983).

Schumpeter's (1983) theorizing of economic development and technological innovation can serve as guidelines to understanding the strategies that entrepreneurs use to market their mobile applications. Galindo and Mendez-Picazo (2013) used Schumpeter's concepts to analyze the relationship between innovation and economic growth and found that innovation plays a vital role in economic growth. Similarly, Bahmani, Galindo, and Mendez (2012) found that entrepreneurship has a positive effect on economic growth. Galindo and Mendez-Picazo (2012) stated that entrepreneurs serve as essential vehicles to introduce new technology that increases profits.

## Definition of Terms

The following keywords and terms appear throughout this research study. My goal is to clarify definitions so that readers of this study understand the intended meaning of technical terms and jargon.

*Business failure:* The sale or closing of a business because of bankruptcy or dissolution, or because the business did not meet the entrepreneur's anticipated expectations (Ucbasaran, Shepherd, Lockett, & Lyon, 2010).

*Business success:* A situation that occurs when a business owner produces a net profit for the previous 3 years that is equal to or greater than the average profit for a particular industry (Lussier & Halabi, 2010).

*Entrepreneur:* A person who starts, organizes, and manages a business for profit (U.S. Small Business Administration, 2013).

*Entrepreneurship:* The process of creating a new venture by dedicating the necessary time and effort, obtaining financial support, personal risks, and receiving financial and personal independence (Zahra & Wright, 2011).

*Mobile applications:* Software programs that run on mobile devices such as smartphones and tablets and connect to cell phone networks (Bresnahan, Davis, & Yin, 2013; Serrano, Hernantes, & Gallardo, 2013).

*Mobile game applications:* Video games that consumers use to play on a smartphone, mobile phone, or handheld computer (Ting-Peng & Yi-Hsuan, 2011).

*Small business:* An independent business with 0-1,500 employees (0-500 in the manufacturing industry; Small Business Administration, 2012).

*Start-up*: A new business that is typically technology-oriented and has high growth potential and unique struggles (Small Business Administration, 2013).

*Sustainability entrepreneurship*: The ability to sustain an innovative business that provides a benefit or service intended to address the unmet demands of a larger group of society or stakeholders (Schaltegger & Wagner, 2011).

*Technology entrepreneurship*: An innovative process whereby entrepreneurs turn potentially viable technological opportunities into successful businesses (Petti & Zhang, 2013).

### **Assumptions, Limitations, and Delimitations**

A phenomenological researcher's goal is to explore and capture the participants' experiences from their point of view (Marshall & Rossman, 2011). The quality and usefulness of my research findings hinged on my participants being truthful. It was also essential that participants provided detailed descriptions of their work experiences.

#### **Assumptions**

Assumptions are thoughts that researchers accept as true prior to obtaining the actual evidence (Leedy & Ormrod, 2013). In carrying out this qualitative phenomenological study, I made two assumptions: entrepreneurs of mobile game applications businesses share similar marketing experiences for business, and the entrepreneurs would respond honestly to the interview questions.

#### **Limitations**

Limitations are circumstances that may affect the research method and analysis that researchers are unable to control (Leedy & Ormrod, 2013). During interviews,

participants may provide socially desirable responses instead of honest ones that they perceive as socially undesirable. Participants may affect the veracity of study findings if they are unable to remember the business strategies that they used and honestly explain their processes. I required participants to consent orally to the recorded interviews; my doing so may have caused some participants to withhold information for privacy reasons.

### **Delimitations**

Delimitations denote the boundaries that researchers set for their studies (Leedy & Ormrod, 2013). Because I sought to explore the strategies that entrepreneurs use to market their mobile application development business, I selected participants who worked as mobile game application entrepreneurs. I further restricted my selection of participants to those who lived in northern California. Participation in the study was small due to the competitive nature of the mobile application industry.

### **Significance of the Study**

My purpose in carrying out this qualitative phenomenological study was to explore the strategies that entrepreneurs use to market their mobile game application development businesses. My research findings may provide helpful guidance to entrepreneurs who own mobile game application businesses. My findings may also help to fill some of the existing gaps in the literature about marketing mobile game applications. Entrepreneurs may find value from the results of this study during the development of their business practices. I hope that my research study yields knowledge that might also have a positive influence on how other entrepreneurs successfully market

their mobile game applications. The increase of small businesses could have significant implications for increased jobs and decreased unemployment rates in the U.S.

### **Contribution to Business Practice**

The benefit of this research is that it may reduce the number of costly mistakes that some entrepreneurs make during the first few years of their mobile game application startups. My study may also provide information for mobile game application entrepreneurs on how they might sustain their businesses and become profitable in the technology industry. Similarly, Ayala and Garcia (2010) noted the importance of sustaining businesses in the technology industry. Findings may help entrepreneurs develop a better understanding of why some new small businesses achieve favorable outcomes. Findings may also provide useful insight about marketing to the mobile application business industry (Ayala & Garcia, 2010; El Harbi, Grolleau, & Bekir, 2011). I hope to reduce a gap in the entrepreneurship literature regarding how entrepreneurs of successful mobile applications make critical business decisions.

### **Implications for Social Change**

Entrepreneurs with struggling mobile game application start-ups may improve their business strategies by learning about entrepreneurs who have successfully started such ventures. As previously noted, small businesses, including start-up companies such as mobile game application businesses, represent a significant sector of the U.S. economy. According to the SBA (2012), small businesses make up 99.7 % of employer firms overall and 37% of high-tech firms in the United States. Small business owners drive innovative job development in the United States (Cole, 2013; Neumark, Wall, &

Junfu, 2011). Increasing the number of successful mobile game application businesses may also help to reduce unemployment. The new information gathered from these entrepreneurs may also increase new products and services in communities, which may positively affect the U.S. economy. Increasing the number of successful mobile application entrepreneurs may provide an increase demand for similar technology businesses (Palo & Tähtinen, 2013). Governmental and policy makers may also use the findings of this study to develop guidelines to assist small business owners of innovative new technology (Choudrie & Culkin, 2013).

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

In researching entrepreneurial challenges and successes with mobile application start-ups, I searched research databases at academic libraries to find credible scholarly books, websites, peer-reviewed journals, government publications, and other literature. I searched ABI/INFORM Complete, Business Source Complete, Emerald Management Journals, Google Scholar, and ProQuest Central databases. I used the following keywords: *entrepreneurs, entrepreneurship, financing, innovation, marketing, mobile applications, and mobile game applications*. I cited 70 peer-reviewed sources in the literature review. The research included 301 references, with 266 of these dated from 2011 to 2015. I divided the literature review into seven main subject categories: mobile applications, mobile games, marketing strategies, organizational structure, financing, start-up business opportunities and challenges, and entrepreneurial attributes. Databases used in locating the peer-reviewed references included (a) ABI/INFORM Complete, (b) Business Source Complete, (c) Emerald Management Journals, (d) Google Scholar, and

(e) ProQuest Central. Eighty-seven percent of the references were from peer-reviewed sources, and were published within five years of the completion of the study.

### **Entrepreneurship**

Entrepreneurship refers to finding and taking advantage of profitable opportunities (Maceli, 2011). Venkataraman (1997) defined the field of entrepreneurship as the scholarly evaluation of how, by whom, and with what effects opportunities for entrepreneurs generate future products. Many researchers have studied entrepreneurial success and failure (see Cumming & Johan, 2013; Katre & Salipante, 2012; Powell & Eddleston, 2013; Siegel & Wessner, 2012). Other researchers, such as Carsrud and Brännback (2011), reviewed entrepreneurial behaviors. The findings from these studies noted that the entrepreneurial process needs further review.

Entrepreneurs who have strong consumer relationships may have an increased probability of business success. Entrepreneurs and the public are equally interested in entrepreneurship sustainability and business success (Ayala & Garcia, 2010, Mohamad, & Hasan, 2011, Tahir, Marom, & Lussier, 2014). Entrepreneurs who can achieve legitimacy and distinctiveness have a greater chance of success (Navis & Glynn, 2011).

Technology start-up businesses are essential to the high-tech environment. Hunter (2012) noted that, although entrepreneurship research tends to focus on technology start-ups, technology start-ups do not represent the majority of business start-ups. Most new technology start-up businesses develop from existing technology (Hunter, 2012). Yet, entrepreneurs of technology must emphasize the innovative effects of their products if they are to be competitive in the existing high-tech environment (Ritchie,

2011). Because start-up organizations are key forces in increasing economic growth (Abou-Moghli & Al-Kasasbeh, 2012; Hormiga, Batista-Canino, & Sánchez-Medina, 2011), researchers have studied entrepreneurship to discover the variables that affect the success of such organizations (Hormiga et al., 2011; Semrau & Werner, 2012).

It is vital that entrepreneurs develop technologies to aid in consumer's supply and demand. Other researchers (Cortimiglia, Ghezzi, & Renga, 2011) have examined entrepreneurs who have developed technologies to meet the needs of mobile users who are increasingly downloading mobile applications. One reason that mobile application use is increasing is that consumers can use mobile apps for almost any purpose (Yang, 2013). It is essential that mobile application entrepreneurs understand their mobile application users to increase the sales of their mobile applications (Zamfiroiu, 2012).

### **Mobile Applications**

Mobile applications are essential for many consumers who use mobile phones. Mobile applications are software programs that run on mobile devices, such as smartphones and tablet computers that connect to cellular networks (Bresnahan, Davis, & Yin, 2013; Lin, Fang, & Hsu, 2014). Similarly, Yan et al. (2012) defined mobile applications as software packages that users install and use in mobile devices.

There are many factors to consider prior to developing mobile applications. Charland and Leroux (2011) found that performance and security are vital factors to consider when developing mobile applications for consumers. Although consumers who use mobile devices have some privacy vulnerabilities, mobile applications are located on

servers that protect them and may help to prevent unsolicited information sharing (Savage, 2013).

Many consumers find it difficult to maneuver among the different mobile application marketplaces. The increase in mobile application services has resulted in a consumer sales decrease of mobile applications (Jurisic & Azevedo, 2011). Thousands of owners of small mobile application start-ups use new online application stores owned by Apple, Google, and other communications and software mega-corporations (Anthes, 2011). Google, Android, and Apple are the three leading mobile operating systems in the mobile application marketplace (Maceli, 2011). Some mobile application stores and businesses are profiting at an exponential rate (Anthes, 2011). The growing phenomenon of mobile applications is one of the reasons that business owners are investing in developing applications for markets such as the Apple App Store (Melnik, 2012).

Mobile technology is essential to the technology industry. Jarvenpaa and Lang (2005) defined *mobile technology* as hand-held information technology, such as objects that include devices or hardware, interface and applications or software, and network devices that enable users to communicate. Business owners in the mobile technology industry have combined existing information technologies with innovations and used the positive responses to improve their mobile devices (Bresnahan, Davis, & Yin, 2013).

The mobile application industry is increasing, and consumers are increasing their use of mobile technology (Nicolaou, 2013). Experts assert that improvements in mobile devices' communication capabilities have been one of the primary reasons for the increase in mobile applications (Jabeur, Zeadally, & Sayed, 2013). Another reason for

the growth of mobile applications is the widespread growth of information networks and surges in mobile Internet usage (Wei-Han Tan, Keng-Boon, Jia-Jia, & Phusavat, 2012). Similarly, Kourouthanassis and Giaglis (2012) suggested that technological advances in enhancing consumers' abilities to enjoy Internet access and mobile applications through their mobile devices. The increasing use of the Internet by consumers using mobile devices may also account for the increase in the number of consumer mobile game collaborative applications (König, Gäbler, Klauck, Pink, & Sprejz, 2013).

Mobile applications are in demand among users who enjoy the ability to communicate anytime and anywhere, without having to use a desktop computer (Jabeur, Zeadally, & Sayed, 2013). Pavaloiaia (2013) observed that increased Internet availability and the use of business-related applications have contributed to the increase of mobile applications usage. The quality of mobile applications may determine their perceived reputation and consumer ratings (Marchank & Hennig-Thurau, 2013; Müller, Kijl, & Martens, 2011). However, Zhou (2013) contended that consumers have not given high approval ratings to mobile games and their customer satisfaction rate may decrease.

An array of mobile applications is available, which enable users to access social networking sites, games, news, and maps and conduct complex business transactions (Xiao, Xiadong, Wei, & Xingming, 2013). According to Xiao et al. (2013), U.S. users purchase mobile apps for an array of functions including staying informed about the weather, stocks, and news, playing games, and social networking. Zamfiroiu (2012) found that testing and verification for mobile applications are more challenging than traditional applications. Unhelkar and Murugesan (2010) categorized mobile applications

into five groups: mobile information, mobile transaction, mobile broadcast, mobile collaboration, and mobile operation. Mobile application services function as navigation, emergency, entertainment, information, tracking, and billing (Litvin, Abrantes, & Brown, 2013; Petrova & Wang 2011). Mobile applications can offer sensitive business services such as financial, vacation, or health services that can monitor the user's location and usage (Unhelkar & Murugesan, 2010).

Many mobile applications are free to consumers. Some critics (see Castelluccio, 2013) have praised applications that do not require end-user license agreements and which are free to consumers. Mobile app owners should consider the implications that the determination to make their mobile application free or not will affect their app's survival rate (Jung, Baek, & Lee, 2012). The free and paid mobile application business markets are different, so it is vital that businesses develop strategies that are appropriate for each application market (Jung et al., 2012). Customer ratings also affect the survival of apps, which makes the ranking methods used by the Apple Store competitive (Jung et al., 2012). Apple shares approximately 70% of an application's revenue with the app developer; this arrangement has attracted many new app entrepreneurs to develop apps (Jung et al., 2012).

Weber and Horn (2012) noted that Apple was the first technology company to report significant market share in smartphones and tablets. Apple executives credit the company's revenue-sharing methods with playing a role in the increase of business in the Apple Store (Jung et al., 2012). Bergvall-Kåreborn and Howcroft (2011) found that mobile application download revenue ranges from \$50 for six applications to \$150,000

for one application. The distributions of mobile applications may not be an issue for some business owners, but users may have difficulties finding them in other places outside the app store (Serrano, Hernantes, & Gallardo, 2013).

Because of the increase in customer usage of smartphones, more entrepreneurs have opportunities to create mobile application businesses (Maceli, 2011). Scholars estimated the download of approximately 185 billion apps by the end of 2014 (Xiao et al., 2013). Harbour (2011) measured satisfactory performance as the three “Ds”: design, data, and display. In previous years, software and mobile businesses actively invested time and money to ensure the expansion of new software (Maceli, 2011). Performance is the primary concern for application developers because if the application software requires a significant amount of data processing time, it could affect the application performance (Serrano, Hernantes, & Gallardo, 2013).

During the beginning of mobile application development, individual application entrepreneurs had few opportunities to take advantage of the application development market (Maceli, 2011). However, the mobile application development market in the 21st century is more accessible to persons who use the application marketplace (Maceli, 2011). The mobile software industry framework has improved, and it is now possible individuals without special training to take part in the software development process (Voas, Michael, & van Genuchten, 2012).

A variety of revenue models exists for mobile application start-ups to obtain funds (Anthes, 2011). Crowley, Michiels, and Joosen (2012) found an increase in the use of platform markets for advertising, distribution, and payment for mobile applications. The

increase in platform markets may be due to U.S. corporations realizing the profit potential for mobile applications through advertisements and marketing processes (Yang, 2013).

Kourouthanassis and Giaglis (2012) reported that mobile phones and tablet surpassed personal computer shipments for the first time in technology history in 2011. The emergence of mobile phones and tablets may become more global in the economic markets (Kourouthanassis & Giaglis, 2012). Mobile application stores can generate profits from applications in two ways: They can sell the application or sell the advertising for the application (Maceli, 2011). Mobile application owners can increase the visibility of their apps by marketing in an innovative manner to increase customer flow (Müller, Kijl, & Martens, 2011). Some challenges facing mobile application entrepreneurs in marketing their mobile software include price, data traffic, and competition (Dhar & Varshney, 2011).

The ability for consumers to shop from their mobile device offers them the convenience of anytime shopping (Maceli, 2011). Pavaloaia (2013) noted that mobile applications serve as a tool for many industries, including

- media industries, which are continuing to move to digital versions;
- education systems, which allow students to use mobile software applications in classrooms;
- retail applications, which may increase business options;
- travel industries, which offer mobile resources for travelers such as travel tickets and maps; and

- health care systems, which use mobile software applications to process patient charts and medical information.

Benefits of online application stores for mobile application start-up entrepreneurs include low costs for overhead, development, marketing, and distribution, and low market entry barriers (Anthes, 2011). The mobile technology industry has provided the business market with inexpensive mobile applications (Favaro & Pfleeger, 2011). The increasing number of application downloads may exert more pricing competition pressures for entrepreneurs (Erman et al., 2011). Entrepreneurs are taking advantage of the new mobile application opportunities, and they can still develop their mobile application software at a low price (Erman, Inan, Nagarajan, & Uzunalioglu, 2011). Dhar and Varshney (2011) argued that mobile application providers should consider access and purchase flexibility for consumers, so that consumers can avoid network charges.

Mobile application businesses owners tend to underprice their applications, which may result in a profit loss (Hsee & Zhang, 2010). It is essential, therefore, that mobile applications businesses set their prices higher for unique applications than they would for general applications (Hsee & Zhang, 2010). The market share rate of most application stores is 70% (developer) 30% (app store), which is higher than the 50-50 percent rate for most mobile network distribution systems (Cortimiglia, Ghezzi, & Renga, 2011). In 2010, global mobile application store revenue exceeded \$7.3 billion from consumers purchasing applications and revenue made from advertising on the applications themselves (Yang, 2013).

Mobile applications offer users various opportunities, but they may also have challenges (Bal, 2013; Unhelkar & Murugesan, 2010). It is critical for mobile applications to be flexible enough to run on a large set of mobile devices to optimize growth opportunities (Ivan, Zamfiroiu, & Palaghita, 2013). Whether or not consumers consider a mobile application to be trustworthy becomes another challenging issue that affects success (Yan et al., 2012). Some mobile applications have challenges determining the user's geographical location and other tracking issues that may affect the user's services (Unhelkar & Murugesan, 2010). Mobile application owners should develop strategies to prevent the noted challenges prior to their occurrence to increase their chances of business success.

### **Mobile Games**

Mobile games are becoming a high commodity in the U.S. During the 1980s, consumers who were early adopters used first generation (1G) mobile phone to make telephone calls (Hyung-Min, 2013), but these early adopters were unable to play games on their mobile phones. During the 1990s, customers were able to use mobile games and text with the launch of the next-generation (2G) mobile phones (Hyung-Min, 2013). Ting-Peng and Yi-Hsuan (2011) defined a mobile game as a video game that users play on a smartphone, mobile phone, or a handheld computer. Initially, the games available on 2G mobile phones were basic (e.g., Tetris; Hiorth, 2011). Nokia, a communications company, launched the first mobile game, referred to as the "Snake" in late 1998 (Rajala, Rossi, Tuunainen, & Vihinen, 2007). The number and features of mobile games increased with the introduction of third-generation (3G) mobile phones in 2000 (Hyung-

Min, 2013). Some innovative mobile game features have also caused mobile games to become prevalent among mobile phone users (Gu & Duh, 2011). The success of mobile game applications, cameras, and the Internet has increased consumer usage for various purposes (Kim, Im, & Slater, 2013; Kim, Proctor, & Salvendy, 2012).

There are many things to consider prior to designing and developing mobile game applications. Application developers and service providers should consider the needs of the users when designing mobile games (Ting-Peng & Yi-Hsuan, 2011). Mobile devices such as smartphones are still new enough for mobile application developers to implement innovative games and products without the use of large develop teams (Curran & George, 2012). Mobile applications are sophisticated and often include game engines and 3D graphics on their mobile platforms (Curran & George, 2012). However, the mobile smartphone applications are becoming more user-friendly, which allows for easier consumer use (Curran & George, 2012). Mobile application developers are creating additional virtual games that enable the user to experience their mobile application games from a virtual view (Gu & Duh, 2011; Hyung-Min, 2013).

Technology devices have grown with many platform options to include more games (Yan, Zang, & Deng, 2012), which have become the most downloaded applications on smartphones (Hyung-Min, 2013). Game applications are the most often used applications in the mobile application industry (Yin, Davis, & Muzyrya, 2014). Entrepreneurs have been investing in developing a brand for their games and engaging consumers to increase the longevity of their mobile game application business (Bergstrom, 2014). In this context, developing mobile game application products and

expanding the consumer base have become vital to business owners trying to increase revenue (Bergstrom, 2014).

Mobile device platforms can execute numerous applications (Yan, Zang, & Deng, 2012). In the technology industry, mobile software applications are increasing in popularity and creating economic opportunities for application businesses (Anthes, 2011). As a result, mobile technology entrepreneurs have entered the market, producing a variety of these applications, more commonly known as *apps* (Bresnahan et al., 2013).

### **Marketing Strategies**

Marketing is a vital component of technology-related businesses. New ventures started by entrepreneurs and their teams tend to grow by starting formalized processes such as collecting and disseminating market information to enhance their businesses (Kawakami, MacLachlan, & Stringfellow, 2012). Businesses must be aware of E-commerce and the implications that it helps secure business presence in the marketing environment (Ščeuľovs & Gaile-Sarkane, 2010). Arora and Nandkumar (2012) noted that the technological competence is a competitive marketing advantage due to the growth of corporate research and the development of technical markets.

