

Strategies for Sustainability in Information Technology Startups: A Multiple Case Study

Jude Thomas^{ID}

317 Foundation AI Education, Palo Alto, CA, USA

Email: jay@jthomassite.com

How to cite this paper: Thomas, J. (2026). Strategies for Sustainability in Information Technology Startups: A Multiple Case Study. *Open Journal of Business and Management*, 14, 3078-3107. <https://doi.org/10.4236/ojbm.2026.145152>

Received: March 30, 2026

Accepted: September 20, 2026

Published: September 23, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). <http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

This qualitative multiple-case study aimed to explore new venture modeling strategies that technology startup business owners with at least five years of success identify as crucial to their sustainability. Understanding strategies that increase success rates could boost employment opportunities and stimulate job growth in the United States. The concept of blue ocean strategy, introduced by Kim and Mauborgne (2015), involves creating new markets through value innovation, in which competition becomes irrelevant. Three Silicon Valley-based technology startup owners, each with over five years of experience, were interviewed for this study. The findings are intended to guide other technology startup owners who want to develop innovative products and services, enter new markets within the tech sector, access uncontested markets, and improve outcomes in existing markets. The major themes identified were 1) disruptive technology, 2) value and cost tradeoffs, 3) agility in technology, and 4) data analysis; these themes may help technology startup owners sustain their businesses beyond five years. The study indicates that applying blue ocean theory to develop venture strategies that create an innovative market space and make competition irrelevant can lead to business success and long-term growth. Developing a successful venture-modeling strategy grounded in engagement, professionalism, and expertise is vital to sustaining technology startups beyond five years. Additionally, the blue ocean strategy can help business owners identify and seize market opportunities, resulting in high-quality products and services that enhance customer satisfaction and yield higher returns on investment.

Keywords

Blue Ocean Strategy, New Venture Modeling Strategies, Information Technology Startups, Startup Sustainability, Value Innovation, Disruptive Technology, Agility in Technology

1. Introduction

Information technology startup owners face intense competition in their industry. Dominant players like Facebook and Google lead the social media sector. New venture strategies, such as the blue ocean approach and targeting uncontested markets, can help IT startups sustain their success (Jackson et al., 2016). These innovative modeling strategies might drive breakthroughs that benefit both the public and private sectors, promoting organizational growth (Jackson et al., 2016). Technological innovation can continue to benefit startups and society by providing valuable new developments (Kim & Mauborgne, 2015). However, pursuing these strategies involves risks, as entrepreneurs must decide when and how to innovate (Wang et al., 2015). Startup owners often rely on the Internet to network and maintain sales and distribution, especially in fields like 1) telehealth, 2) artificial intelligence, 3) cybersecurity, and 4) wireless technologies, creating strategic venture models (Christofi et al., 2015). According to Borgman (2015), building a lasting organization today requires continuous innovation in products and services. Businesses that fail to keep pace with IT innovations risk losing market share (Kim & Mauborgne, 2015). I researched and experienced various venture-modeling strategies used by IT startup owners to sustain their businesses beyond five years. This study comprises three chapters. The first section includes the abstract, background, significance of the study, assumptions, limitations, and delimitations. The second section reviews academic literature, and the third covers methodology, findings, and conclusions.

1.1. Purpose Statement

The purpose of this qualitative multiple-case study was to explore new venture modeling strategies that information technology startup owners use to sustain their businesses beyond 5 years. Public records of the startups and observations of them served as evidence that the companies employ new venture modeling strategies in their operations. The target population included three owners of information technology startups within a 100-mile radius of Silicon Valley, California, who have used venture modeling strategies to keep their businesses running for more than 5 years. The findings from this research could contribute to social change by identifying successful venture modeling strategies that IT startup owners can use to improve global education remotely. These findings might also help startup owners increase social responsiveness through technology, creating efficient healthcare, more jobs, and empowerment initiatives through community news and information.

1.2. Research Questions

The research question guiding this study was: What new venture modeling strategies do information technology startup owners use to sustain their businesses beyond 5 years?

1.3. Significance of the Study

The significance of the study lies in its ability to identify new venture-modeling strategies relevant to information technology startups. Discovering nine new strategies can serve two main purposes: creating motivating environments for employees, which contributes to successful business practices, and improving the lives of employees and consumers, thus impacting social change. Information technology employees benefit from good healthcare, live in high-quality environments, and earn wages supported by sound business practices. The blue ocean strategy has significant potential to help information technology business owners sustain growth beyond the first five years.

1.4. Assumptions, Limitations, and Delimitation

Assumptions provide clarity and add perspective to the topic; however, when taken for granted by the researcher, they can lead to misunderstanding (Parker & Northcott, 2016). An assumption is a belief without proof (Parker & Northcott, 2016). The first assumption was that the interviewees and I would conduct ourselves ethically. The second assumption was that participants would be honest and provide accurate answers to the interview questions. The third assumption was that the participants' answers to the interview questions could address the research questions. Limitations are the researcher's claims about generalizability or conclusiveness that come from the conceptual framework or research design (Marshall & Rossman, 2016). The limitations of a study indicate its potential and offer directions for future research (Aguinis et al., 2018). Limitations could stem from scheduling conflicts when accessing study participants. The limitations could also include the types of new venture modeling strategies participants use, which may not reflect the entire information technology industry. Additionally, the possibility that startup owners might withhold valuable information out of fear of losing a competitive advantage could limit the study's findings. Delimitations define the scope and boundaries of the study. Limitations include the study's context and its lack of transferability to other areas (Marshall & Rossman, 2016). The boundaries of this study were the three owners of information technology firms located in the Silicon Valley, California area. Only owners who had successfully sustained their businesses for more than five years were included. The study was confined only to the information technology sector. No other industries were examined. The research only included examining business sustainability beyond the five-year mark. Methodological boundaries were a qualitative multiple-case study design. Other methods were not part of the research design.

2. Literature Review

The conceptual framework of this qualitative study drew common themes from the literature review and blue ocean theory. Information technology startup owners may benefit from the blue ocean theory and new venture modeling strategies to successfully sustain their businesses beyond five years. A technology startup

owner's approach to new venture modeling strategies can influence a business's success. Kim and Mauborgne (2015) argued that entrepreneurs who embrace risk-taking are more likely to