Marketing is a vital step for mobile entrepreneurs to consider as they develop context identification (Benou, Vassilakis, & Vrechopoulos, 2012). Marketing research techniques tend to be essential for mobile business owners when analyzing consumer behavior to help determine ways to improve their mobile application efficiency (Munnukka, & Jarvi, 2011). Mobile entrepreneurs seek marketing activities such as buying and promoting mobile marketing to advance their businesses (Rudaina, 2012).

Mobile marketing offers new opportunities entrepreneurs to connect and establish relationships with their target audiences (Mojica, Adams, Nagappan, Dienst, Berger, & Hassan, 2014; Rudaina, 2012).

Ščeuļovs and Gaile-Sarkane (2010) described a marketing mix as involving (a) promotional activities, (b) advertising, (c) personal selling, (d) sales promotion, (e) sponsorship marketing, (f) internet marketing, (g) database marketing, (h) public relations, and (i) direct marketing. Including these different activities may help to ensure a wider consumer reach. However, because of the lack of funding and work experience with marketing exploration, entrepreneurs of new venture businesses tend to rely on customers to gather marketing information (Kawakami et al., 2012). In new small businesses, organized formalization is not always required at the beginning because start-ups are usually small (Kawakami et al., 2012). Entrepreneurs use the small size of their start-ups to sustain social networks, a vital marketing tool (Islam, 2011; Kawakami et al., 2012).

Social networks used by consumers are vital components to consider prior to pricing and marketing high-tech products (Munnukka & Jarvi, 2011). The marketing of mobile applications may have dual purposes. Yang (2013) noted that workers in corporate America use mobile applications to carry advertisements for their organizations or to advertise and market their own mobile application business to consumers. Mobile applications can be useful for business owners to develop their brand and increase consumer advertising (Chiem et al., 2010; Lee, Hwang, & Hyun, 2010; Okazaki & Mendez, 2013; Rudaina, 2012). The benefit of brand engagement is an increase in

consumer preference toward a particular brand (Chiem et al., 2010). Similarly, Dincer (2011) stated that mobile application marketing and advertising is a vital way to develop brand awareness, particularly for targeting different audiences. Technology, individual market characteristics, socio-culture factors, and government regulations can increase the national mobile marketing value contributions (Seal, 2010). The flexibility and increase of consumer usage of mobile devices to market and advertise have inspired the mobile application business community (Dincer, 2011).

Drucker (1985) completed studies on entrepreneurship as it related to opportunity and innovation, argued an entrepreneur's personality is not the primary business characteristic for business success. Instead, an entrepreneur's ability to create innovation and economic growth is more essential for entrepreneurial success. Drucker contended that innovations include work and identifying new opportunities, and not just an entrepreneur's human nature. Drucker found that there were seven types of innovations:

- New knowledge.
- Industry and market changes.
- Unexpected occurrences.
- Changes in perception.
- Incongruities.
- Demographic changes.
- Process needs.

## **Organizational Structure**

One component that separates entrepreneurs from other business managers is that entrepreneurs form organizations and some business managers do not create organizations (Gartner & Shaver, 2012). The entrepreneur's organizational effort has a vital impact on establishing start-up business success (Kessler, Korunka, Frank, & Luger, 2012). Scharmer and Kaeufer (2010) stated that organizations might be successful and sustainable if it uses the knowledge of accomplished organizational members to accomplish their strategic objectives.

In some instances, entrepreneurs of start-up technology businesses collaborate with an established start-up for resource marketing purposes (Reynolds & Samel, 2013). Entrepreneurs of high-tech businesses seek sponsorships that may enable them to market their product in an innovative environment (Ritchie, 2011). Organizations are human systems and entrepreneurs improve their performance by implementing positive organizational practices (Cameron, Mora, & Leutscher, 2011). Developing and using a framework to assess the performance of a business may be a vital tool for small business managers (Chalmeta, Palomero, & Matilla, 2012).

Many entrepreneurs use start-up businesses their technological ventures. The SBA (2013) described start-up businesses as businesses that are typically technology-oriented and have high growth potential and unique struggles. Many start-up entrepreneurs strive to increase profits but fail to meet the expectations of their investors (Elston & Audretsch, 2011). Hormiga et al. (2011) determined that the top three factors accounting for start-up business success or failure were the entrepreneur, the

entrepreneur's strategic plan, and the industry of the new business venture. Yallapragada and Bhuiyan (2011) argued that relatively less-experienced entrepreneurs have a lower chance of business failure. The success or failure of start-up business may vary and have many factors that may contribute to their sustainability.

Katre and Salipante (2012) found that planning is beneficial to small business success and other factors, such as the tenure of the business and the organizational environment, which can affect the business. There are many reasons entrepreneurs are willing to experience risk in their work environment. Culture influences could have an impact on the amount of proactive risk that entrepreneurs are willing to take (Hansen, Deitz, Tokman, Marino, & Weaver, 2011). Entrepreneurship requires an environment where entrepreneurs can be proactively innovative while taking risks when developing policies and procedures (Ming-Chu, 2013). Renko (2013) argued that although many entrepreneurs of high-tech businesses may be more innovative, they tend to have a greater chance of failure than other businesses. Dunham (2010) stated that viewing entrepreneurship from a single financial dimension to one that incorporates ethics, and human purpose might lead to a more sophisticated view of entrepreneur decision-making. Despite the acknowledged importance of entrepreneurship in our economic growth, entrepreneur success factors are challenging to define (Bianchi & Biffignandi, 2012; Chu, Kara, Zhu, & Gok, 2011).

In research on innovative technology ventures, BarNir (2012) found that the role of motives and human capital in start-up decision-making highlighted potential sources for competitive advantages for management. Women entrepreneurs who gain

educational knowledge tend to have better networking and human capital growth skills, which increase their chance of success (Bates, 2013; Yao & Shen, 2011). The cost to employ people to work for small businesses is difficult for small business owners to finance (Chittithaworn, Islam, Keawchana, & Muhd Yusuf, 2011). Human capital is a multilevel business phenomenon (Coff & Kryscynski, 2011; Unger, Rauch, Frese, & Rosenbusch, 2011). A study of 70 independent small businesses found a slight relationship between human capital and business success (Navis & Glynn, 2011). Similarly, Chittithaworn et al. (2011) found that human capital was the most challenging factor for small and medium business in Thailand.

Business team size is an essential factor in success (Brannon, 2013; del-Palacio, 2012; Marion, Dunlap, & Friar, 2012). Entrepreneurial researchers found that firm size might affect a new start-up's performance (Marion, Dunlap, & Friar, 2012). The size and capability of a firm may also contribute to promoting high-risk business investments (del-Palacio, 2012).

Gwebu, Wang, and Wang (2010) found that because of the popularity of outsourcing software development overseas, mobile application start-up teams have to decide whether they will outsource the development of their product. Mathewa and Chenb (2013) also found that offshoring software applications differ from other offshore information technologies because the applications' distinctive features may increase performance risk factors. Gwebu, Wang, and Wang (2010) noted that there are many benefits of offshoring software applications overseas, such as increased human capital and cost savings. However, offshoring software abroad can cause businesses to suffer

losses and have a variety of risks (Gonzalez, Llopis, & Gasco, 2013; Mathewa & Chenb, 2013). Determining the requirements of software applications offshored overseas is difficult, because of uncertainties related to projecting development timelines, which makes managing the service provider more problematic for the business owner (Mathewa & Chenb, 2013). Mobile software businesses must refine their distribution methods to ensure that they meet the customers' expectations (Anthes, 2011). The distribution of mobile software applications may be difficult for new mobile application entrepreneurs (Serrano, Hernantes, & Gallardo, 2013).

The technology industry requires software entrepreneurs to adapt to today's increasing changes, to ensure software application success (Dwivedi, Dwivedi, & Bardia, 2012; Günsela, Açıkğşzb, Tükelc, & Ögütđ, 2012). Günsela et al. (2012) stated that the software development team's independence was an important factor to ensure a start-up business team's flexibility. A software development team's flexibility may also explain the positive effects of the software advancement, functionality, and market success (Günsela et al., 2012). Small businesses have struggled to compete with large businesses (Vaaler & McNamara, 2010). However, recent researchers have found that small businesses can be competitive with large businesses because of their ability to be adaptable in today's market (Dwivedi, Dwivedi, & Bardia, 2012).

### **Financing**

One of the most vital obstacles to small business operations and development is the issue of funding. Angela (2011) contended that the struggles for entrepreneurs to obtain financing relate to the entrepreneur's abilities, their environment, and the existing

regulatory processes of the geographical location of their businesses. A significant contribution to the financial issues of some new entrepreneurial small businesses is a lack of funding (Bianchi, 2012; Fatoki, & Asah, 2011; Gronum, Verrynne, & Kastle, 2012). There are a large number of investors available in the U.S.; however, some small businesses have a difficult time obtaining financial assistance to sustain their businesses (Elston & Audretsch, 2011). There are many reasons why small businesses fail. Some entrepreneurs of small businesses fail because of a lack of business credit and collateral (Bianchi, 2012; Jasra, Khan, Hunjra, Rehman, & Azam, 2011).

Financial funding institutions cannot forecast whether an entrepreneur will be able to survive during economic struggles, but they do allow entrepreneurs the opportunity to recover (Lee & Yamakawa, 2012). Entrepreneurs of technology start-up businesses have to use their limited funding wisely to ensure that they can build their teams, and market their business (Reynolds & Samel, 2013). In some instances, entrepreneurs of technology start-up businesses collaborate with other established entrepreneurs for resource marketing purposes (Reynolds & Samel, 2013). According to Tundui and Tundui (2012), business survival is evident when a business that is presently, or was formerly, approaching failure, continues to remain in business.

Many entrepreneurs of new small businesses have limited funding and available resources (Kraus et al., 2010). An entrepreneur's ability to obtain financing is a vital component of their business success (Freel, Carter, Tagg, & Mason, 2012). Bianchi and Biffignandi (2012) found that essential factors such education, previous work experience, and the personal salary could be used to measure entrepreneur's success. Entrepreneurs

of small businesses may be successfully managing their businesses, and deserve the same consideration to prevent bias (Bianchi & Biffignandi, 2012). Bankruptcy and financial stress may occur when a business owner can no longer sustain or pay their business financial obligations (Divsalar, Firouzabadi, Sadeghi, Behrooz, & Alavi, 2011).

Goa and Shi (2010) found that among 92 technology-based firms, there was no substantial difference in the financial management practices of the unsuccessful and successful businesses, but there were differences in the technology-based firm's business quality and characteristics. Yallapragada and Bhuiyan (2011) found that a lack of financial management practices or investments might be a factor in business failure. Rodgers (2010) explored the small and medium business rationale and found that entrepreneurs seek other goals along with financial ones to increase their sustainability. Entrepreneurs of technology start-up businesses have to use their limited funding wisely to ensure that they can build their teams, market their business (Reynolds & Samel, 2013).

### **Start-Up Business Opportunities and Challenges**

There are many opportunities and challenges to owning a mobile application start-up business. Consumers download mobile games more than they do any other mobile applications (Hyung-Min, 2013). Consequently, mobile games are one of the largest mobile application successes where consumers agree to pay to use the product (Penttinen, Rossi, & Virpi, 2010). Mobile phone users have access to download multiple applications to play games developed by numerous application developers (Wilson, Chesher, Hjorth, & Richardson, 2011). Moreover, the market for mobile games is

increasing due to the growing amount of telephones with mobile game application capabilities (Penttinen et al., 2010). Mobile game entrepreneurs use the smartphone market as a means to make their mobile game applications more interesting to consumers (Penttinen et al., 2010).

The U.S. Small Business Administration (2012) reported that successful small businesses create a profit. However, Kiviluoto (2013) found that sales growth alone does not show a measure of business success. The number of consumers that use a mobile game application is vital information for measuring the success of an application (Müller, Kijl, & Martens, 2011). Rajput (2011) found that it was vital for business owners to understand their target customers to increase their chances of business success. Although there are several new mobile applications becoming available to consumers on many global application platforms, the most popular mobile games tend to remain consistently at the top downloaded (Hyung-Min, 2013). Due to the increasing growth of smartphones and mobile applications business owners continues to attract consumers by using marketing communication platforms (Eunice, Jih-Syuan, Yongjun, & Morrison, 2012).

Marvel (2013) reasoned that entrepreneurs tend to either create opportunities or seek to discover them. The organizational likenesses of technology markets could be one of the reasons why some entrepreneurial opportunities are hard to identify (Grégoire & Shepherd, 2012). An entrepreneur's pursuit of opportunity is vital to their success, and their success is dependent upon their surrounding opportunities (Renko, Shrader, & Simon, 2012).

The most significant challenge for a start-up company is survival (Nambisan & Baron, 2013). The high failure rate of entrepreneurship with start-ups reveals that many obstacles prevent the possibility of success; however, even entrepreneurship still has a significant influence on the U.S. economy (Arthur & Hisrich, 2011). Headd (2003) found that over 70% of business founders thought their start-up efforts were unsuccessful and closed operations in the first year of business. In addition, researchers expect for the number of entrepreneurs exiting their firms in the U.S. to increase (DeTienne & Cardon, 2012).

Entrepreneurs exit their start-ups due to a variety of pressures they experience while in the business marketplace (Campbell, Heriot, Juaregui, & Mitchell, 2012; Wennberg & DeTienne, 2014). There are numerous distribution channels for mobile game application entrepreneurs, which may increase competition among other entrepreneurs (Rajala et al., 2007). Young entrepreneurs tend to exit businesses because of a relative lack of experience (Stam, Thurik, & van der Zwan, 2010).

The topic of small businesses survival offers measures such as the number of employees and business profits to determine the reasons for success or failure (Cader & Leatherman, 2011). Entrepreneurs of small businesses must have a system in place that can assist them in determining possible risky business operation issues (Borrajo, Baruque, Corchado, Bajo, & Corchado, 2011). Start-up failure can be due to internal mismanagement, which may have caused profit losses (Bratland, 2011) as along with a lack of experience, knowledge, and human resource management (Arasti, Zandi, & Talebi, 2012).

Mobile game application entrepreneurs may experience challenges when developing and deploying new mobile game applications due to the slow deployment of the enhanced mobile telephone network (Rajala et al., 2007). Entrepreneurs may also be unsuccessful in trying to introduce a new product for which no preexisting demand exists (Bratland, 2011). One typical mobile game application obstacle found among researchers is the lack of game familiarity among mobile game consumers (Li, Jiang, Tan, & Wei, 2014). App users reported being disappointed about not understanding their mobile game and the lack of mobile game engagement directly related to the consumer's familiarity with their mobile game (Li et al., 2014).

From a managerial viewpoint, mobile game content quality, consumers' perceived ease of use, attractiveness, and rich mobile game content affect business success and failure (Mojica et al., 2014). The perceived ease of use among consumers of technology is also a component of the technology acceptance model (TAM), which reflects the difficulty of using technology (Mojica et al., 2014). Li et al. (2014) found that the small screens of mobile telephones caused eyestrain, which could affect consumers' operational efforts. Mobile game application entrepreneurs need to consider their consumer's user requirements and employ measures to attract usage of their mobile games, to decrease the chance of failure (Mojica et al., 2014).

DeTienne and Cardon (2012) found that researchers gathered a majority of what they know about entrepreneurial failure or exits from unreliable research studies. There are many reasons why entrepreneurs fail to sustain their businesses. A business manager's ability to develop tasks to respond to the technology industry and competitive

environment is vital to ensure their business survival (Dos Santos, Patel, & D'Souza, 2011). The start-up failure rate can be due to poor sales, competition, lack of capital, or lack of managerial ability (Arthur & Hisrich, 2011; Casey, 2012).

Although some entrepreneurs fail and exit from entrepreneurship, there are many reasons that contribute to their departure, such as financial and business performance practices (DeTienne & Cardon, 2012). Cardon, Stevens, and Potter, (2011) completed a study on entrepreneurial failures from 1999 to 2001 and found that one of the reasons for start-up failures may be a variation in the geographical area. Stam et al. (2010) suggested entrepreneurs inside city limits are more likely to fail than businesses located outside the city. Similarly, Christie and Sjqvist (2012) found that businesses located inside the city are at a greater risk of failure. However, businesses located in counties that have a high level of profitable growth have a higher survival rate (Christie & Sjqvist, 2012).

Storey (2011) found that 85% of the outcome of a new business is a result of chance and only 15% by the business owner or government policies. Mason and Brown (2013) stated that policy makers should use entrepreneurship research to consider the specificities of an entrepreneur's environment when developing policy interventions for small businesses. Governments may be able to assist start-ups by creating new systems involving ways to help new businesses survive in multiple jurisdictions that may contribute to improving economic conditions (Christie & Sjqvist, 2012). Grinvald (2012) stated that the enforcement of laws and policies governing businesses might have an influence on the high failure rate among small business owners.

## **Entrepreneurial Attributes**

Kuckertz and Wagner (2010) explored issues of entrepreneurial sustainability and found that due to business markets imperfections entrepreneurial sustainability orientation ceased to exist with business experience. Business experience is an essential factor for entrepreneurs who intend to increase their market advantage among others in their industry (Thurik, & Patel, 2011). An entrepreneurial venture success or decision to continue in business may be dependent upon sustainable influences, such as values and motives, and not just for financial gain (Holland & Shepherd, 2013). Entrepreneurs who develop their business knowledge should also develop their natural and public environmental knowledge to increase their abilities to recognize sustainable opportunities (Patzelt & Shepherd, 2011).

Many variables affect entrepreneurs, such as prior experience, social skills, and the ability to fail and try again (Baron, 2012; Makhbul & Hasun, 2011; Phillip, 2011). Only a limited numbers of entrepreneur networks own or manage start-ups in rural locations, which could have an influence on their success (Scott, 2012). The ability to maintain personal involvement to obtain knowledge from diverse social contacts is a characteristic of a successful entrepreneur. Researchers found that business owners should consider utilizing the different skills from their teams to increase their level of success (Teng, Bhatia, & Anwar, 2011).

It may be vital for entrepreneurs to develop their educational skills to increase their ability to define their business and recognize other business opportunities (Bates,

2013). However, small business owners normally do not have time to attend training, and some do not have business degrees (Coetzer, Battisti, Jurado, & Massey, 2011).

Katre and Salipante (2012) revealed that entrepreneurs who use successful social practices balance the organizing behaviors of their business ventures. The use of virtual communication, delegation, and having a limited number of contacts are characteristics of struggling entrepreneurs (Katre & Salipante, 2012).

Ganotakis (2012) stated that entrepreneurs with business education tend to create successful technology businesses. Occupational background and education can have positive effects on an entrepreneur's decision to start a technology venture (BarNir, 2012). Subsequently, business experience is critical to entrepreneurial success (Kabongo & McCaskey, 2011; van Gelderen, Thurik, & Patel, 2011). Similarly, Newbert (2012) and Miller, Wesley, and Williams (2012) found that education and work experience is vital to business success. Educated individuals are likely to improve their skills to ensure their entrepreneurial thoughts of managing a successful business (Stam, Thurik, & van der Zwan, 2010). Similarly, Jardon and Martos (2012) found that organizational competencies affect strategic elements, which increase entrepreneurial business success. Stam et al. (2010) also showed that educated entrepreneurs might be able to identify entrepreneurship opportunities, which decrease the likelihood of business closure. This information shows that entrepreneurs of new software technology businesses can improve their performance by seeking additional education and managerial experience (Ganotakis, 2012). Education is a vital factor that may influence success rates for entrepreneurs who own or manage the high-technology business (Yao & Shen, 2011). High-growth trails

among young technology-based firms tend to result from how they structure their resource portfolios to meet the demands of their consumers (Clarysse, Bruneel, & Wright, 2011).

Entrepreneurs should have a high tolerance for risk and manage productivity to increase business success (Ming-Chu, 2013). To start a venture, entrepreneurs should include (a) personal planning, (b) preparation, (c) focus on the product, (d) create a business presence, (e) create organizational and financial structure, and (f) implementation (Katre & Salipante, 2012). Entrepreneurs who include financial, marketing, and human relations in their start-ups increase their business longevity and success (Chow & Dunkelberg, 2011; Jones & Rowley, 2011).

Entrepreneurs' efforts regarding business planning and having a clear assessment of the start-up possibilities has led to enhanced rates of success and new venture survival (Kessler et al., 2012). Technology executives who succeed in presenting their strategic advantage to external stakeholders tend to sustain their businesses (Lim, Stratopoulos, & Wirjanto, 2013). Similarly, experienced entrepreneurs who actively seek funding tend to have a higher probability of commercialization success (Marion et al., 2012).

The social and financial risks of entrepreneurship can be emotionally draining on entrepreneurs (Arthur & Hisrich, 2011). Small businesses just entering the market have access to only a small customer base, limited financial resources at their disposal, and an insignificant amount of market power (Kraus et al., 2010). An entrepreneur's ability to access resources, in particularly finances, is an essential component of the foundation of the business (Freel, Carter, Tagg, & Mason, 2012). Mathewa and Chenb (2013)

contended that the entrepreneurs' ability to deliver creative technology to global markets might be a business resource advantage. Similarly, Louart and Martin (2012) found that the innovation globalization process might be an effective approach to increasing the markets for small business managers. Muñoz-Bullón and Sanchez-Bueno (2011) argued against the possibility of globalization being a method for improving business performance.

Persistence can be a critical component of entrepreneurial success (Ahmad & Ramayah, 2012; Holland & Shepherd, 2013). The ability to be persistence is vital for entrepreneurs who choose to continue with a start-up business regardless of the challenges that may alter their mission (Holland & Shepherd, 2013). Some entrepreneurs may attempt to be small business leaders but fail to create or take advantage of new opportunities (Bratland, 2011). An entrepreneur's attitudes can affect his or her response to the possibility of failure, and well as the approach to business opportunities (Cotterill, 2012). Entrepreneurs who can take risks and respond to business issues in an efficient manner are more satisfied with their work performance (Cook, Pandit, & Milman, 2011). Many entrepreneurs are afraid of working at their maximum level, not only because they fear they will fail but because they may succeed (Ekore & Okekeocha, 2012).

Managerial leadership skills may be essential to develop ethics among staff who work in small businesses (Fassin, Rossem, & Buelens, 2011). Krzyżanowska and Tkaczyk (2013) found that professional experience and the existence of network market partners are two essential factors that can affect new small business owners. Similarly,

Bianchi and Biffignandi (2012) found that the education and previous high-tech work experience are constructive entrepreneur success factors.

Eesley and Roberts (2012) found that when entrepreneurs are familiar with the technology markets, their professional experience might be vital to their business success. However, if entrepreneurs are not familiar with the technology markets their talent may be more essential to their success (Eesley & Roberts, 2012). Entrepreneurs who have both skills and experience tend to rely more on their experience when managing both unfamiliar and familiar business issues (Eesley & Roberts, 2012). Business flexibility is one of the main reasons that people start small businesses (Hurst et al., 2011).

Entrepreneurs should develop a competitive advantage process to ensure that their competitive edge remains favorable and sustains for many years (Awuah & Reinert, 2012). Another essential characteristic that an entrepreneur should have is confidence (Cotterill, 2012). Entrepreneurship researchers contended that new entrepreneurs should not have premature expectations about their place in the business community (Awuah & Reinert, 2012). However, entrepreneurs should be aware that other entrepreneurs might consider them as competitors seeking to steal their market share (Awuah & Reinert, 2012).

Demographic challenges exist for entrepreneurs, as well. Bianchi and Biffignandi (2012) found that entrepreneurs of minority-owned businesses are not as profitable and do not grow as fast as businesses owned by White entrepreneurs. Pardo-del-Val (2010) examined the differences between women and men entrepreneurs using a model that characterizes a push or pull form of personal development. Norshiah and Razak (2011)

found that female entrepreneurs' business factors such as credit availability might affect their success more individual factors such as experience and education.

The push model represented achieving advancement, and the pull model represented limited entrepreneurial progress among the men and women (Pardo-del-Val, 2010). The success rate of businesses owned by entrepreneurs tends to correlate with their individual values and business intentions (Mitchelmore, & Rowley, 2013; Pardo-del-Val, 2010). Similarly, Thébaud (2010) found that women entrepreneurs tend to be stricter on their self-assessment, which could be a justification for the gender gap in entrepreneurship.

Bianchi and Biffignandi (2012) found that women and minority entrepreneurs tend to have more difficulties in starting a new business. There is a need for more research to explore the notion of how female entrepreneurs grow their businesses (Brush & Cooper, 2012; Marlow & McAdam, 2013) and if a woman's approaches to deciding to start a new business differ from those of men (Brush & Cooper, 2012). There is also limited research on how women business owners measure success (Brush & Cooper, 2012).

Hansen, Shrader, and Monllor (2011) examined entrepreneurial opportunities over a 19-year period and found fragmentations, which left them with the assumption that more entrepreneurial research may help increase business opportunities. Maw-Der (2011) noted that entrepreneurial feelings, such as happiness or fear might influence their risk perceptions when deciding on new business opportunities. Similarly, Covin and

Lumpkin's (2011) research explored the assumption that more research on entrepreneurship may be vital to corporate entrepreneurship orientation.

### **Transition and Summary**

Section 1 of the study addresses background information and the need for the study. The literature review supported the conceptual framework by providing a background of knowledge directly and indirectly related to entrepreneurship among game application developers. The literature review also served as a foundation for more research, providing an opportunity to conduct future studies.

Section 2 includes a description of plans for conducting the study, and a review of the research questions, the participant consent form, and the data analysis process.

Section 2 concludes with a brief summary of the research process. Section 3 contains the final analysis with a summary of the study and the derivative findings, conclusions, and recommendations for further research study.

## Section 2: The Project

In this section, I convey my purpose statement and role, describe my study participants, research method, and population and sampling group, and provide other relevant information about data collection. I also address my processes for assuring the reliability and validity of the study. I explain the participants' identification selection process, my ethical responsibilities, and participants' rights. Finally, the proposal ends with a transition and summary into Section 3.

### **Purpose Statement**

The purpose of this qualitative phenomenological study was to explore the strategies that mobile game entrepreneurs use to market their mobile application successfully. Twenty entrepreneurs who own mobile game application business provided data for this study. I gathered from the entrepreneurs as part of a broader effort to provide knowledge that may help struggling mobile application entrepreneurs sustain their businesses. The entrepreneurs provided data about the strategies they used to market their mobile game applications successfully. The participants for the study owned profitable mobile game application businesses in northern California.

Acquiring a more profound understanding of mobile game start-up success might provide crucial information for key stakeholders such as start-up entrepreneurs, small business investors and financiers, and government policy makers (Choudrie & Culkin, 2013). Some researchers have studied organizational entrepreneurship (see Gartner et al., 2010). However, only a few researchers, such as Bianchi and Biffignandi (2012) and Chittithaworn et al. (2011) have completed studies comparing entrepreneurial

performances and how their work performance affect their business success. My study results add to the present literature on entrepreneurship by providing marketing strategies that entrepreneurs can use to sustain their businesses.

### **Role of the Researcher**

My first role as the researcher was to identify participants for the study. I conducted a pilot study to test the interview questions and data collection techniques. After completing five pilot interviews, I coded data, identified preliminary themes, and reviewed my findings. Due to the successful pilot interviews, I did not have to revise my interview method. I then conducted interviews with 20 mobile game application entrepreneurs, using a WebEx video and audio software interview tool to record them. My use of open-ended questions allowed participants the opportunity to respond using terminology related to their lived experiences. I strove not to interject my personal interpretations into my findings. I have previous experience working as a small business entrepreneur; however, my interest in the topic did not affect my study approach or analysis of findings.

I provided each participant with a consent form, the interview questions, and responses prior to the interview. The interview protocol outlined the interview procedure. The interview protocol includes guidance for the interviewing process (Hlady-Rispal, & Jouison-Laffitte, 2014). All participants had the opportunity to respond to and obtain clarify in reference to the questions. As the researcher, I followed the Belmont Report's ethical protocols for research involving human research. The Belmont

Report is a report created by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research.

### **Participants**

Each participant for the study met the following criteria: He or she was an entrepreneur of a mobile game application and 18 years of age or older whose development business was located in northern California, and had created a profit and was currently in business. I weighed drawing my sample by completing a Google search of mobile game application entrepreneurs in northern California but decided that I would need to do more to ensure an adequate number of participants. I decided to use snowball sampling and purposive sampling methods. A snowball sampling method is a technique by which initial participants recommend someone else who has the key characteristics required by the research design (Handcock, & Gile, 2011; Marshall & Rossman, 2011; Trotter, 2012). Using a purposive sampling method also helped to ensure an adequate number of participants for studying the phenomenon (Suri, 2011). The selected participants met study criteria based on the geographic location, mobile game application experience as a profitable business entrepreneur, and availability.

The next group of participants recommended others who met the criteria until I had 20 participants for the study and demonstrated data saturation. The use of numbers replaced the participants' names, such as P1 to P20. Walden University guidelines provide information that all phenomenological doctoral studies must have 20 or more interview participants. Moreover, the interviewing process continued although I reached saturation prior to the 20<sup>th</sup> participant. This was evident by the participants' similar

responses to the interview questions. O'Reilly and Parker (2013) similarly noted that in some qualitative studies, data analysis reaches a point that of saturation when the researcher is no longer receiving any new or different information from the participants. Mason (2010) stated that, at times, one participant may provide enough information for the study, and at other occasions, more participants may be required to reach saturation. Curry et al. (2009) contended that reaching a point of saturation, where there is no new information obtained is vital, but others argued against saturation attempts because there will always be new information. The interview participation process concluded after data saturation was evident and after I obtained sufficient data to analyze and complete the research study.

Prior to contacting participants, Walden University Internal Review (IRB) Board approved the study and provided the approval number 03-04-15-0289720. It was essential to respect the privacy of the participants. The participants responded to the interview questions alone in a private room. Individual responses to the interview questions should remain confidential (Marshall & Rossman, 2011). The data will be stored for five years in two separate locations. After all participants received consent forms, they obtained information on their right to decline involvement at any time during the research process. Participants should have the right to decline participation anytime during a research study (Groenwold, der Graaf, & van Delden, 2013). I provided participants with an opportunity to review the consent form, and I explained the withdrawal process. The consent form included data protection practices and compliance

with Walden University's institutional review board (IRB) guidelines as noted in Appendix A.

### **Research Method and Design**

The research question for this study follows: What are the marketing strategies that entrepreneurs use to market their mobile game applications successfully? I explored the lived experiences of mobile game entrepreneurs in northern California to gain detailed data about their successful marketing strategies. I did so by using qualitative research methods. As Yin (2009) noted, qualitative methods are particularly useful to researchers seeking an in-depth understanding of a social phenomenon.

#### **Research Method**

The purpose of the qualitative study was to explore the marketing strategies entrepreneurs use to market their mobile game applications. One qualitative method is to interview participants and solicit responses to open-ended questions, which the researcher can later organize into themes (Qu & Dumay, 2011). Qualitative researchers seek in-depth information on a single topic (Bernard (2013; Vallack, 2010; Yin, 2009).

Quantitative researchers use statistical processes to confirm or disconfirm one or more hypotheses (Belk, 2013). They collect, convert and analyze the data statistically (Boet et al., 2012). Quantitative researchers examine the relationships and differences between variables, and they seek to answer questions by testing hypotheses by using surveys or secondary data (Belk, 2013). My research study does not include hypothesis testing or the examination of relationships between variables. I determined that a quantitative research method is not an efficient method for seeking detailed descriptions

or lived experiences of participants (Bernard, 2013). Moreover, quantitative researchers tend to reduce the lived experiences to numerical values, which may decrease the participants' ability to share detailed data. Therefore, I decided against using a quantitative method for this research study.

Mixed methods researchers combine quantitative and qualitative methodologies to examine and explore a phenomenon (Fisher & Stenner, 2011; Harrits, 2011). Similarly, Lieber and Weisner (2010) noted that mixed methods consist of qualitative and quantitative research methods that use confirmatory questions and is typically a lengthy process. Due to time constraints and the research focus, I decided against using a mixed method design.

Major and Savin-Baden (2011) noted increases in research costs have influenced researchers to make efficient use of qualitative studies. Researchers can explore experiences and perceptions of business owners by using a qualitative research method (Bernard, 2013). Similarly, the qualitative research method is explorative and provides means for researchers to analyze and understand the data supplied by the participants (Vallack, 2010). Qualitative methodology includes a focus on the participants involved in the research, which provides the participants the opportunity to have a voice in the research process (Ogden & Cornwell, 2010; Westerman & Yanchar, 2011). A qualitative research method was appropriate for this research study because using this method facilitates the exploration of detailed expressions of the participants' business experiences (Bernard, 2013). Qualitative researchers can use interviews to generate comprehensive data that explain the research study participants' experiences related to the research

questions (Petty et al., 2012). Bernard (2013) contended that interviewers use qualitative methods to solicit responses to open-ended questions and to capture detailed data. Moreover, since it is difficult to explore the essence of entrepreneurs' marketing strategies using quantitative self-reports, I deemed a qualitative research method as the best choice for this research study.

### **Research Design**

Qualitative researchers may use a number of research designs in their studies (Reiter, Stewart, & Bruce, 2011). Grounded theory, case study, ethnography, narrative, and phenomenology are some common qualitative research designs (Bansal & Corley, 2012). I chose to use a phenomenological design. Phenomenological researchers focus on capturing and reflecting the lived experiences of participants (Finlay, 2012; Moustakas, 1994; Reiter et al., 2011). My focus for this study was to gather data on the successful marketing strategies of mobile game entrepreneurs by allowing them to share their lived experiences. The use of detail data is vital in qualitative phenomenon research designs.

Researchers use a grounded theory design when they are seeking to discover theories for explaining a phenomenon through the analysis of their data (O'Reilly & Marx, 2012). The purpose of this study was not to discover theories for explaining a phenomenon; therefore, I decided against using a grounded theory approach. Petty et al. (2012) noted that ethnographic researchers study the mutual patterns of behavior, language, and beliefs within a culture. Similarly, Mortensen and Hollowell (2009) stated

that ethnographic researchers focus on a particular culture or religion. Because of my different focus, I decided against using an ethnographic design.

Researchers who intend to explore experiences and stories communicated by one or two individuals, and researchers in the psychology field, frequently use narrative research methods (Leitner & Hayes, 2011). However, the intent of this study was not to gather narrative stories from one or two participants. The purpose of this study was to collect data about the lived experiences involving marketing strategies mobile game application entrepreneurs have used to achieve business success. Therefore, I decided against using a narrative research method.

In a qualitative case study, an event or a particular situation that has occurred within a particular time span is the focus of the research (Wahyuni, 2012). I decided against using a case study approach because my intent was not to concentrate on a distinctive event over a particular time span (Wahyuni, 2012; Yin, 2009). Instead, I wanted to gain a deeper understanding of a social phenomenon (Savage-Austin & Honeycutt, 2011). The phenomenon in this study was the unknown strategies that entrepreneurs use to market their mobile game applications successfully.

Phenomenology is the study of human experiences that have affected the lives of individuals (Reiter et al., 2011). During a phenomenological inquiry, researchers may assume that meaning comes from the commonality of shared experiences (Reiter et al., 2011). Phenomenological research helps researchers find meaning and essence of the lived experiences of the participants (Marshall & Rossman, 2011). A phenomenological design enables the interviewer to uncover and document contemporary, intricate, and rich

narratives of an individual's lived experience (Finlay, 2012). Phenomenological research usually begins with concrete descriptions of first-person accounts and general themes about the essence of a phenomenon (Finlay, 2012). A phenomenological researcher's goal is to go beyond the explicit meanings and unveil the implicit aspects and insights of the participants (Marshall & Rossman, 2011).

The interviewing process did not end until data saturation was evident. The high response rate of similar data provided by the participants yielded a large amount of data that reflected a point of data saturation. Data saturation is evident in the interviewing process when there is no new or different data provided by participants in the study (Choudrie & Culkin, 2013). It was vital for me to use a population of entrepreneurs who could provide detailed information of their lived mobile application work experiences.

### **Population and Sampling**

I used both purposive sampling and snowball sampling for obtaining participants for this study. Because I sought to explore the successful marketing strategies of entrepreneurs with mobile game application businesses in northern California, I decided on a study population of mobile application entrepreneurs who own profitable mobile game application businesses. Eligibility for this study required the participants to be entrepreneurs who had started and continued to own a profitable mobile game application business. The initial participants in this research study included a selection from an online Google search list of mobile game application entrepreneurs in northern California.

A snowball sampling method, by which initial participants recommend someone else who has the key characteristics required by the research design, was vital to the research study (Trotter, 2012). Selecting the sample required the identification of a collection of entrepreneurs who could provide data about their lived experiences and their successful marketing strategies. The purposive sampling required a review of the participants identified by the snowball method to ensure qualified participants. The purposive sampling method helped to ensure that the participants identified have lived experiences in mobile game application entrepreneurship. I used active communication to bolster retention of my study participants. The development of a working relationship and seeking additional participants for the study was possible by becoming a member of mobile application social networks. Some members of social networks such as IT Toolbox and Usenet shared conference and meeting information used by technology business owners. The additional review also served as verification that all of the participants are presently working in northern California.

This research may provide successful strategies that entrepreneurs use to market their mobile game applications. Suri (2011) suggested that homogenous samples are appropriate for data analysis for conducting summaries synthesizing to develop findings a phenomenon that have explicit implications for their field of study. The study required sampling the population to obtain data from entrepreneurs with mobile game application businesses. Saturation was evident after the first 10 interviews, but I continued the process to ensure that I had adequate data.

The rationale for selecting 20 participants was to ensure that I gathered and explored sufficient data for addressing the study's research question. The participant's interviewing process can stop when saturation is evident (Choudrie & Culkin, 2013; O'Reilly & Parker, 2013; Suri, 2011). Each participant for the study met the following criteria: (a) entrepreneur of a mobile game application, (b) whose development business was located in northern California, (c) whose mobile development business had created a profit, (d) who was currently in business, and (e) who was 18 years old or older.

### **Ethical Research**

The ethical considerations of qualitative research have specific requirements concerning informed consent, social justice, confidentiality, and privacy (Iphofen, 2011; Resnik & Shamoo, 2011; Shaw, 2008). The approval process took place before the study began. The Office of Assessment, Equity, and the Record Services require three documents for review and approval: (a) a doctoral study proposal approved by the Walden University Committee, (b) a completed Application to Conduct Research form, and (c) participant consent forms (see Appendix A).

Prior to completing the interview process, I completed the National Institute of Health's web-based training course titled Protecting Human Research Participants. The certification number for the training located in Appendix F is 1652458. The NIH training included information about the Belmont Report, which includes ethical principles and guidelines for research involving human research. After Walden's Institutional Review Board (IRB) approved the study, all participants completed and signed an informed consent document, noting their voluntary participation to be a part of the study.

The participants maintained the right to withdraw from the study at any time. I informed the participants of their ability to withdraw from the interview during my initial email contact. I also informed the participants about their ability to withdraw from the interview process prior to the interview in a written statement on the consent form. In addition, the participants' identification and all business information remained private and confidential. To assure confidentiality, the use of numbers such as P1 to P20 replaced the participants' names. The participants responded to the interview questions alone in a room to ensure privacy during the interview process. The participants for this study did not receive payment or incentive. The data collection information and notes will remain secure on a password protected electronic disc for 5 years before I destroy all information to ensure confidentiality. The Walden University approval number for this research study was 03-04-15-0289720.

### **Data Collection Instruments**

To conduct this study, I selected a sample of participants in an ethical and accurately documented manner (Resnik & Shamoo, 2011). The purpose of the qualitative research instrument is to gather descriptions from the participants with respect to their defined meaning of the described issue (Bluhm, Harman, Lee, & Mitchell, 2011; Kvale, 1983). In qualitative interviews, the researcher and the semistructured questions serve as instruments for the data collection process (Roulston, 2011; Yin, 2009).

The interview protocol for this study contains a standard list of semistructured, open-ended qualitative research questions addressing each participant's experience of marketing their mobile game applications. O'Donnell (2011) concluded semistructured

interviews to be an effective method when gathering information from small-business owners. One advantage of using open-ended qualitative interview questions is that it allowed the participants the opportunity to describe their unique personal experiences. Another advantage of using open-ended questions is that the interviewer can gather detailed responses from the participants (Smith, 2015). A disadvantage of using qualitative open-ended interviewing questions is that the process can be time consuming. The second disadvantage of the qualitative interviewing process is that it can be costly if the interviewer and participants live in different geographical locations.

My use of an interview protocol (see Appendix D) prior to the actual interview was vital to the interview process. Hlady-Rispal and Jouison-Laffitte (2014) found that the use of an interview protocol was essential to their study findings. The interview process included a pilot prior to the actual interview to ensure that the interview questions were clear and appropriate (Bazeley, 2013). The purpose of the interview was to obtain data on marketing strategies mobile game application entrepreneurs employ to achieve business success. It was vital to ensure reliability and validity of the data gathered from the participants by utilizing member checking and verifying information with the participants (Carlson, 2010). The process of member checking included obtaining feedback from participants on both the accuracy of the transcripts and my interpretation of the transcript meaning within the context of the research question (Carlson, 2010). Obtaining the participants agreement with the transcript and my interpretation increased the credibility of the data. The information gathering process included transcribing information on an Excel spreadsheet and uploading the transcribed information into

NVivo 10. NVivo 10 enables researchers to manage data analysis in an organized manner (Bergin, 2011; Edwards-Jones, 2014; Leech & Onwuegbuzie, 2011).

### **Data Collection Technique**

The data collection process involved interviewing 20 successful mobile game application entrepreneurs to explore the marketing strategies that they use in their mobile game application development businesses. I used both purposive sampling and snowball techniques to identify and solicit entrepreneurs to serve as participants in this study. The participants signed an e-mailed electronic consent forms before their interviews.

Upon the receipt of the participants' introduction letters (Appendix C), the interview process took place by using WebEx, an online program that enables the user to conduct video interviews. WebEx is also useful when recording interviews. Researchers use WebEx because it allows more participant flexibility to increase participation rates in the research study. WebEx usage was vital to the data collection process for all of the participants because many entrepreneurs work long and various hours.

A number replaced each participant's name. As a result, the names of the participants were P1 to P20. The coding method for the study provided the participants with anonymity while participating in the study (Tan, 2010). The participants heard all questions in the same order. To prevent researcher bias, each participant responded to the same open-ended interview questions in the same order.

Walden University's Institutional Review Board (IRB) does not require a pilot study of qualitative studies including semistructured interviews with open-ended interview questions. However, for my study, I used a pilot process in which five mobile

application entrepreneurs who worked in northern California signed consent forms and responded to the interview protocol and open-ended questions. The purpose of the pilot was to ensure that the questions were appropriate, reliable, and necessary. The participants selected for the study answered all of the interview questions with no signs of ambiguity and no resulting changes to the questions. I also verified the estimated interview durations of time and the efficacy of the overall interview protocol. Open-ended questions allow participants to communicate their viewpoints and experiences in detail (Litz, Pearson, & Litchfield, 2012; Marshall & Rossman, 2011; Qu & Dumay, 2011). Open-ended questions are consistent with qualitative research methodologies and designs (Litz, Pearson, & Litchfield, 2012).

### **Data Organization Technique**

Qualitative research synthesis has the potential to be valuable when categorizing the mass quantity of literature focused on organizational change (Major & Savin-Baden, 2011). I used the NVivo 10 software to track and organize data. The data will remain secure on an electronic file on a private computer. The name on the folder is Successful Entrepreneurs with subfolders named P1 through P20. The data organization process enabled me to identify themes and trends as well as inconsistent information gathered from the participants (Leedy & Ormrod, 2013). The process also included coding and organizing the data collected from the participants, which helped reveal themes that might not be defined (Chenail, 2012; Tan, 2010).

The study was qualitative; therefore, it was vital that the narrative data remained separate from the coded data (Yin, 2009). To identify additional themes or trends

reviewed all data from the participants, the research notes, and the interview questions.

The data storing process required two separate filing locations for back-up purposes for 5 years prior to destroying.

### **Data Analysis**

This study included the exploration of marketing strategies entrepreneurs have employed in their mobile game application businesses in northern California. From a modern perspective, it is thought provoking to take into account Schumpeter's (1983) economic development theory that includes innovation, entrepreneur' behavior and their relevance to economic growth when analyzing the research data. Schumpeter noted that the entrepreneur is the leader that produces innovations, and the decision to innovate is contingent on each entrepreneur's expectations of, and strategies for obtaining a profit.

I used NVivo 10 software to sort and structure the collected data. The features of the NVivo 10 software program enable users to use a query, search, and visualization mechanisms to analyze interview data (Edwards-Jones, 2014). NVivo 10 is a software program capable of detecting subtle similarities, themes, and patterns within the data from the participants to develop the research findings (Bergin, 2011).

I used Moustakas's (1994) transcendental approach to phenomenology to analyze the perspective of entrepreneurs' marketing strategies. Moustakas (1994) recommended that researchers use a six-step data analysis process to decode and interpret the information collected from the participants: (a) list and group the data collected from all of the participants, (b) consider all data prior to the reduction and elimination of data, (c) group the data by research questions, (d) formulate the data into themes that identify

common elements, (e) construct an individual textual description of the experience, and (f) present the data findings. The interviews were audio/video-recorded and transcribed into a written document. After the interviews, the process of saving, filing, and categorizing the data from individual participants took place. The uploading of the information into the NVivo 10 software program served as a source for the data analysis. The process included reading the transcribed interviews before categorizing and noting discovered concepts. NVivo 10 then enabled me to assess the transcribed interviews to search for common themes embedded in the answers from the study participants. The examination and decoding of frequent or recurring ideas, phrases or expression of participants is vital to the data gathering process. The next steps include categorizing and grouping the datum with its corresponding research questions.

The NVivo 10 software enabled me to create structural and textual descriptions of the research data. The interpretation and explanation of the consistent themes addressed the research questions. A summary of findings reflects the phenomena of the participants' strategies for marketing their mobile application development businesses successfully. A participant matrix is vital when measuring and verifying the information presented by participants (Ogden & Cornwell, 2010). The matrix is another mechanism that interviewers use for note keeping and determining the point when saturation of information is evident.

The participants of this study may receive a copy of the Walden University's IRB approved study findings, once the study is available for publication. The interview questions were as follows:

1. What are some marketing challenges that you experienced when launching your mobile application?
2. How do you market your mobile application business?
3. How have social networks influenced how you market your mobile game application start-up?
4. How have financing opportunities, or the lack of financing opportunities, affected how you market your mobile game application business?
5. What marketing approaches have been the most successful for your mobile game application?
6. How do you determine the success of your marketing strategy?
7. What else would you like to share about your mobile game application marketing strategies that may be helpful to other entrepreneurs?

### **Reliability and Validity**

Reliability and validity are essential components for qualitative studies (Babbie, 2012). Reliability refers to the dependability of the data collection (Babbie, 2012). Validity refers to the accuracy of the study (Babbie, 2012). One of the goals of this qualitative phenomenological research study was to minimize errors and biases to provide reliable research findings.

#### **Reliability**

Reliability refers to the capability of other researchers to make the same observations of a phenomenon if they use the same procedure to conduct a research study (Ali & Yusof, 2011). Reliability indicates consistency in data findings (Babbie, 2012).

It is vital during quantitative studies for researchers to use strategies to establish dependability to ensure that other researcher can duplicate their research path and determine comparable findings (Thomas & Magilvy, 2011). However, during qualitative studies, the ability to replicate is not the focus of the research study (Thomas & Magilvy, 2011). The intent of the qualitative researcher is to obtain a deeper understanding of the phenomenon, which may be difficult using quantitative questions (Thomas & Magilvy, 2011).

The pilot is essential to assure the reliability of the interview questions and dependability of a study (Trotter, 2012). If required, the modification of the interview questions can occur during or after the pilot process. The research questions should be clear and concise, which will increase the assurance of the reliability of responses from the participants (Ishak & Baker, 2012; White & Drew, 2011). I established the reliability of the data by recording the responses of the participants during the online interviews. I replayed the recording to confirm that the transcript data was accurate.

### **Validity**

Validity is essential to ensure the credibility of the study (Carlson, 2010). Qualitative researchers experience credibility when other researchers can recognize similar experiences in a study by exploring the participants' noted experiences (Thomas & Magilvy, 2011). Validation methods help to increase credibility and assure other researchers that the validation method selected is appropriate (Ihantola & Kihn, 2011).

Onwuegbuzie and Crabtree (2008) described member checking as a method of providing valid results by determining the accuracy by common themes found in data.

Member checking includes allowing participants to verify the data to ensure that the data is correct and to ensure validity (Carlson, 2010; Harper & Cole, 2012). I allowed participants the opportunity to review, correct and comment on whether or not their interview summaries are accurate to increase the creditability and conformability of the study's validity.

A qualitative study that includes the transferability of data findings allows the researcher's results to expand to wider populations (Prowse & Camfield, 2013). Research study conclusions should be logically generalizable to other populations (Prowse & Camfield, 2013). Erlingsson and Brysiewicz (2013) posited that the process of transferability includes ensuring that the research results have detailed descriptions of the phenomenon so that readers can determine if the findings apply to their circumstance. Thomas and Magilvy (2011) noted that an effective strategy to obtain transferability in qualitative research is to provide a thorough description of the research participants and the demographic boundaries of the research study.

The objective of this qualitative study was to understand the factors involved in entrepreneur's marketing strategies and not about generalizability. The redundancy of data or saturation may increase the validity and credibility of data findings and may indicate if there is an adequate depth of data to meet the purposes of the study (Choudrie & Culkin, 2013). Similarly, Carlson (2010) suggested that determining the accuracy of common themes found in the data strengthens the validity of the data.

Entrepreneurs with the same responses to the interview questions served in validating that saturation was evident. Thomas and Magilvy (2011) noted that

confirmability is the degree by which participants can confirm the data results of others. The findings in this study were reflections of the life experiences of the participants and not by personal bias, which aided in the confirmability of the study.

### **Transition and Summary**

Section 2 encompassed information about the methodology and design of the study. Section 2 contained a justification for my selecting the qualitative method and the phenomenological research design, the purpose of the study, and my role as the researcher. Section 2 also contained the rationale and means for assuring appropriate participant selection, sample size, technique of data collection, data organization, and data analysis. Lastly, Section 2 contained information about the reliability, credibility, and dependability. Section 3 features the findings of the research study and demonstrate the applicability of the findings with relations to how the results affect the professional practice of business. Section 3 includes discoveries that are about the application of the findings to professional practice, implications for social change, and recommendations for action and further study. Section 3 also includes the reflections on the research experience.

### Section 3: Application to Professional Practice and Implications for Change

#### **Purpose Statement**

The purpose of this qualitative phenomenological study was to explore the strategies mobile game entrepreneurs use to market their mobile applications successfully. Section 1 included an introduction to the background of the problem, noting the problem and purpose of this qualitative phenomenological research study. My survey instrument included one overall question and seven specific interview questions. I selected economic development theory as the selected conceptual framework for this qualitative phenomenological research study. In Section 1, I discussed my assumptions, limitations, and delimitations. The final portion of Section 1 consisted of academic literature with peer-reviewed information about the mobile application industry and marketing strategies. Section 2 included my purpose statement and described my role and the participant selection process. Section 2 also described my research design, population, and sampling. I concluded Section 2 with a discussion of ethical research, instruments, data collection techniques, data organization techniques, reliability, and validity.

In Section 3, I considered the strategies that participants used to market their mobile game applications. In Section 3, I presented my findings, applied them to professional practice, discussed the implications of my research for social change, made recommendations for action and further study, and offered my reflections. Lastly, I summarized and concluded the study.

## **Overview of Study**

My purpose was to explore the lived experiences of mobile game application entrepreneurs who implemented strategies to market their mobile game application businesses successfully. The research study was exploratory, based on the entrepreneurs' experiences, insights, and ideas regarding mobile game application marketing strategies. The 20 entrepreneurs who served as participants worked in northern California.

The entrepreneurs shared their lived experiences of how they marketed their mobile game applications. Due to a large number of mobile game applications, entrepreneurs have to develop ways to stay competitive. Entrepreneurs need innovative ideas and budgets to increase their chances of business success (Freel, Carter, Tagg, & Mason, 2012). Mobile game entrepreneurs should consider many things prior to launching their applications, such as funding, sales, marketing, consumer awareness, and ongoing product development. My findings indicate that entrepreneurs used social media and word-of-mouth to market their mobile game applications successfully. The next section contains additional details, an analytical review, and a presentation of the research study results.

## **Presentation of the Findings**

The primary research question for this study was the following: What are the marketing strategies that entrepreneurs use to market their mobile game applications successfully? The seven interview questions were as follows:

1. What are some marketing challenges that you experienced when launching your mobile application?

2. How do you market your mobile game application business?
3. How have social networks influenced how you market your mobile game application start-up?
4. How have financing opportunities or the lack of financing opportunities, affected how you market your mobile game application business?
5. What marketing approaches have been the most successful for your mobile game application start-up?
6. How do you determine the success of your marketing strategy?
7. What else would you like to share about your mobile game application marketing strategies that may be helpful to other entrepreneurs?

The data analysis resulted in the development of themes that aligned with the study's conceptual framework and literature review. Schumpeter's economic development theory (Schumpeter 1942) was evident when the participants' responses revealed what happened when they introduced their mobile game application to consumers. Schumpeter (1942) acknowledged numerous sources of innovation, such as a new business, invention methods, new markets, supply sources, and industry reorganization.

Eight factors influenced the marketing strategies that entrepreneurs used when they started their mobile game application development business. I divided the eight factors into five primary themes and three secondary themes. Primary themes were those that the majority of the participants observed, and secondary themes were those commented on by three to seven participants. The primary themes that emerged from

the research results are (a) marketing challenges, (b) social networks, (c) financing opportunities (d) marketing strategies, and (g) innovative marketing approaches. The secondary themes are (a) word-of-mouth, (b) number of downloads as a measure of success, and (c) consumer awareness.

My research findings directly correspond to my conceptual framework.

Economic development theory served as my conceptual framework. This theoretical framework encompasses (a) the introduction of a new consumer product or service, (b) introduction of a new product that has not been tested by the technology industry, (c) opening of a new market that no one else have previously opened, (d) the procurement of a new source of supply, and (e) creating a new organization ((Schumpeter 1942).

My study findings were in sync with those of Davis, and Yin (2013) and Mojica et al. (2014). Bresnahan et al. (2013) noted that entrepreneurs of mobile applications have found that a large number of new markets create competition in marketing to consumers. The large variety of mobile applications is a benefit for consumers.

I kept entrepreneurs' names confidential by assigning participants with codes (i.e., P1-P20). The data gathering process included transcribing and categorizing data into thematic codes. The study involved 5 themes that materialized from the responses from the participant interviews. Finally, I analyzed the formulated data into the results provided in the next subcategory.

### **Research Themes**

During this qualitative phenomenological research study, some themes emerged which gave me a better understating of marketing strategies as a phenomenon. The

primary themes that emerged from the research results are (a) marketing challenges, (b) social networks, (c) financing opportunities (d) marketing strategies, and (g) innovative marketing approaches. The secondary themes are (a) word-of-mouth, (b) number of downloads as a measure of success, and (c) consumer awareness.

**Theme 1: Marketing challenges.** The theme of marketing challenges links to the body of literature (Cumming & Johan, 2013; Katre & Salipante, 2012; Powell & Eddleston, 2013) and Schumpeter's conceptual framework (1983). The purpose of this question was to understand and explore the marketing challenges that mobile game application entrepreneurs experience when launching mobile applications. Six participants shared that finding ways to market their mobile game was a challenge (P3, P4, P7, P8, P9, and P16). Similarly, 80% of the participants noted that mobile game marketing was a major business problem. Indeed, mobile game entrepreneurs' ability to reach their intended audience is a vital marketing issue, according to Rajput (2011). Holland and Shepherd (2013) found that it is essential that entrepreneurs of small businesses continue to be persistent and continue with their start-up businesses regardless of the challenges that they will face during the beginning business stages.

In his theory of economic development and new value creation of technology, Schumpeter (1983) suggests that entrepreneurs must create new products to acclimate to an uncertain environment. Rajput (2011) found that it was vital for business owners to understand how to reach their target customers to increase their chances of business success. Other researchers, such as Kourouthanassis and Giaglis (2012), found that by the end of 2011, approximately 425 million consumers had accessed Facebook through

their mobile phones, and half of those were first-time users. Seventy-five percent of the participants interviewed shared that they market their mobile game applications by advertising on Google, Facebook, and other social media advertising. These findings confirmed Munnukka and Jarvi's (2011) research findings that social networks are essential marketing tools for entrepreneurs to increase their chances of business success.

Participants shared that entrepreneurs should make sure that their product is a good product that consumers will like and use (P1, P4, P18, and P19). In addition to creating a good game, five respondents (P1, P2, P6, P8, and P14) said it is essential that entrepreneurs have creative, innovative ideas and budgets. Entrepreneurs should have a budget, and they should know their target audience (P1, P2, P6, and P12). Five participants shared that a major challenge for an entrepreneur is determining their target audience (P5, P6, P12, P18, and P19). Entrepreneurs should also know what demographic group they plan to focus on when marketing their mobile games (P5, P6, P12, P18, and P19). Eight participants shared that distinguishing their application from a crowd of over one million applications is a marketing challenge (P1, P3, P4, P5, P7, P11, P12, and P13).

One participant (P12) stated,

The ability to get consumers to download your app, finding a way to make people aware of your app, and getting the app on consumers phones are major challenges. Entrepreneurs should focus on awareness through advertisements, campaigns, and by connecting them in other places where consumers may be able

to download the app. In-app purchases that prompt consumers to purchase other apps from the app they are using is also a good marketing tool.

**Theme 2: Social networks.** The theme of social networks also links to the body of literature and the conceptual framework. Social networks have become one of the most useful marketing tools for business owners to market their products and services (Pentina, Zhang, & Basmanova, 2013). Social media are a widely popular and collaborative social practice (Singh & Sonnenburg, 2012). Schmidt and Ralph (2011) confirmed that it is essential that businesses use social media in their marketing strategies to increase their online consumer relationships. Social media is a tool and thus allows virtual interactions between users expand and reach audiences both locally and internationally (Bui & Kemp, 2013). Similarly, Schumpeter's (1942) conceptual framework focused on social groups because social groups may have a positive effect on an entrepreneur's business actions. Some entrepreneurs market primarily through the press, the web, and social networks.

Fifty percent of the participants noted that social media and networks were their most beneficial approach during their mobile application marketing process. There are many social media tools for entrepreneurs to choose from; these include email, innovative videos, social blogs, Twitter, and word-of-mouth. Several participants said that they used these tools (P2, P3, P6, P7, P8, P9, P11, P13, and P16). Participant 9 stated, "We try to release our applications at the same time that Apple releases a new update for their phones to increase their visibility and marketing success rate." Some entrepreneurs shared that Google, Facebook, and other social media were useful tools that

they use to advertise and market their mobile games (P2, P3, P9, P11, and P13).

Conversely, dissatisfied consumers will share negative experiences with at least nine other people via social media, which could decrease application sales (Khare et al., 2011). Social media offers marketing opportunities for entrepreneurs to reach more consumers with less money (P2, P4, P5, P6, P7, P8, and P13). Facebook is a popular social networking site that people use for social interactions with other online users (Hughes et al., 2012). My participants reinforced this point (P2, P3, P6, P7, P8, P9, P11, P13, and P16).

**Theme 3: Financing opportunities.** The theme of financing opportunities also links to the body of literature and the conceptual framework. Seven participants contended that entrepreneurs who have funds to spend on their business might have an increased chance of business survival (P2, P5, P6, P7, P10, P12, and P15). Financing is an important element of the planning and implementation of mobile game development (P2, P5, P6, P7, P8, P10, and P11). Participant 4 stated, “Marketing budgets for mobile game applications must be set to maximize returns on investment.” Participant 1 stated, “The lack of financing might affect an entrepreneur’s marketing approach and prevent them from being able to use various marketing methods.”

Entrepreneurs should remember that without financing, they might run a risk of the business failure due to the competitive marketing of other entrepreneurs (P1).

Three participants noted that they one way that they obtain funding is by getting other businesses to invest in their mobile game businesses (P5, P10, and P15). Some

participants shared that entrepreneurs should plan and manage their finances wisely to increase their chance of business success (P5, P7, P10, and P15).

Schumpeter (1949) noted in his conceptual framework that entrepreneurs' procurement sources are vital components of economic development. Gronum, Verrynne, and Kastle (2012) found that financial issues, such as a lack of funding, might be a vital part an entrepreneur's business success or failure. Freel et al. (2012) confirmed this point and noted that funding is an essential component that is required to ensure business success. Reynolds and Samel (2013) noted that entrepreneurs might collaborate with other established entrepreneurs to find additional resources for marketing purposes. Entrepreneurs of small businesses must plan well and use their funding wisely to increase their marketing opportunities and business growth (Reynolds & Samel, 2013). These results confirmed those of my participants.

**Theme 4: Marketing strategies.** The theme of marketing strategies links to the body of literature and interview questions 1, 2, 3, 4, 5, and 6. Sixty percent of the participants determine the success of their business marketing strategies by the number of consumers who downloaded their mobile games. Fifty percent of the participants noted that a combination of social media strategies and word-of-mouth is effective for mobile entrepreneurs to use in marketing. Participants (P2, P3, P6, P7, P8, P9, P11, P13, and P16), said that they used marketing strategies via Facebook, YouTube, Twitter, LinkedIn, and other websites to market their mobile game applications.

Some participants noted that one vital marketing strategy is to develop a mobile game application that consumers will enjoy and find useful (P1, P4, P18, and P19).

Seven participants said they used banner ads with Facebook and press releases so that their games will show up on popular websites (P1, P4, P5, P6, P10, P11, and P12).

Participant 2 stated, “Entrepreneurs could increase their likelihood of success by making multiple games and using multiple marketing approaches instead of focusing on one.”

Some business owners have found that using both social and traditional marketing approaches has been effective (Onishe & Manchanda, 2012). Business owners should be aware that, in some cases, online users interact on Facebook for many purposes (Clayton, Osborne, Miller, & Oberle, 2013). The use of more than one marketing strategy may help entrepreneurs ensure that their mobile games reach a larger number of consumers. Anthes (2011) confirmed that mobile entrepreneurs should refine their distribution methods to ensure that they meet customers’ needs.

**Theme 5: Innovative marketing approaches.** The theme of innovative marketing approaches also links to the body of literature and the conceptual framework. Schumpeter (1983) contended that small business owners should consider the importance of creating an innovative product to keep up with the others in the competitive markets. Small business owners believe that innovative ideas are vital to the success and development of their businesses (de Jong, 2013; Judd & McNeil, 2012). Entrepreneurs of technology should develop innovative brands to increase their product success (Ritchie, 2011). The ability for entrepreneurs to be innovative is essential for business marketing success (Bresnahan et al., 2013).

The mobile application business owner can also increase the visibility of their products by marketing in an innovative manner to increase customer flow (Muller, Kiil,

& Martens, 2011). Schumpeter (1942) noted in his conceptual framework that technology innovation could be a source of new products that lead to economic development. Curran and George (2012) found that mobile game entrepreneurs could use the development of new smartphones as an opportunity to develop innovative mobile games to install on them.

Seventy-five percent of the participants shared that there are a large number of mobile games on the market from which consumers may choose. Therefore, it is essential for entrepreneurs to create fun innovative games. In addition to creating a good game, respondents (P1, P2, P6, P8, and P14) said it is essential that entrepreneurs have creative, innovative ideas, and budgets. Other participants noted that it is a challenge to develop innovative new games on time to beat others in the game industry (P1, P4, and P7).

It is vital for entrepreneurs to focus on developing innovative products to satisfy customers and to determine if their marketing strategy is successful (P8, P14). However, P1, P4, and P7 said that developing innovative mobile games is a challenge for small business owners. Mobile game entrepreneurs can also use mobile platforms in stores to advertise their games (P2). Participants (P1, P4, P7, P8, and P14) shared that it was vital for them to focus on developing innovative products to rise above other mobile game applications.

Small business owners tend to find it easier to provide communities with new innovative products and services because of their convenience (Dwivedi, Dwivedi, & Bardia, 2012). Entrepreneurs should be aware of some possible adverse consequences of

innovation, such as profit, cost, and reputation that may influence the success or failure of their small businesses (Laforet, 2011). To be competitive, it is essential that small business owners be creative and market their innovation in a manner that customers understand (Hotho & Champion, 2011; Lindgren, 2012; Rajput, 2011).

**Secondary Theme 1: Word-of-mouth.** Some mobile game entrepreneurs believe that the use of word-of-mouth is the most effective marketing tool for mobile game entrepreneurs (P3, P6, P7, P9, P13, and P16). Fifty percent of the participants indicated that entrepreneurs should use both social media and word-of-mouth to advertise and increase their mobile game usage. Six participants shared that word-of-mouth can increase the number of consumers, which could increase the mobile game entrepreneurs' rate of success (P3, P6, P7 P9, P13, and P16).

The experiences shared by study participants confirm the perception of Khare, Labrecque and Asare (2011), who found that satisfied consumers share positive information about a product by using word-of-mouth. The use of marketing via word-of-mouth can be an effective marketing tool that can change consumer's choice of whether or not to use a product or service (Lee, Noh, & Kim, 2013). Hardey (2011) found that word-of-mouth was seven times as influential as media in influencing purchase decisions.

**Secondary Theme 2: Number of downloads as a measure of success.** Three participants shared that they measure their success of their mobile game business by the number of consumer downloads and mobile game usage (P9, P12, and P19). The number of downloads and usage of mobile games help mobile game entrepreneurs determine business success (P11, P12, and P19). Participant 3 noted that since there are various

kinds of mobile applications, they measure their success by the number of consumer downloads. Other mobile game entrepreneurs use analytics to determine the number of downloads after the implementation of their marketing strategy to determine success (P9, P11, P12, and P19). However, P11 measured success by the number of downloads shared, consumer engagement, and the amount of time spent on the mobile game application.

The ability of mobile game entrepreneurs to increase consumer usage is vital for business success. Xiao, Xiaodong, Wei and Xingming (2013) estimated that the number of apps downloaded would be up to 85 billion by the end of 2014. Cortimiglia et al. (2011) found that is vital for entrepreneurs to market their mobile games to reach the maximum amount of growing mobile users to increase their chances of consumer usage.

**Secondary 3: Consumer awareness.** Seven participants shared that consumer awareness is a challenge for mobile game entrepreneurs (P3, P5, P6, P8, P11, P15, and P19). Fifty percent of the participants noted that consumer awareness is a vital challenge for mobile game entrepreneurs. The increased consumer interest may increase the number of mobile games purchased by consumers (P1, P3, P5, P6, P8, P11, and P14). Participant 10 noted that consumer awareness and accessibility is their major marketing challenge. Two participants shared that the sharing of information from one consumer to another could increase the number of mobile games users and increase the possibility of business success (P15, P19).

Participant 20 stated,

“Mobile game entrepreneurs should make sure that they are honest with their customers. Entrepreneurs should listen and communicate with their consumers whenever possible because customer relations are a vital form of marketing. Some consumers will overlook a few app challenges as long as the business owner treat them like human beings and assist them with their game issues. Consumers usually spread good mobile game experiences with others.”

Some mobile game entrepreneurs use various virtual types of online environments to reach consumers (Xu et al., 2012). Similarly, Wang and Chang (2013) noted that consumers who post information about products online could have an effect on the purchase decision of other consumers. Entrepreneurs who use their mobile games to provide consumer information could increase their business profits and interest more consumers (Lee, Hwang, & Hyun, 2010; Okazaki & Mendez, 2013). However, Dincer (2011) suggested new consumer marketing and advertising of mobile devices has a positive effect on consumer usage. Schumpeter (1949) contended that opening new technological markets could have a positive impact for consumers and lead to economic development.

### **Linkage of Findings to the Conceptual Framework**

The data collection process included (a) collecting data from 20 participants, (b) developing groups of data by using codes, (c) developing themes from the codes, (d) analyzing the information, and (e) developing conclusions. A linkage to the conceptual framework and literature review provided in Section 1 was evident in the questions asked of the participants. An entrepreneur’s mobile game applications business success may

depend on their ability to use innovative ideas and learn from other successful entrepreneurs to ensure economic conclusiveness. The economic development theory provides a vital tool for entrepreneurs to understand the link between marketing and innovation. Entrepreneurs use innovative products to offer a new service (Schumpeter, 1934). Obtaining information from other entrepreneurs may help new entrepreneurs improve their services as noted in the economic theory (Schumpeter, 1934). The five patterns of Schumpeter's economic development theory were evident in the entrepreneurs' responses:

- Introduction of new mobile game applications.
- Introduction of a new mobile game application that is unknown and untested by the technology industry.
- Opened a mobile game application that no one else had previously opened.
- Procurement issues such as marketing strategies of their new mobile game application.
- Creating or sharing a mobile game application business strategy.

The themes and subthemes have a direct correlation with Schumpeter's conceptual framework. Schumpeter (1983) found that entrepreneurs must produce innovative new products to be competitive in the technology industry. Entrepreneurs who introduce a new product such as a mobile game application may experience marketing challenges. New mobile games that are unknown and untested may experience competitive marketing challenges. Social networks influence the opening of new a new product that no one else has previously opened. Procurement and financing

opportunities are vital to technology success, which is evident in the research findings and the conceptual framework. Innovative marketing approaches can be essential to the creation of a new business such as mobile game applications. BarNir (2012) noted that innovative practices are vital to business marketing.

The secondary themes found through the interview process included (a) word-of-mouth, (b) the number of downloads, and (c) consumer awareness. The findings from the study strongly relate to Schumpeter's (1983) study results that showed the economic importance of the introduction of new business products. New innovative products may be essential to keep up with various competitive markets (Schumpeter, 1983). Similarly, Galindo and Mendez-Picazo (2013) found that entrepreneurs of new technology are vital links to the increasing the business industry. Onishe and Manchanda (2012) noted that the use of traditional word-of-mouth and social media marketing are essential for business marketing success.

### **Applications to Professional Practice**

This section contains the application to professional practice. The research findings from this study may provide valuable information for mobile game entrepreneurs and small business owners seeking to market their product or services. The purpose of this qualitative phenomenological study was to explore the strategies that mobile game entrepreneurs use to market their mobile applications successfully.

A brief summary of the research study findings represents the exposed common themes and business practices that materialized from the data gathered from the participants. Eight themes emerged from the marketing insight of 20 mobile game

entrepreneurs who work in northern California. The themes that emerged from the research results were: (a) marketing challenges, (b) social networks, (c) financing opportunities, (d) marketing strategies, and (e) innovative marketing approaches. The secondary themes that emerged were: (a) word-of-mouth, (b) number of downloads, and (c) consumer awareness.

In this study, the participants provided their lived experiences and suggestions on how they market their mobile game applications. Social media have become the future of the mobile game industry (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, and P20). Fifty percent of the participants interviewed shared that they market their mobile game applications by the use of social media. Pentina et al. (2013) noted that the use of social media have become vital marketing tools for business owners to utilize to market their business. Social media is an ongoing social practice that has become common and uncontrollable (Singh & Sonnenburg, 2012).

Lee et al. (2013) found that business owners might find the use of word-of-mouth to be an effective marketing tool. Fifty percent of the participants shared that mobile game entrepreneurs should use both social media and word-of-mouth to market their mobile game business. Fourteen participants shared that it is vital that entrepreneurs use some form of social Medias to market their mobile games and increase their consumer network (P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, and P20). These findings are relevant for mobile game application entrepreneurs who are seeking additional ways to market their mobile games. Small business owners could also benefit from obtaining additional marketing knowledge from successful mobile game

entrepreneurs. The findings related to improving mobile game application entrepreneurs' marketing skills may also be relevant to improve other small business practices. The next section of the research study contains information about the implications of social change.

### **Implications for Social Change**

The implications for positive social change include new understanding to support entrepreneurs in their efforts to contribute to the U.S. economy by increasing sales and business sustainability. This research study may change the way mobile application entrepreneurs approach new business start-ups in the United States. Knowledge gained from this research study may also enhance the chance that the development of technology innovations may add value to the U.S. economy. Similarly, Coleman and Robb (2012) found that technology innovations are vital to the U.S. economy.

The outcome from this research study may provide entrepreneurs and economists a platform for continued positive social change. The participants provided information that may provide significantly to the entrepreneurs looking to increase their chance of profit and sustainability for their small businesses. Mobile application developers need to consider their options and determine how they can use current mobile game application trends to develop their mobile application activities (Holzer & Ondrus, 2011). Therefore, by building on the findings from this study, entrepreneurs may experience an increase in business success, which may result in an increase in jobs. The increase of businesses may have implications for an increase in employment, which may lead to social change by helping to create jobs.

### **Recommendations for Action**

The information provided in this research study may contribute to additional profitable mobile application businesses in the United States. Entrepreneurs may use the findings from this research study to enhance their mobile application business.

Entrepreneurs may determine the findings from this research study to be an added resource of information from profitable mobile application entrepreneurs. My recommendations for action are as follows:

- Mobile application entrepreneurs may benefit from using a variety of marketing practices to compete in the global technology industry.
- Entrepreneurs should include social media networks and word-of-mouth to market mobile games applications.
- Entrepreneurs should develop a plan to determine how they will reach their target audiences.
- Entrepreneurs should consider the financial implications of starting a new business or maintaining an existing business.
- Entrepreneurs should always be working to present innovative products to meet the customer's needs.

The dissemination plan for the study results includes the following professional publications and journals for review and publishing consideration: (a) *Journal of Small Business Management*, (b) *Journal of Developmental Entrepreneurship*, and (c) *Journal of Small Business and Enterprise Development*. The noted professional journals are just a few of the prospective journals that the finding from this study may offer for

publication purposes. The findings from this research study will also be available to entrepreneurs during professional technological business meetings and conferences. Both current and future mobile game entrepreneurs should pay attention to the results of this research study to increase their chance of business success. The goal of this publication is to provide additional knowledge to entrepreneurs and others who may have an interest in successful mobile application marketing strategies.

### **Recommendations for Further Study**

This qualitative research study has added to the body of work on entrepreneur business success. The goal of this study was to explore successful marketing strategies used by mobile game application entrepreneurs when marketing their mobile application development business. Twenty entrepreneurs volunteered to participate in this study, and because of similar findings from the first 10, no additional participants were required to participate. The geographical regions used for this research study were in northern California. By including other areas of the United States, future researchers might generate new interview questions related to how entrepreneurs market their mobile applications successfully.

A quantitative study may offer additional data in support of entrepreneur's small business success by increasing the number of participants and increasing the chance of gathering additional data. Questions that are not open-ended may reduce the limitation of the participants responding to the questions in a socially accepted way instead of their right lived experiences. Future researchers could use a quantitative or mixed method research study to confirm the findings from this qualitative research study. The use of

quantitative surveys could element the need to record the participants and reduce the need to withhold information for privacy reasons. Future researchers could use a combination of the qualitative and quantitative research methods to reflect statistical data and survey information when noting the experiences of the participants. It is essential for entrepreneurs to learn more and remember new marketing strategies to increase their rate of success.

It would be thought provoking to seek additional data from a variety of mobile application entrepreneurs to complete a comparison research study of their business marketing strategies. A different qualitative research study might explore whether gender, race, and ethnicity have an effect on the choice selection of business strategies among mobile application entrepreneurs. Future researchers could obtain valuable data by comparing female and male entrepreneurs separately and comparing the overall research findings. Additional research studies may be useful to future entrepreneurs, scholars, researchers, small businesses, startups, employment, and the economic growth of the United States.

### **Reflections**

The opportunity to obtain a doctoral degree has been a life-changing experience. This doctoral research study has provided me with a greater interest to contribute more literature on the phenomenon of successful marketing strategies. All preconceived bias and ideas about how entrepreneurs successfully market their mobile applications were set aside to ensure that the data gathering process and data analysis were a result from the participants' lived experiences.

The participants' contributions were vital to the completion of this study. Demographic questions about the participants' race and gender were not included during the qualitative interview process of this research study. However, after completing the interview process, I realized that demographic data, such as race and gender, might have provided additional data for business strategies and comparison purposes.

The opportunity to interview entrepreneurs who own mobile game applications was an active learning experience. However, I underestimated the amount of time required to confirm and schedule the participants' interviews. Twenty entrepreneurs completed the interview process, and five entrepreneurs were not interested in participating. My thinking of mobile game application entrepreneurs has changed in a positive manner because of this research study. The mobile game application entrepreneurs interviewed for this study were creative minded, innovative thinkers.

### **Summary and Study Conclusions**

The purpose of this qualitative phenomenological study was to explore the strategies mobile game entrepreneurs use to market their mobile applications successfully. Entrepreneurs with small businesses may have a considerable influence on the economy in the United States. The increase of successful entrepreneurial with small businesses may lead to an increase in job creation. Existing entrepreneurs who implement some of the success strategies identified in this research study may experience benefits that may affect the way they successfully service their community.

The revelation of this additional research data about the phenomenon of entrepreneurs' successful marketing strategies may be vital to the economic growth.

Small business owners in the United States serve as vital constituents of innovative job development and economic growth (Cole, 2013; Neumark, Wall, & Junfu, 2011).

As the U.S. economy continues to grow, the innovative proficiency and job creation power of technologically focused entrepreneurs may become increasingly essential for continued economic growth. Fiscal indicators should not be the only measure of business success for entrepreneurs (Fisher, Maritz, & Lobo, 2014). The method by which entrepreneurs obtain information varies. Entrepreneurs do not choose to gather the same amount of business information, so their business results may not be the same (Frankish, Roberts, Coad, Spears, & Storey, 2012). Some entrepreneurs make better business decisions than others (Frankish et al., 2012).

It may be essential for entrepreneurs to find opportunities within new technology markets to be successful in the mobile application markets (Johansson et al., 2012). Being first with a new style of a mobile application may be vital to an entrepreneur's success since other entrepreneurs could market similar services (Johansson et al., 2012). The development of smartphones gives growth to the mobile application market and opportunities for new entrepreneurs to become a part of the growing mobile application market that requires minimal capital to launch (Tiarawut, 2013).

The study suggests it is vital for mobile game application entrepreneurs to market their applications using various social media and via word-of-mouth, which may lead to increased consumer accessibility. The marketing strategies found because of this research may provide entrepreneurs a greater chance of marketing success. Bahmani, Galindo, and Mendez (2012) used Schumpeter's economic development approach with

the belief that social groups have a significant influence on entrepreneur business activities and innovation considerations. Ideas related to Schumpeter's (1983) economic development theory appeared in the interview findings, which included (a) introducing new mobile game applications, (b) introducing a new mobile game applications that have not been tested by the technology industry, (c) opening a new mobile game application that no one else had previously opened, (d) the ability of the entrepreneurs to obtain a new mobile game application source, and (e) creating a new mobile game application.

Evidence from this research suggests that mobile game application businesses created with marketing strategies using innovation, economic efficiency, social equity, and consumer accountability tend to be more resilient. Entrepreneurs of mobile game applications need to develop marketing strategies that consist of innovative social media and traditional marketing efforts to ensure consumers' interest and business success.

## References

- Abou-Moghli, A., & Al-Kasasbeh, M. (2012). Social network and the success of business start-up. *International Journal of Business and Management*, 7(9), 134-140. doi:10.5539/ijbm.v7n9p134
- Ahmad, N. H., & Ramayah, T. (2012). Does the notion of “doing well by doing good” prevail among entrepreneurial ventures in a developing nation? *Journal of Business Ethics*, 106, 479-490. doi:10.1007/s10551-011-1012-9
- Ali, A., & Yusof, H. (2011). Quality in qualitative studies: The case of validity, reliability and generalizability. *Social and Environmental Accountability Journal*, 5(1/2) 25-64. Retrieved from <http://www.st-andrews.ac.uk/~csearweb/seaj/>
- Angela, R. (2011). SMES' Sector access to finance: An overview. Annals of the University of Oradea. *Economic Science Series*, 20, 431-437. Retrieved from <http://www.academia.edu>
- Anthes, G. (2011). Invasion of the mobile apps. *Communications of the ACM*, 54(9), 16-18. doi:10.1145/1995376.1995383
- Apple, Inc. (2013, January 7). App Store tops 40 billion downloads with almost half in 2012 [Press release]. Retrieved from <http://www.apple.com/pr/library/2013/01/07App-Store-Tops-40-Billion-Downloads-with-Almost-Half-in-2012.html>
- Arasti, Z., Zandi, F., & Talebi, K. (2012). Exploring the effect of individual factors on business failure in Iranian new established businesses. *International Business Research*, 5(4), 2-11. doi:10.5539/ibr.v5n4p2

- Arora, A., & Nandkumar, A. (2012). Insecure advantage? Markets for technology and the value of resources for entrepreneurial ventures. *Strategic Management Journal*, 33, 231-251. doi:10.1002/smj.953
- Arthur, S. J., & Hisrich R. D. (2011). Entrepreneurship through the ages: Lessons learned. *Journal of Enterprising Culture*, 19, 1-40.  
doi:10.1142/S0218495811000696
- Ayala, C., & Garcia, G. (2010). Established business owner' success: Influencing factors. *Journal of Developmental Entrepreneurship*, 15, 263-286.  
doi:10.1142/S1084946710001555
- Babbie, E. (2012). *The practice of social research* (13th ed.). Belmont, CA: Wadsworth.
- Bacq, S., & Janssen, F. (2011). The multiple faces of social entrepreneurship: A review of definitional issues based on geographical and thematic criteria. *Entrepreneurship & Regional Development*, 23, 373-403.  
doi:10.1080/08985626.2011.577242
- Bahmani, S., Galindo, M.A., & Me´ndez, M.T. (2012), Nonprofit organizations, entrepreneurship, social capital and economic growth, *Small Business Economics*, 38, 271-281. doi:10.1007/s11187-010-9274-7
- Bak, O. (2011). The role of qualitative research in a mixed methods study. *Qualitative Research Journal*, 11(2), 76-84. doi:10.3316/QRJ1102076
- Bal, S. N. (2013). Mobile web–enterprise application advantages. *International Journal of Computer Science and Mobile Computing*, 2(2), 36-40. Retrieved from [www.ijcsmc.com](http://www.ijcsmc.com)

- Bansal, P., & Corley, K. (2012). What's different about qualitative research? *Academy of Management Journal*, *55*, 509–513. doi:10.5465/amj.2012.4003
- BarNir, A. (2012, March). Starting technologically innovative ventures: reasons, human capital, and gender. *Management Decision*, *50*, 399-419.  
doi:10.1108/00251741211216205
- Baron, R. A. (2012). *Entrepreneurship: An evidence-based guide*. Cheltenham, United Kingdom: Edward Elgar.
- Bates, T., & Robb, A. (2013). Greater access to capital is needed to unleash the local economic development potential of minority-owned businesses. *Economic Development Quarterly*, *27*, 1-10. doi:10.1177/0891242413477188
- Bazeley, P. (2013). *Qualitative data analysis: Practical strategies*. Thousand Oaks, CA: Sage.
- Belk, R. W. (2013). Qualitative versus quantitative research in marketing. *Revista Denegocios*, *18*(1), 5-9. doi:10.7867/1980-431.2013v18n1p5\_9
- Benou, P., Vassilakis, C., & Vrechopoulos, A. (2012). Context management for m-commerce applications: Determinants, methodology and the role of marketing. *Information Technology and Management*, *13*(2), 91-111.  
doi.org/10.1007/s10799-012-0120-2
- Bergin, M. (2011, April 6). 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

- Bergstrom, S. (2014). Community-led marketing for mobile games: Rovio's fans first strategy. *Journal of Digital & Social Media Marketing, 1*, 327-334. Retrieved from <http://www.henrystewartpublications.com>
- Bergvall-Kåreborn, B., & Howcroft, D. (2011). Mobile applications development on apple and google platforms. *Communications of the Association for Information Systems, 29*, 565-580. Retrieved from <http://aisel.aisnet.org>
- Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage.
- Bianchi, A., & Biffignandi, S. (2012). A new index of entrepreneurship measure. *Journal of Marketing Development & Competitiveness, 6*(4), 1-17. Retrieved from <http://www.na-businesspress.com/Journals.html>
- Bluhm, D. J., Harman, W., Lee, T. W., & Mitchell, T. R. (2011). Qualitative research in management: A decade of progress. *Journal of Management Studies, 48*, 665-695. doi:10.1111/j.1467-6486.2010.00972.x
- Boet, S., Sharma, S., Goldman, J., & Reeves, S. (2012, February). Review article: Medical education research: An overview of methods. *Canadian Journal of Anesthesia, 59*(2), 159-170. doi:10.1007/s12630-011-9635-y
- Borrajo, M., Baruque, B., Corchado, E., Bajo, J., & Corchado, J. M. (2011). Hybrid neural intelligent system to predict business failure in small-to-medium-size enterprises. *International Journal of Neural Systems, 21*, 277-296. doi:10.1142/S01290657p11002833

- Brannon, D. L., Wiklund, J., & Haynie, J. M. (2013). The varying effects of family relationships in entrepreneurial teams. *Entrepreneurship Theory and Practice*, 37, 107-132. doi:10.1111/j.1540-6520.2012.00533.x
- Bratland, J. (2011, March). The myth of the “winner’s curse” in auctions of capital goods. *Quarterly Journal of Austrian Economics*, 14(1), 25-52. Retrieved from <http://mises.org/journals/qjae/>
- Bresnahan, T. F., Davis, J. P., & Yin, P. (2013, November). Economic value creation in mobile applications. *National Bureau of Economic Statistics*. Retrieved from [www.nber.org/chapters/c13044.pdf](http://www.nber.org/chapters/c13044.pdf)
- Brush, C. G., & Cooper, S. Y. (2012). Female entrepreneurship and economic development: An international perspective. *Entrepreneurship & Regional Development*, 24(12), 1-6. doi:10.1080/08985626.2012.637340
- Bui, M., & Kemp, E. (2013). E-tail emotion regulation: Examining online hedonic product purchases. *International Journal of Retail & Distribution Management*, 41(2), 155-170. doi:10.1108/09590551311304338
- Cader, H., & Leatherman, J. (2011). Small business survival and sample selection bias. *Small Business Economics*, 37(2), 155-165. doi:10.1007/s11187-009-9240-4
- Cameron, K., Mora, C. & Leutscher, T. (2011). Effects of positive practices on organizational effectiveness. *The Journal of Applied Behavioral Science*, 4, 266-308. doi:10.1177/0021886310395514

- Campbell, N., Heriot, K., Juaregui, A., & Mitchell, D. (2012). Which state policies lead to U.S. firm exits? Analysis with economic freedom index. *Journal of Small Business Management*, 5, 87-104. doi:10.1111/j.1540-627X.2011.00345.x
- Cardon, M. S., Stevens, C. E., & Potter, D. R. (2011). Misfortunes or mistakes? Cultural sense making of entrepreneurial failure. *Journal of Business Venturing*, 26, 79-92. doi:10.1016/j.jbusvent.2009.06.004
- Carlson, J. A. (2010, September). Avoiding traps in member checking. *The Qualitative Report*, 15, 1102-1113. Retrieved from <http://www.nova.edu>
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: What do we still need to know? *Journal of Small Business Management*, 49(1), 9-26. doi:10.1111/j.1540-627X.2010.00312.x
- Casey, C. (2012). Low-wealth minority enterprises and access to financial resources for start-up activities: Do connections matter? *Economic Development Quarterly*, 26, 252-266. doi:10.1177/0891242412452446
- Castelluccio, M. (2013). A platter of spps. *Strategic Finance*, 95(1), 59-60. Retrieved from <http://www.imanet.org/>
- Chalmeta, R., Palomero, S., & Matilla, M. (2012). Methodology to develop a performance measurement system in small and medium-sized enterprises. *International Journal of Computer Integrated Manufacturing*, 25, 716-740. doi:10.1080/0951192X.2012.665178
- Charland, A., & Leroux, B. (2011). Mobile application development: Web vs. native. *Communications of the ACM*, 54, 49-53. doi:10.1145/1941487.1941504

- Chenail, R. J. (2012). Conducting qualitative data analysis: Reading line-by-line, but analyzing by meaningful qualitative units. *The Qualitative Report, 17*, 266-269. Retrieved from <http://www.nova.edu/ssss/QR/QR17-1/chenail-line.pdf>
- Chiem, R., Arriola, J., Browers, D., Gross, J., Limman, E., Nguyen, P. V., Seal, K. (2010). The critical success factors for marketing with downloadable applications: Lessons learned from selected European countries. *International Journal of Mobile Marketing, 5*(2), 43-56. Retrieved from <http://connection.ebscohost.com>
- Chittithaworn, C., Islam, M., Keawchana, T., & Muhd Yusuf, D. (2011). Factors affecting business success of small & medium enterprises (SMEs) in Thailand. *Asian Social Science, 7*, 180-190. doi:10.5539/ass.v7n5p180
- Choudrie, J., & Culkin, N. (2013). A qualitative study of innovation diffusion: the novel case of a small firm and KTP. *Journal of Small Business and Enterprise Development, 20*, 889-912. doi:10.1108/JSBED-03-2012-0047
- Chow, M. J., & Dunkelberg, W. C. (2011). The small business sector in recent recoveries. *Business Economics, 46*, 214-228. doi:10.1057/be.2011.23
- Christie, T., & Sjqvist, D. L. (2012). New business survival in Georgia: Exploring the determinants of survival using regional level data. *Growth & Change, 43*, 110-142. doi:10.1111/j.1468-2257.2011.00579.x
- Chu, H. M., Kara, O., Zhu, X., & Gok, K. (2011). Chinese entrepreneurs: Motivations, success factors, problems, and business-related stress. *Journal of Chinese Entrepreneurship, 3*, 84-111. doi:10.1108/17561391111144546

- Clark, T., & Muller, P. A. (2012). Exploiting model driven technology: A tale of two start-ups. *Software & Systems Modeling, 11*, 481-493. doi:10.1007/s10270012-0260-1
- Clarysse, B., Bruneel, J., & Wright, M. (2011). Explaining growth paths of young technology-based firms: Structuring resource portfolios in different competitive environments. *Strategic Entrepreneurship Journal, 5*, 137-157.  
doi: 10.1002/sej.111
- Clayton, R. B., Osborne, R. E., Miller, B., & Oberle, C. (2013). Loneliness, anxiousness, and substance use as predictors of Facebook use. *Computers in Human Behavior, 29*, 687-693. doi:10.1016/j.chb.2012.12.002
- Coetzer, A., Battisti, M., Jurado, T., & Massey, C. (2011). The reality of management development in SMEs. *Journal of Management & Organization, 17*, 290-306.  
doi:10.5172/jmo.2011.17.3.290
- Coff, R., & Kryscynski, D. (2011). Invited editorial: Drilling for micro foundations of human capital-based competitive advantages. *Journal of Management, 37*, 1429-1443. doi:10.1177/0149206310397772
- Cole, R. (2013). What do we know about the capital structure of privately held firms? Evidence from the surveys of small business finance. *Financial Management, 42*, 777-813. doi:10.1111/fima.12015
- Coleman, S., & Robb, A. (2012). Capital structure theory and new technology firms: Is there a match? *Management Research Review, 35*(2), 106-120.  
doi:10.1108/01409171211195143

- Cook, G. A., Pandit, N. R., & Milman, D. (2012). A resource-based analysis of bankruptcy law, SMEs and corporate recovery. *International Small Business Journal*, 30, 275-293. doi:10.1177/0266242611407409
- Cortimiglia, M. N., Ghezzi, A., & Renga, F. (2011). Mobile applications and their delivery platforms. *IT Professional Magazine*, 13(5), 51-56.  
doi:10.1109/MITP.2011.84
- Cotterill, K. (2012). A comparative study of entrepreneurs' attitudes to failure in technology ventures. *International Journal of Innovation Science*, 4, 101-116. doi: 10.1260/1757-2223.4.2.101
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial orientation theory and research: Reflections on a needed construct. *Entrepreneurship: Theory & Practice*, 35, 855-872. doi:10.1111/j.1540-6520.2011.00482.x
- Crowley, C., Michiels, S., & Joosen, W. (2012, October). Show me the money: The Importance of network effects for mobile application business models. In *Intelligence in Next Generation Networks, 2012*. 16th International Conference, IEEE. doi:10.1109/ICIN.2012.6376021
- Cumming, D., & Johan, S. (2013). Technology parks and entrepreneurial outcomes around the world. *International Journal of Managerial Finance*, 9, 279-293.  
doi:10.1108/IJMF-02-2013-0018
- Curran, K., & George, C. (2012). The future of web and mobile game development. *International Journal of Cloud Computing and Services Science (IJ-CLOSER)*, 1(1), 25-34. doi.org/10.11591/closer.v1i1.233

- De Cleyn, S. H., & Braet, J. (2012). Do board composition and investor type influence innovativeness in SMEs? *International Entrepreneurship and Management Journal*, 8, 285-308. doi:10.1007/s11365-010-0168-6
- de Jong, J. J. (2013). The decision to exploit opportunities for innovation: A study of high-tech small-business owners. *Entrepreneurship: Theory & Practice*, 37, 281-301. doi:10.1111/j.1540-6520.2011.00459.x
- del-Palacio, I., Zhang, X. T., & Sole, F. (2012). The capital gap for small technology companies: Public venture capital to the rescue? *Small Business Economics*, 38, 283-301. doi:10.1007/s11187-010-9275-6
- Denzin, N. K., & Lincoln, Y. S. (2011). *The Sage handbook of qualitative research* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage.
- DeTienne, D., & Cardon, M. (2012). Impact of founder experience on exit intentions. *Small Business Economics*, 38, 351-374. doi:10.1007/s11187-010-9284-5
- Dhar, S., & Varshney, U. (2011). Challenges and business models for mobile location based services and advertising. *Communications of the ACM*, 54(5), 121-129. doi:10.1145/1941487.1941515
- Dincer, C. (2011). The use of mobile advertising: Status and implications. *Marmara University Journal of the Faculty of Economic & Administrative Sciences*, 30, 341-363. Retrieved from <http://connection.ebscohost.com>
- Divsalar, M., Firouzabadi, A., Sadeghi, M., Behrooz, A., & Alavi, A. (2011). Towards the prediction of business failure via computational intelligence techniques. *Expert Systems*, 28, 209-226. doi:10.1111/j.1468-0394.2011.00580.x

- Dos Santos, B. L., Patel, P. C., & D'Souza, R. R. (2011). Venture capital funding for information technology businesses. *Journal of the Association for Information Systems, 12*(1), 57-87. Retrieved from <http://www.aisnet.org>
- Drucker, P. F. (1985). Entrepreneurial strategies. *California Management Review, 27*(2), 9-25. [doi.org/10.2307/41165126](https://doi.org/10.2307/41165126)
- Dunham, L. (2010). From rational to wise action: Recasting our theories of entrepreneurship. *Journal of Business Ethics, 92*, 513-530. [doi:10.1007/s10551-009-0170-5](https://doi.org/10.1007/s10551-009-0170-5)
- Dworkin, S. L. (2012). Sample size policy for qualitative studies using in-depth interviews. *Archives of Sexual Behavior, 41*, 1319-1320. [doi:10.1007/s10508-012-0016-6](https://doi.org/10.1007/s10508-012-0016-6)
- Edwards-Jones, A. (2014). Qualitative data analysis with NVIVO. *Journal of Education for Teaching, 40*, 193-195. [doi:10.1080/02607476.2013.866724](https://doi.org/10.1080/02607476.2013.866724)
- Easley, C. E., & Roberts, E. B. (2012). Are you experienced or are you talented?: When does innate talent versus experience explain entrepreneurial performance?. *Strategic Entrepreneurship Journal, 6*, 207-219. [doi: 10.1002/sej.1141](https://doi.org/10.1002/sej.1141)
- Ekore, J. O., & Okekeocha, O. C. (2012, June). Fear of entrepreneurship among university graduates: A psychological analysis. *International Journal of Management, 29*, 515-524. Retrieved from <http://www.theijm.com>
- El Harbi, S., Grolleau, G., & Bekir, I. (2011). Entrepreneurship and growth: What causes what? *Advances in the Study of Entrepreneurship, Innovation & Economic Growth, 22*, 73-91. [doi:10.1108/S1048-4736\(2011\)0000022007](https://doi.org/10.1108/S1048-4736(2011)0000022007)

- Elston, J. A., & Audretsch, D. B. (2011). Financing the entrepreneurial decision: An empirical approach using experimental data on risk attitudes. *Small Business Economics*, *36*, 209-222. doi:10.1007/s11187-009-9210-x
- Erlingsson, C., & Brysiewicz, P. (2013). Orientation among multiple truths: An introduction to qualitative research. *African Journal of Emergency Medicine*, *3*, 92-99. doi:10.1016/j.affem.2012.04.005
- Erman, B., Inan, A., Nagarajan, R., & Uzunalioglu, H. (2011). Mobile applications discovery: A subscriber-centric approach. *Bell Labs Technical Journal*, *15*(4), 135-148. doi:10.1002/bltj.20477
- Eunice, K., Jhih-Syuan, L., Yongjun, S., & Morrison, M. (2012). To app or not to app: Engaging consumers via branded mobile apps. *Journal of Interactive Advertising*, *13*(1), 53-65. doi:10.1080/15252019.2013.782780
- Evanschitzky, H., Eisend, M., Calantone, R. J., & Jiang, Y. (2012). Success factors of product innovation: An updated meta-analysis success factors of product innovation: An updated meta-analysis. *Journal of Product Innovation Management*, *29*(29), 21-37. doi:10.1111/j.1540-5885.2012.00964.x
- Fassin, Y., Rossem, A., & Buelens, M. (2011). Small-business owner-managers' perceptions of business ethics and CSR-related concepts. *Journal of Business Ethics*, *98*, 425-453. doi:10.1007/s10551-010-0586-y
- Fatoki, O., & Asah, F. (2011). The impact of firm and entrepreneurial characteristics on access to debt finance by SMEs in King Williams Town, South Africa.

*International Journal of Business and Management*, 6, 170-180. doi:10.5539/ijbm.v6n8p170

Favaro, J., & Pfleeger, S. (2011). Guest editors' introduction: Software as a business.

*IEEE Software*, 28(4), 22-25. doi:10.1109/MS.2011.77

Fini, R., Grimaldi, R., Marzocchi, G., & Sobrero, M. (2012). The determinants of corporate entrepreneurial intention within small and newly established firms.

*Entrepreneurship: Theory & Practice*, 36, 387-414. doi:10.1111/j.1540-6520.2010.00411.x

Finlay, L. (2012). *Debating phenomenological methods*. Boston, MA: SensePublisher.

Fisher, R., Maritz, A., & Lobo, A. (2014). Evaluating entrepreneurs' perception of

success: Development of a measurement scale. *International Journal of Entrepreneurial Behaviour & Research*, 20, 478-492. doi:10.1108/IJEBR-10-2013-0157

Fisher, W. P., & Stenner, A. J. (2011). Integrating qualitative and quantitative research approaches via the phenomenological method. *International Journal of Multiple*

*Research Approaches*, 5, 85-99. doi:10.5172/mra.2011.5.1.89

Frankish, J. S., Roberts, R. G., Coad, A., Spears, T. C., & Storey, D. J. (2012). Do

entrepreneurs really learn? Or do they just tell us that they do? *Industrial and Corporate Change*, 22(1), 73-106. doi:10.1093/icc/dts016

Freel, M., Carter, S., Tagg, S., & Mason, C. (2012). The latent demand for bank debt:

characterizing "discouraged borrowers." *Small Business Economics*, 38, 399-418. doi:10.1007/s11187-010-92836

- Friesner, D., Khayum, M., & Schibik, T. (2013). Characteristics of the information content in business sentiment surveys. *American Journal of Business*, 28(1), 19-37. doi:10.1108/19355181311314752
- Galindo, Miguel-Ángel, & Méndez-Picazo, María-Teresa. (2013). Innovation, entrepreneurship and economic growth. *Management Decision*, 51, 501-514. doi:10.1108/00251741311309625
- Garengo, P., & Biazzo, S. (2012). Unveiling strategy in SMEs through balanced scorecard implementation: A circular methodology. *Total Quality Management & Business Excellence*, 23(1), 79-102. doi:10.1080/14783363.2011.637800
- Gartner, W., & Shaver, K. (2012). Nascent entrepreneurship panel studies: Progress and challenges. *Small Business Economics*, 39, 659-665. doi:10.1007/s11187-011-9353-4
- Gill, R., & Larson, G. S. (2014). Making the ideal (local) entrepreneur: Place and the regional development of high-tech entrepreneurial identity. *Human Relations*, 67, 519-542. doi:10.1177/0018726713496829
- Gonzalez, R., Llopis, J., & Gasco, J. (2013). Information systems offshore outsourcing: Managerial conclusions from academic research. *International Entrepreneurship and Management Journal*, 9, 229-259. doi:10.1007/s11365-013-0250-y
- Grégoire, D. A., & Shepherd, D. A. (2012). Technology-market combinations and the identification of entrepreneurial opportunities: An investigation of the opportunity-individual nexus. *Academy of Management Journal*, 55, 753-785. doi:10.5465/amj.2011.0126

- Grinvald, L. (2012). Resolving the IP disconnect for small businesses. *Marquette Law Review*, 95, 1491-1550. Retrieved from <http://scholarship.law.marquette.edu/mulr/>
- Groenewegen, G., & de Langen, F. (2012). Critical success factors of the survival of start-ups with a radical innovation. *Journal of Applied Economics & Business Research*, 2, 155-171. Retrieved from <http://www.aebrjournal.org/>
- 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
- Groves, K., Vance, C., & Choi, D. (2011). Examining entrepreneurial cognition: An occupational analysis of balanced linear and nonlinear thinking and entrepreneurship success. *Journal of Small Business Management*, 49, 438-466. doi:10.1111/j.1540-627X.2011.00329.x
- Günsela, A., Açıkğözü, A., Tükel, A., & Öğüd, E. (2012). The role of flexibility on software development performance: An empirical study on software development teams. *Procedia - Social and Behavioral Sciences*, 58, 853-860. doi:10.1016/j.sbspro.2012.09.1063
- Gwebu, K.L., Wang, J., & Wang L. (2010). Does IT outsourcing deliver economic value to firms? *The Journal of Strategic Information Systems*, 19, 109–123. doi:10.1016/j.jsis.2010.05.003
- Handcock, M. S., & Gile, K. J. (2011), Comment: On the concept of snowball sampling. *Sociological Methodology*, 41: 367-371. doi:10.1111/j.1467-9531.2011.01243.x

- Hansen, D. J., Shrader, R., & Monllor, J. (2011). Defragmenting definitions of entrepreneurial opportunity. *Journal of Small Business Management*, 49, 283-304. doi:10.1111/j.1540-627X.2011.00325.x
- Hansen, J. D., Deitz, G. D., Tokman, M., Marino, L. D., & Weaver, K. M. (2011). Cross national invariance of the entrepreneurial orientation scale. *Journal of Business Venturing*, 26(1), 61-78. doi:10.1016/j.jbusvent.2009.05.003
- Harbour, J. (2011). The three “Ds” of successful performance measurement: Design, data, and display. *Performance Improvement*, 50(2), 5-12. doi:10.1002/pfi
- Hardey, M (2011). Generation C, content, creation, connections, and choice. *The Market Research Society*, 53(6), 749-770. doi:10.2501/IJMR-53-6-749-770
- Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy? *Qualitative Report*, 17, 510-517. Retrieved from <http://www.nova.edu>
- Harrits, G. (2011). More than method? A discussion of paradigm differences within mixed methods research. *Journal of Mixed Methods Research*, 5, 150-166. doi:10.1177/1558689811402506
- Headd, B. (2003). Redefining business success: Distinguishing between closure and failure. *Small Business Economics*, 21(1), 51-61. doi:10.1023/A:1024433630958
- Hlady-Rispal, M., & Jouison-Laffitte, E. (2014). Qualitative research methods and epistemological frameworks: A review of publication trends in entrepreneurship. *Journal of Small Business Management*, 52, 594-614. doi: 10.1111/jsbm.12123
- Holland, D. V., & Shepherd, D. A. (2013). Deciding to persist: Adversity, values,

- and entrepreneurs' decision policies. *Entrepreneurship: Theory & Practice*, 37, 331-358. doi:10.1111/j.1540-6520.2011.00468.x
- Holzer & Ondrus. (2011). Mobile application market: a developer's perspective. *Telematics and Informatics* 28(1), 22-31. doi:10.1016/j.tele.2010.05.006
- Hormiga, E., Batista-Canino, R., & Sánchez-Medina, A. (2011). The impact of relational capital on the success of new business start-ups. *Journal of Small Business Management*, 49, 617-638. doi:10.1111/j.1540-627X.2011.00339.x
- Hotho, S., & Champion, K. (2011). Small businesses in the new creative Industries: Innovation as a people management challenge. *Management Decision*, 49(1), 29-54. doi:10.1108/00251741111094428
- Hsee, C. K., & Zhang, J. (2010). General evaluability theory. *Perspectives on Psychological Science*, 5, 343–355. doi:10.1177/1745691610374586
- Hughes, D., Rowe, M., Batey, M., & Lee, A. (2012). A tale of two sites: Twitter vs. Facebook and the personality predictors of social media usage. *Computers in Human Behavior*, 28, 561-569. doi:10.1016/j.chb.2011.11.001
- Hunter, M. (2012). On some of the misconceptions about entrepreneurship. *Economics, Management & Financial Markets*, 7(2), 55-104. Retrieved from [www.ceeol.com](http://www.ceeol.com)
- Hurst, E., Pugsley, B. W., Haltiwanger, J., & Looney, A. (2011). What do small businesses do? *Brookings Papers on Economic Activity*, 43(2) 73-142. doi:10.1353/eca.2011.0017

- Hutchison, A., Johnston, L., & Breckon J. (2010). Using QSR-NVivo to facilitate the development of grounded theory project: An account of worked example. *International Journal of Social Research Methodology*, 13, 283-302.  
doi:10.1080/13645570902996301
- Hyung-Min, K. (2013). Mobile media technology and popular mobile games in contemporary society. *International Journal of Mobile Marketing*, 8(2), 42-54.  
Retrieved from <http://connection.ebscohost.com>
- Ihantola, E., & Kihn, L. (2011). Threats to validity and reliability in mixed methods accounting research. *Qualitative Research in Accounting and Management*, 8, 39-58. doi:10.1108/11766091111124694
- Iphofen, R. (2011). Ethical decision making in qualitative research. *Qualitative Research*, 11, 443-446. doi:10.1177/1468794111404330
- Islam, M., Khan, M., Obaidullah, A., & Alam, M. (2011). Effect of entrepreneur and firm characteristics on the business success of small and medium enterprises (SMEs) in Bangladesh. *International Journal of Business and Management*, 6, 289-299.  
Retrieved from <http://www.ccsenet.org/journal/index.php/ijbm/article/view/9722>
- Ishak, N., & Bakar, A. (2012). Qualitative data management and analysis using NVivo: An approach used to examine leadership qualities among student leaders. *Education Resource Journal*, 2(3), 94-103. Retrieved from <http://www.resjournals.com/ERJ/Index.htm>

- Ivan, I., Zamfiroiu, A., & Palaghita, D. (2013). Typologies of mobile applications. *Journal of Information Systems & Operations Management*, 7(1), 1-7. Retrieved from <http://www.rebe.rau.ro/RePEc/rau/jisomg>
- Jabeur, N., Zeadally, S., & Sayed, B. (2013). Mobile social networking applications. *Communications of the ACM*, 56(3), 71-79. doi:10.1145/2428556.2428573
- Jardon, C. M., & Martos, M. S. (2012). Intellectual capital as competitive advantage in emerging clusters in Latin America. *Journal of Intellectual Capital*, 13, 462-481. doi:10.1108/14691931211276098
- Jarvenpaa, S. L., & Lang, K. R. (2005). Managing the paradoxes of mobile technology. *Information Systems Management*, 22(4), 7-23. doi:10.1201/1078.10580530/45520.22.4.20050901/90026.2
- Jasra, J., Khan, M., Hunjra, A., Rehman, R., & Azam, R. (2011). Determinants of business success of small and medium enterprises. *International Journal of Business and Social Science*, 2, 274-280. Retrieved from <http://www.ijbssnet.com>
- Johansson, J., Malmström, M., Chroner, D., Styven, M., Engström, A., Bergvall Kåreborn, B. (2012). Business models at work in the mobile service sector, *iBusiness*, 4(1), 84-92. doi:10.4236/ib.2012.41010
- Jones, R., & Rowley, J. (2011). Entrepreneurial marketing in small businesses: A conceptual exploration. *International Small Business Journal*, 29(1), 25-36. doi:10.1177/0266242610369743
- Judd, R., & McNeil, R. D. (2012). Large firms & small firms: Job quality, innovation and economic development. *Journal of American Business Review*, Cambridge, 1,

157-164. Retrieved from <http://www.jaabc.com/journal.htm>

- Jung, E., Baek, C., & Lee, J. (2012). Product survival analysis for the App Store. *Marketing Letters*, 23, 929-941. doi:10.1007/s11002-012-9207-0
- Juriscic, B. & Azevedo, A. (2011). Building customer-brand relationships in the mobile communications market: The role of brand tribalism and brand reputation. *Journal of Brand Management*, 18, 349-366. doi:10.1057/bm.2010.37
- 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(1), 27-42. doi:10.1108/14626001111106415
- Katre, A., & Salipante, P. (2012). Start-up social ventures: Blending fine grained behaviors from two institutions for entrepreneurial success. *Entrepreneurship: Theory & Practice*, 36, 967-994. doi:10.1111/j.1540-6520.2012.00536.x
- Kawakami, T., MacLachlan, D. L., & Stringfellow, A. (2012). New venture performance in China, Japan, and the United States: The impact of formalized market information processes. *Journal of Product Innovation Management*, 29, 275-287. doi:10.1111/j.1540-5885.2011.00895.x
- Kessler, A., Korunka, C., Frank, H., & Luger, M. (2012). Predicting founding success and new venture survival: A longitudinal nascent entrepreneurship approach. *Journal of Enterprising Culture*, 20(1), 25-55. doi:10.1142/S0218495812500021
- Khare, A., Labrecque L., & Asare, A. K. (2011). The assimilative and contrastive effects of word-of-mouth volume: An experimental examination of online consumer ratings. *Journal of Retailing*, 87, 111-126. doi:10.1016/j.jretai.2011.01.005

- Kim, K., Proctor, R. W., & Salvendy, G. (2012). The relation between usability and product success in cell phones. *Behaviour & Information Technology*, *31*, 969-982. doi:10.1080/0144929X.2011.596997
- Kim, N., Im, S., & Slater, S. F. (2013). Impact of knowledge type and strategic orientation on new product creativity and advantage in high-technology firms. *Journal of Product Innovation Management*, *30*, 136-153. doi: 10.1111/j.1540-5885.2012.00992.x
- Kiviluoto, N. (2013). Growth as evidence of firm success: Myth or reality? *Entrepreneurship & Regional Development*, *25*, 569-586. doi:10.1080/08985626.2013.814716
- Klotz, A. C., Hmieleski, K. M., Bradley, B. H., & Busenitz, L. W. (2014). New venture teams a review of the literature and roadmap for future research. *Journal of Management*, *40*, 226-255. doi:10.1177/0149206313493325
- König, H., Gäbler, J., Klauck, R., Pink, M., & Sprejz, M. (2013). uBeeMe - A platform for mobile collaborative applications. *PIK - Praxis Der Informationsverarbeitung Und Kommunikation*, *36*(1), 43. doi:10.1515/pik-2012-0058
- Kourouthanassis, P. E., & Giaglis, G. M. (2012). Introduction to the special issue mobile commerce: The past, present, and future of mobile commerce research. *International Journal of Electronic Commerce*, *16*(4), 5-18. doi.org/10.2753/JEC1086-4415160401

- Kraus, S., Harms, R., & Fink, M. (2010). Entrepreneurial marketing: Moving beyond marketing in new ventures. *International Journal of Entrepreneurship and Innovation Management*, 11(1), 19-34. doi:10.1016/j.sbspro.2012.09.1065
- Kuckertz, A., & Wagner, M. (2010). The influence of sustainability orientation on entrepreneurial intentions - Investigating the role of business experience. *Journal of Business Venturing*, 25, 524-539. doi:10.1016/j.jbusvent.2009.09.001
- Laforet, S. (2011). A framework of organizational innovation and outcomes in SMEs. *International Journal of Entrepreneurial Behaviour & Research*, 17, 380-408. doi:10.1108/13552551111139638
- Lee, S., Hwang, J., & Hyun, M. (2010). Mobile services as a marketing tool to enhance restaurant revenue: An exploratory study. *Journal of Hospitality Marketing & Management*, 19, 464-479. doi:10.1080/19368623.2010.482829
- Lee, S., Noh, S., & Kim, H. (2013). A mixed methods approach to electronic word-of-mouth in the open-market context. *International Journal of Information Management*, 33, 687-696. doi:10.1016/j.injinfomgt2013.03.002
- Lee, S., & Yamakawa, Y. (2012). Forgiving features for failed entrepreneurs vs. cost of financing in bankruptcies. *Management International Review*, 52(1), 49-79. doi:10.1007/s11575-011-0112-1
- Leech, N. L., & Onwuegbuzie, A. J. (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.
- Leitner, L. M., & Hayes, K. J. (2011). Rigorous qualitative research. *PsycCRITIQUES* 56(3), 97-100. doi:10.1037/a0024989
- Li, M., Jiang, Q., Tan, C., & Wei, K. (2014). Enhancing user-game engagement through software gaming elements. *Journal of Management Information Systems*, 30, 115-150. doi:10.2753/MIS0742-1222300405
- Lim, J., Stratopoulos, T. C., & Wirjanto, T. S. (2013). Sustainability of a firm's reputation for information technology capability: The role of senior IT executives. *Journal of Management Information Systems*, 30(1), 57-96. doi:10.2753/MIS0742-1222300102
- Lin, Y. H., Fang, C. H., & Hsu, C. L. (2014). Determining uses and gratifications for mobile phone apps. In *Future Information Technology*, 309, 661-668. doi: 10.1007/978-3-642-55038-6\_103
- Lindgren, P. (2012). Business model innovation leadership: How do SMEs strategically lead business model innovation? *International Journal of Business and Management*, 7, 53-66. doi:10.5539/ijbm.v7n14p53
- Litvin, E. B., Abrantes, A. M., & Brown, R. A. (2013). Computer and mobile technology based interventions for substance use disorders: An organizing framework. *Addictive Behaviors*, 38(3), 1747-56. doi:10.1016/j.addbeh.2012.09.003

- Louart, P., & Martin, A. (2012). Small and medium-sized enterprises and their attitudes towards internationalization and innovation. *International Business Research*, 5(6), 14-23. doi:10.5539/ibr.v5n6p14
- Lussier, R. N., & Halabi, C. E. (2010). A three-country comparison of the business success versus failure prediction model. *Journal of Small Business Management*, 48, 360-377. doi:10.1111/j.1540-627X.2010.00298.x
- Maceli, K. M. (2011). Changes in the development process of mobile phone applications bring opportunities for developers and more options to consumers. *Journal of Business Case Studies*, 7(3), 31-36. Retrieved from <http://journals.cluteonline.com/>
- Makhbul, Z., & Hasun, F. (2011). Entrepreneurial success: An Exploratory study among entrepreneurs. *International Journal of Business & Management*, 6, 116-125. Retrieved from <http://www.ccsenet.org/journal/index.php/ijbm/index>
- Manolova, T. S., Brush, C. G., Edelman, L. F., & Shaver, K. G. (2012, January). One size does not fit all: Entrepreneurial expectancies and growth intentions of US women and men nascent entrepreneurs. *Entrepreneurship & Regional Development*, 24(1/2), 7-27. doi:10.1080/08985626.2012.637344
- Marchand, A., & Hennig-Thurau, T. (2013). Value creation in the video game industry: Industry economics, consumer benefits, and research opportunities. *Journal of Interactive Marketing*, 27, 141-157. doi:10.1016/j.intmar.2013.05.001

- Marion, T. J., Dunlap, D. R., & Friar, J. H. (2012). The university entrepreneur: A census and survey of attributes and outcomes. *R&D Management*, *42*, 401-419.  
doi:10.1111/j.1467-9310.2012.00691.x
- Marlow, S., & McAdam, M. (2013). Gender and entrepreneurship: advancing debate and challenging myths; exploring the mystery of the under-performing female entrepreneur. *International Journal of Entrepreneurial Behaviour & Research*, *19*, 114-124. doi:10.1108/13552551311299288
- Marom, S., & Lussier, R. N. (2014). A business success versus failure prediction model for small businesses in Israel. *Business and Economic Research*, *4*(2), 63-81. doi:10.5296/ber.v4i2.5997
- Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research* (5th ed.). Thousand Oaks, CA: Sage.
- Mason, C., & Brown, R. (2013). Creating good public policy to support high-growth firms. *Small Business Economics*, *40*, 211-225. doi:10.1007/s11187-011-9369-9
- Mathewa, S. K., & Chenb, Y. (2013). Achieving offshore software development success: An empirical analysis of risk mitigation through relational norms. *The Journal of Strategic Information Systems*, *22*, 298-314.  
doi:10.1016/j.jsis.2013.03.001
- Maw-Der, F. (2011). Emotions and entrepreneurial opportunity evaluation. *Entrepreneurship: Theory & Practice*, *35*, 375-393. doi:10.1111/j.1540-6520.2009.00357.x
- McDermott, A., Kidney, R., & Flood, P. (2011). Understanding leader development:

- Learning from leaders. *Leadership & Organization Development Journal*, 32, 358-378. doi:10.1108/01437731111134643
- Melnik, T. (2012). Need an app? Crowdfsource!. *Journal of Health Care Compliance*, 14(1), 53-56. Retrieved from <http://www.aspenpublishers.com>
- Miller, T. L., Wesley, C. L., & Williams, D. E. (2012). Educating the minds of caring hearts: Comparing the views of practitioners and educators on the importance of social entrepreneurship competencies. *Academy of Management Learning & Education*, 11, 349-370. doi:10.5465/amle.2011.0017
- Ming-Chu, Y. (2013). The influence of high-performance human resource practices on entrepreneurial performance: the perspective of entrepreneurial theory. *International Journal of Organizational Innovation*, 6(1), 15-33. doi:10.1177/0149206313478184
- Mitchelmore, S., & Rowley, J. (2013). Growth and planning strategies within women-led SMEs. *Management Decision*, 51(1), 83-96. doi.org/10.1108/00251741311291328
- Mojica, I. J., Adams, B., Nagappan, M., Dienst, S., Berger, T., & Hassan, A. E. (2014). A large-scale empirical study on software reuse in mobile apps. *IEEE Software*, 31(2), 78-86. doi:10.1109/MS.2013.142
- Mortensen, L., & Hollowell, J. J. (2009, August 23). *Ethnographies and archaeologies: Iterations of the past*. Gainesville, FL: University Press of Florida.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

- Müller, R. M., Kijl, B., & Martens, J. J. (2011). A comparison of inter-organizational business models of mobile app stores: There is more than open vs. closed. *Journal of Theoretical & Applied Electronic Commerce Research*, 6(2), 63-76.  
doi:10.4067/S0718-18762011000200007
- Muñoz-Bullón, F., & Sanchez-Bueno, M. J. (2011). Is there new evidence to show that product and international diversification influence SMEs' performance? *EuroMed Journal of Business*, 6(1), 63-76. doi:10.1108/14502191111130316
- Muskat, M., Blackman, D., & Muskat, B. (2013, January). Mixed methods: Combining expert interviews, cross-impact analysis and scenario development. *Electronic Journal of Business Research Methods*, 10(1), 9-21. doi:10.2139/ssrn.2202179
- Nambisan, S., & Baron, R. A. (2013). Entrepreneurship in innovation ecosystems: Entrepreneurs' self-regulatory processes and their implications for new venture success. *Entrepreneurship: Theory & Practice*, 37, 1071-1097.  
doi:10.1111/j.1540-6520.2012.00519.x
- Navis, C., & Glynn, M. A. (2011). Legitimate distinctiveness and the entrepreneurial identity: Influence on investor judgments of new venture plausibility. *Academy of Management Review*, 36, 479-499. doi:10.5465/amr.2011.61031809
- Neumark, D., Wall, B., & Junfu, Z. (2011). Do small businesses create more jobs? New evidence for the United States from the national establishment time series. *Review of Economics & Statistics*, 93, 16-29. doi:10.1162/REST\_a\_00060

- Newbert, S. (2012). Marketing amid the uncertainty of the social sector: Do social entrepreneurs follow best marketing practices? *Journal of Public Policy & Marketing*, 31(1), 75-90. doi:10.1509/jppm.11.038
- Nicolaou, A. (2013). Best practices on the move: building Web apps for mobile devices. *Communications of the ACM*, 56(8), 45-51. doi:10.1145/2492007.2492023
- O'Donnell, A. (2011). Small firm marketing: Synthesizing and supporting received wisdom. *Journal of Small Business and Enterprise Development*, 18, 781-805. doi:10.1108/14626001111179802
- Ogden, J., & Cornwell, D. (2010). The role of topic, interviewee, and question in predicting rich interview data in the field of health research. *Sociology of Health and Illness*, 32, 1059-1071. doi:10.1111/j.1467-9566.2010.01272.x
- Onishi, H., & Manchanda, P. (2012). Marketing activity, blogging, and sales. *International Journal of Research in Marketing*, 29, 221-234. doi:10.1016/j.ijresmar.2011.11.003
- O'Reilly, M., & Parker, N. (2013). Unsatisfactory saturation: a critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13, 190-197. doi:10.1177/1468794112446106
- Okazaki, S., & Mendez, F. (2013). Perceived ubiquity in mobile services. *Journal of Interactive Marketing*, 27, 98-111. doi:10.1016/j.intmar.2012.10.001
- Pai-Ling, Y., Davis, J., & Muzyrya, Y. (2014). Entrepreneurial Innovation: Killer Apps in the iPhone Ecosystem. *American Economic Review*, 104, 255-259. doi:10.2139/ssrn.2403624

- Palo, T., & Tähtinen, J. (2013). Networked business model development for emerging technology-based services. *Industrial Marketing Management*, 42, 773-782.  
doi:10.1016/j.indmarman.2013.05.015
- Pardo-del-Val, M. (2010). Services supporting female entrepreneurs. *Service Industries Journal*, 30, 1479-1498. doi:10.1080/02642060802626840
- Patzelt, H., & Shepherd, D. A. (2011). Recognizing opportunities for sustainable development. *Entrepreneurship: Theory & Practice*, 35, 631-652.  
doi:10.1111/j.1540-6520.2010.00386.x
- Pavaloaia, V. (2013). Methodology approaches regarding classic versus mobile enterprise application development. *Informatica Economica*, 17(2), 59-72.  
doi:10.12948/issn14531305/17.2.2013.05
- Pentina, I., Zhang, L., & Basmanova, O. (2013). Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter. *Computers in Human Behavior*, 29, 1546-1555. doi:10.106/j.chb.2013.01.045
- Penttinen, E., Rossi, M., & Virpi, K. T. (2010). Mobile games: Analyzing the needs and values of the consumers. *JITTA: Journal of Information Technology Theory and Application*, 11(1), 5-21. Retrieved from <http://aisel.aisnet.org>
- Petti, C., & Zhang, S. (2013). Technological entrepreneurship and absorptive capacity in guangdong technology firms. *Measuring Business Excellence*, 17(2), 61-71.  
doi:10.1108/13683041311329447

- Petrova, K., & Wang, B. (2011). Location-based services deployment and demand: a roadmap model. *Electronic Commerce Research, 11*(1), 5-29.  
doi:10.1007/s10660-010-9068-7
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 1: Introducing the philosophy of qualitative research. *Manual Therapy, 17*, 267-274.  
doi:10.1016/j.math.2012.03.006
- Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual Therapy, 17*, 378-384. doi:10.1016/j.math.2012.03.004
- Plonsky, L., & Gass, S. (2011). Quantitative research methods, study quality, and outcomes: The case of interaction research. *Language Learning, 61*, 325-366.  
doi:10.1111/j.1467-9922.2011.00640.x
- Phillip, M. (2011). Factors affecting business success of small & medium enterprises (SMEs). *Amity Global Business Review, 6*, 118-136. Retrieved from <http://www.amity.edu/>
- 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
- Prowse, M., & Camfield, L. (2013). Improving the quality of development assistance: What role for qualitative methods in randomized experiments? *Progress in Development Studies, 13*(1), 51-61. doi:10.1177/146499341201300104

- Qu, S. Q., & Dumay, J. (2011). The qualitative research interview. *Qualitative Research in Accounting & Management*, 8, 238-264. doi:10.1108/11766091111162070
- Rajput, A. (2011). Impact of innovation and resources in entrepreneurial success: A case study of Pakistani SMEs. *Interdisciplinary Journal of Contemporary Research InBusiness*, 2, 606-636. Retrieved from <http://www.ijcrb.webs.com/archives.htm>
- Rajala, R., Rossi, M., Tuunainen, V., & Vihinen, J. (2007). Revenue logics of mobile entertainment software observations from companies producing mobile games. *Journal of Theoretical & Applied Electronic Commerce Research*, 2(2), 34-47. Retrieved from [www.jtaer.com](http://www.jtaer.com)
- Renko, M. (2013). Early challenges of nascent social entrepreneurs. *Entrepreneurship: Theory & Practice*, 37, 1045-1069. doi:10.1111/j.1540-6520.2012.00522.x
- Renko, M., Shrader, R. C., & Simon, M. (2012). Perception of entrepreneurial opportunity: A general framework. *Management Decision*, 50, 1233-1251. doi:10.1108/00251741211246987
- Resnik, D., & Shamoo, A. (2011). The Singapore statement on research integrity. *Accountability in Research*, 18, 71-75. doi:10.1080/08989621.2011.557296
- Reynolds, E. B., & Samel, H. (2013). Manufacturing startups. *Mechanical Engineering*, 135(11), 36-41. Retrieved from <http://www.memagazine.org/>
- Ritchie, C. (2011). Technology enabled sponsorship strategies. *Journal of Sponsorship*, 4, 105-115. Retrieved from <http://henrystewart.metapress.com/>

- Rodgers, C. (2010). Sustainable entrepreneurship in SMEs: A case study analysis. *Corporate Social Responsibility & Environmental Management, 17*, 125-132.  
doi:10.1002/csr.223
- Roulston, K. (2011). Working through challenges in doing interview research. *International Journal of Qualitative Methods, 10*, 348-366. Retrieved from <http://ejournals.library.ualberta.ca/index.php/IJQM>
- Rudaina, O. Y. (2012). Factors affecting consumer attitudes towards mobile marketing. *Journal of Database Marketing & Customer Strategy Management, 19*, 147-162.  
doi:10.1057/dbm.2012.20
- Savage, N. (2013). Stopping the leaks. *Communications of the ACM, 56*(1), 19-21.  
doi:10.1145/2398356.2398363
- Ščaulovs, D., & Gaile-Sarkane, E. (2010). Electronic tools for company's presence, identification and marketing in e-environment: Theory and practice. *Economics & Management, 15*, 775-782. Retrieved from <https://ortus.rtu.lv/science/en/publications>
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. *Business Strategy & the Environment, 20*, 222-237. doi:10.1002/bse.682
- Scharmer, C. O., & Kaeufer, K. (2010). In front of the blank canvas: Sensing emerging 221 futures. *Journal of Business Strategy, 31*(4), 21-29.  
doi:10.1108/02756661011055159
- Schmidt, S., & Ralph, D. L. (2011). Social media: More available marketing tools. *The*

- Business Review*, 18(2), 37-43. Retrieved from <http://www.bbb.org/us/>
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle*. Cambridge, MA: Harvard University Press.
- Schumpeter, J. A. (1942). *Capitalism, socialism, and democracy*. New York, NY: Harper.
- Schumpeter, J. A. (1949). *Economic theory and entrepreneurial history—Change and the entrepreneur, postulates and patterns for entrepreneurial history*. Cambridge, MA: Harvard University Press.
- Schumpeter, J. A. (1983). *The theory of economic development* (R. Opie, Trans.). New Brunswick, NJ: Transaction Publishers. (Original work published 1934)
- Scott, L. A. (2012). Supporting rural entrepreneurship. *Economic Development Journal*, 11(4), 19-25. Retrieved from: <http://www.iedconline.org>
- Seal, K. C. (2010). A framework for understanding mobile value offering through multi-country studies. *Handbook of Research on Mobile Marketing Management*. 129-156. doi:10.4018/978-1-60566-074-5.ch008
- Semrau, T., & Werner, A. (2012). The two sides of the story: Network investments and new venture creation. *Journal of Small Business Management*, 50, 159-180. doi:10.1111/j.1540-627X.2011.00348.x
- Serrano, N., Hernantes, J., & Gallardo, G. (2013). Mobile Web Apps. *IEEE Software*, 30(5), 22-27. doi:10.1109/MS.2013.111

- Shaw, I. (2008). Ethics and the practice of qualitative research. *Qualitative Social Work*, 7, 400-414. doi:10.1177/1473325008097137
- Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed.” *Entrepreneurship: Theory & Practice*, 35, 137-163. doi:10.1111/j.1540-6520.2010.00426.x
- Siegel, D. S., & Wessner, C. (2012). Universities and the success of entrepreneurial ventures: Evidence from the small business innovation research program. *The Journal of Technology Transfer*, 37, 404-415. doi:10.1007/s10961-010-9186-3
- Singh, S., & Sonnenburg, S. (2012). Brand performances in social media. *Journal of Interactive Marketing*, 26, 189-197. doi:10.1016/j.intmar.2012.04.001
- Smith, J. A. (2015). *Qualitative psychology: A practical guide to research methods*. London, England: Sage.
- Stam, E., Thurik, R., & van der Zwan, P. (2010). Entrepreneurial exit in real and imagined markets. *Industrial & Corporate Change*, 19, 1109-1139. doi:10.1093/icc/dtp047
- Storey, R. (2011). Optimism and chance: The elephants in the entrepreneurship room. *International Small Business Journal*, 29, 303-321. doi:10.1177/0266242611403871
- Suri, H. (2011). Purposeful sampling in qualitative research synthesis. *Qualitative okResearch Journal*, 11(2), 63-75. doi:10.3316/QRJ1102063

- 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>
- Taylor, D. G., Voelker, T. A., & Pentina, I. (2011). Mobile application adoption by young adults: A social network perspective. *International Journal of Mobile Marketing*, 6(2), 60-70. Retrieved from <http://www.mmaglobal.com/>
- Teng, H. S. S., Bhatia, G. S., & Anwar, S. (2011). A success versus failure prediction model for small businesses in Singapore. *American Journal of Business*, 26(1), 50-64. doi:10.1108/19355181111124106
- Thébaud, S. (2010). Gender and entrepreneurship as a career choice: Do self-assessments of ability matter? *Social Psychology Quarterly*, 73, 288-304. doi:10.1177/0190272510377882
- Tiarawut, S. (2013). Mobile technology: Opportunity for entrepreneurship. *Wireless Personal Communications*, 69, 1025-1031. doi:10.1007/s11277-013-1062-7
- 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
- Ting-Peng, L., & Yi-Hsuan, Y. (2011). Effect of use contexts on the continuous use of mobile services: The case of mobile games. *Personal & Ubiquitous Computing*, 15, 187-196. doi:10.1007/s00779-010-0300-1

- Trotter, R. T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive Medicine*, *55*, 398-400. doi:10.1016/j.ypmed.2012.07.003
- Tundui, C., & Tundui, H. (2012). Survival, growth strategies and performance of women owned micro and small businesses in Tanzania. *International Journal of Business and Management*, *7*, 143-155. doi:10.5539/ijbm.v7n8p143
- Ucbasaran, D., Shepherd, D. A., Lockett, A., & Lyon, S. J. (2013). Life after business failure: The process and consequences of business failure for entrepreneurs. *Journal of Management*, *39*, 163-202. doi:10.1177/0149206312457823
- Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, *26*, 341-358. doi:10.1016/j.jbusvent.2009.09.004
- Unhelkar, B., & Murugesan, S. (2010). The enterprise mobile applications development framework. *IT Professional Magazine*, *12*(3), 33-39. doi:10.1109/MITP.2010.45
- U.S. Bureau of Labor Statistics. (2012). *The quarterly census of employment and wages*. Retrieved from <http://www.bls.gov/opub/mlr/2012/03/art4full.pdf>
- U.S. Small Business Administration. (n.d.). *Start-ups-high growth business*. Retrieved from <http://www.sba.gov/content/start-ups-high-growth-businesses>
- U.S. Census Bureau. (2012). *Business dynamics statistics briefing: Where have all the young firms gone?* Retrieved from [http://www.census.gov/ces/pdf/BDS\\_StatBrief6\\_Young\\_Firms.pdf](http://www.census.gov/ces/pdf/BDS_StatBrief6_Young_Firms.pdf)

- U.S. Small Business Administration. (2012, September). *Frequently asked questions*. [http://www.sba.gov/sites/default/files/FAQ\\_Sept\\_2012.pdf](http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf)
- U.S. Small Business Administration (2012, March). *Start-up Rates*. Retrieved from <http://www.sba.gov/sites/default/files/Start-up%20Rates.pdf>
- U.S. Small Business Administration. (2013). *What is an Entrepreneur?* Retrieved from <http://www.sba.gov/content/what-entrepreneur>
- U.S. Small Business Administration. (2014, March). *Frequently asked questions*. [http://www.sba.gov/sites/default/files/FAQ\\_March\\_2014\\_0.pdf](http://www.sba.gov/sites/default/files/FAQ_March_2014_0.pdf)
- Vaaler, P. M., & McNamara, G. (2010). Are technology-intensive industries more dynamically competitive? No and yes. *Organization Science*, 21, 271-289, 307-308. doi:10.1287/orsc.1080.0392
- Vallack, J. (2010). Subtextual phenomenology: A methodology for valid, first-person research. *Electronic Journal of Business Research Methods*, 8, 106-118. Retrieved from <http://ejbrm.com>
- van Gelderen, M., Thurik, R., & Patel, P. (2011). Encountered problems and outcome status in nascent entrepreneurship. *Journal of Small Business Management*, 49(1), 71-91. doi:10.1111/j.1540-627X.2010.00315.x
- Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in entrepreneurship, firm emergence and growth*, 3, 119-138. doi:10.1177/014920630302900304
- Voas, J., Michael, J., & van Genuchten, M. (2012). The mobile software app takeover. *IEEE Software*, 29(4), 25-27. doi:10.1109/MS.2012.81

- Wahyuni, D. (2012), The research design maze: understanding paradigms, cases, methods and methodologies, *Journal of Applied Management Accounting Research*, 10(1), 69-80. Retrieved from <http://ssrn.com/abstract=2103082>
- Wang, H., Wuebker, R., Han, S., & Ensley, M. (2012). Strategic alliances by venture capital backed firms: An empirical examination. *Small Business Economics*, 38, 179-196. doi:10.1007/s11187-009-9247-x
- Wang, J., & Chang, C. H. (2013). How online social ties and product-related risks influence purchase intentions: A Facebook experiment. *Electronic Commerce Research and Applications*, (In Press). doi:10.1016/j.elerap.2013.03.003
- Weber, R. M., & Horn, B. D. (2012). Mobile office-2012 edition. *Journal of Financial Service Professionals*, 66(2), 36-38. Retrieved from <http://www.financialpro.org>
- Wei-Han Tan, G., Keng-Boon, O., Jia-Jia, S., & Phusavat, K. (2012, March). Determinants of mobile learning adoption: An empirical analysis. *Journal of Computer Information Systems*, 52(3), 82-91. Retrieved from <http://connection.ebscohost.com>
- Wennberg, K., & DeTienne, D. R. (2014). What do we really mean when we talk about “exit”? A critical review of research on entrepreneurial exit. *International Small Business Journal*, 32(1), 4-16. doi: 10.1177/0266242613517126
- Westerman, M., & Yanchar, S. (2011). Changing the terms of the debate: Quantitative methods in explicitly interpretive research. *Theory & Psychology*, 21, 139-154. doi:10.1177/0959354310393565
- White, J., & Drew, S. (2011). Collecting data or creating meaning? *Qualitative Research*

*Journal*, 11(1), 3-12. doi:10.3316/QRJ1101003

- Wilson, J., Chesher, C., Hjorth, L., & Richardson, I. (2011). Distractedly engaged: Mobile gaming and convergent mobile media. *Convergence. The International Journal of Research into New Media Technologies*, 17, 351-355. doi:10.1177/1354856511414351
- Xiao, X., Xiaodong, W., Wei, W., & Xingming, Z. (2013). Measuring the mobile app market: A complex network approach. *Information Technology Journal*, 12, 2090-2100. doi:10.3923/itj.2013.2090.2100
- Xu, K., Li, J., & Song, Y. (2012). Identifying valuable customers on social networking sites for profit maximization. *Expert Systems with Applications*, 39, 13009-13018. doi:10.1016/j.eswa.2012.05.098
- Yagi, N., & Kleinberg, J. (2011). Boundary work: An interpretive ethnographic perspective on negotiating and leveraging cross-cultural identity. *Journal of International Business Studies*, 42, 629-653. doi:10.1057/jibs.2011.10
- Yallapragada, R. R., & Bhuiyan, M. (2011). Small business entrepreneurships in the United States. *Journal of Applied Business Research*, 27(6), 117-122. Retrieved from <http://journals.cluteonline.com/index.php/JABR>
- Yan, Z., Zhang, P., & Deng, R. H. (2012). TruBeRepec: A trust-behavior-based reputation and recommender system for mobile applications. *Personal and Ubiquitous Computing*, 16, 485-506. doi:10.1007/s00779-011-0420-2

- Yang, H. (2013, June). Bon appetit for apps: young American consumer's acceptance of mobile applications. *Journal of Computer Information Systems*, 53, 85-95.  
Retrieved from <http://connection.ebscohost.com>
- Yao, H., & Shen, W. (2011). The construction and analysis of cause model for the personal qualities of women entrepreneurs. *Canadian Social Science*, 7, 104-108.  
doi:10.3968/j.css.1923669720110704.215
- Yin, P. L., Davis, J. P., & Muzyrya, Y. (2014). Entrepreneurial innovation: Killer apps in the iPhone ecosystem. *The American Economic Review*, 104, 255-259.  
doi.org/10.1257/aer.104.5.255
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.
- Yong, H., Xizhu, M., Xiangzhou, Z., Yuran, Z., Jianfeng, D., & Kang, X. (2012). Intelligent analysis model for outsourced software project risk using constraint-based Bayesian network. *Journal of Software (1796217X)*, 7, 440-449.  
doi:10.4304/jsw.7.2.440-449
- Zahra, S. A., & Wright, M. (2011). Entrepreneurship's next act. *Academy of Management Perspectives*, 25(4), 67-83. doi:10.5465/amp.2010.0149
- Zamfiroiu, A. (2012, December). Integrability and interoperability of mobile applications. *Informatica Economica*, 16, 150-158. Retrieved from <http://www.revistaie.ase.ro/>

Zhou, T. (2013). Understanding the effect of flow on user adoption of mobile games.

*Personal and Ubiquitous Computing*, 17, 741-748. doi:10.1007/s00779-012-

0613-3

## Appendix A: Waller Study Consent Form

Please consider taking part in a research study to determine the entrepreneur practices of successful mobile application start-up businesses. The researcher is inviting entrepreneurs who have been startup companies that have been in business for a minimum of 3 years to participate in the study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part.

The researcher for this study is Talaya Waller, who is a doctoral student at Walden University.

### **Background Information:**

The purpose of this qualitative phenomenological study was to explore the marketing strategies mobile game entrepreneurs use to market their mobile applications successfully.

### **Criteria:**

Signing this form confirms that you meet the criteria for participating in this study.

- You are an entrepreneur of a mobile game application,
- Your business is located in northern California,
- Your mobile application business has created a profit, and
- You are 18 years old or older.

### **Procedures:**

If you agree to be in this study:

- Download a free WebEx Conferencing Software to your computer or Tablet that should take approximately five minutes. WebEx is an online program that enables users to conduct video interviews. WebEx is also useful when recording interviews.
- Answer the interview questions, which should take approximately 30 minutes to an hour. Be able to provide feedback on both the accuracy of my transcripts and interpretation within the context of the research question, which is known as member checking.

Here are some sample questions:

1. How do you define success as a mobile game application entrepreneur?

2. What would you say are some risks that mobile game application entrepreneurs should expect to experience prior to achieving mobile application business success?

**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 your organization 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 during or after the study. You may stop at any time.

**Risks and Benefits of Being in the Study:**

Being in this type of study involves the minor discomforts, such as stress of daily life. Being in this study would not pose risk to your safety or wellbeing. By participating in this study, you are adding to research that could help leaders create more effective business models for diverse work environments. By participating in this study, you will receive a copy of the findings upon the completion of the study.

**Privacy:**

Any information you provide is confidential. Please respond to the interview questions in a private setting I will not include your name or personal information that could identify you in the study reports. The confidential data will be kept in an electronic file on two different password protected computers. Data will only be accessible by the researcher and authorized Walden personnel. The recording of any information will be destroyed immediately after the transcription. Data will be stored for five years in two separate locations. Data is stored for a period of at least five years, as required by Walden University.

**Contacts and Questions:**

You may ask any questions you have now. If you have questions later, you may contact the researcher via telephone at [REDACTED] or email at Talaya.waller@waldenu.edu. If you want to talk privately about your rights as a participant, you can reach Dr. Leilani Endicott at [REDACTED]. Walden University's approval number for this study is 03-04-15-0289720 and it expires on March 3, 2016.

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 of this letter.

## Appendix B: Waller Study Pilot Consent Form

Please consider taking part in a pilot to determine the entrepreneur practices of successful mobile application start-up businesses. The researcher is inviting entrepreneurs who have been startup companies that have been in business for a minimum of 3 years to participate in the study. This form is part of a process called “informed consent” to allow you to understand this study before deciding whether to take part. The purpose of the pilot is to ensure that the questions are appropriate, reliable, and necessary.

The researcher for this study is Talaya Waller, who is a doctoral student at Walden University.

### **Background Information:**

The purpose of this qualitative phenomenological study was to explore the strategies that mobile game entrepreneurs use to market their mobile applications successfully.

### **Criteria:**

Signing this form confirms that you meet the criteria for participating in this study.

- You are an entrepreneur of a mobile game application,
- Your business is located in northern California,
- Your mobile application business has created a profit, and
- You are 18 years old or older.

### **Procedures:**

If you agree to be in this study:

- Download a free WebEx Conferencing Software to your computer or Tablet that should take approximately five minutes. WebEx is an online program that enables users to conduct video interviews. WebEx is also useful when recording interviews
- Answer the interview questions, which should take approximately 30 minutes to an hour. Be able to provide feedback on both the accuracy of my transcripts and the researcher’s interpretation within the context of the research question, which is known as member checking.

Here are some sample questions:

1. How do you define success as a mobile game application entrepreneur?

2. What would you say are some risks that mobile game application entrepreneurs should expect to experience prior to achieving mobile application business success?

**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 your organization 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 during or after the study. You may stop at any time.

**Risks and Benefits of Being in the Study:**

Being in this type of study involves the minor discomforts, such as stress of daily life. Being in this study would not pose risk to your safety or wellbeing. By participating in this study, you are adding to research that could help leaders create more effective business models for diverse work environments. By participating in this study, you will receive a copy of the findings upon the completion of the study.

**Privacy:**

Any information you provide is confidential. Please respond to the interview questions in a private setting. I will not include your name or personal information that could identify you in the study reports. The confidential data will be kept in an electronic file on two different password protected computers. Data will only be accessible by the researcher and authorized Walden personnel. The recording of any information will be destroyed immediately after the transcription. Data will be stored for five years in two separate locations. Data is stored for a period of at least five years, as required by Walden University.

**Contacts and Questions:**

You may ask any questions you have now. If you have questions later, you may contact the researcher via telephone at [REDACTED] or email at Talaya.waller@waldenu.edu. If you want to talk privately about your rights as a participant, you can reach Dr. Leilani Endicott at [REDACTED] Walden University's approval number for this study is 03-04-15-0289720 and it expires on March 3, 2016.  
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 of this letter.

## Appendix C: Waller Study Introduction Letter

Hello,

My name is Talaya Waller and I am a doctoral student at Walden University. I am a candidate for the Doctor of Business Administration degree. I am conducting a research study on the successful marketing strategies that entrepreneurs use to start a mobile game application development business.

***Entrepreneurs who own mobile game applications businesses in the northern region of California may participate in this study.***

The interview process will take approximately 30 minutes to an hour. You will receive a copy of your responses for your records and for verification purposes. The study will not contain personal identifying information and no personal information is required. If you are interested in participating in this study, please reply using the attached consent form noting your consent. The consent form also includes additional information about this study. If you have questions in reference to this research study, please e-mail me using Talaya.waller@waldenu.edu or call me at [REDACTED].

Thank you,

Talaya Waller

## Appendix D: Waller Study Interview Protocol

### Part 1: Pre-Interview – Preparation

1. Identify participants
2. Review the interview questions
3. Confirm and synchronize dates and times for the interviews
4. Verify if the participants still give consent to participate in the research study
5. Advise participants that they can review the transcript from the interview for validation purposes
6. Check the operability of the WebEx (video interview program) prior to the interview
7. Check to make sure that the participants does not need to reschedule at least 1 hour before the interview time

### Part 2: Implementation – Conducting the Interview process

1. Greeting and introduction of interviewer and participant
2. Thank the participant for agreeing to partake in the interview process
3. Provide the participant with information such as the purpose of the study
4. Verify if the participant still consent to the interview process
5. Conduct volume check to ensure recording quality
6. Ask the participant the interview questions
7. Take notes during the interview process
8. After the pilot, modify interview questions if needed (If not, skip this step)

### Part 3: Post-Interview – Data Management

1. Transcribe the interview notes and enter them into NVivo 10
2. Send a thank you email to all of the interview participants
3. Transcribe the recording
4. Contact participants via email to schedule a member-checking meeting that could last up to 30 minutes via video interviews
5. Send a follow-up email to participants that may not respond
6. Thank the participants again for their contributions to the research study

### Appendix E: Waller: Mobile Marketing Interview Questions

1. What are some marketing challenges that you experienced when launching your mobile application?
2. How do you market your mobile application business?
3. How have social networks influenced how you market your mobile game application start-up?
4. How have financing opportunities, or the lack of financing opportunities, affected how you market your mobile game application business?
5. What marketing approaches have been the most successful for your mobile game application?
6. How do you determine the success of your marketing strategy?
7. What else would you like to share about your mobile game application marketing strategies that may be helpful to other entrepreneurs?

## Appendix F: Talaya Waller National Institutes of Health Certification

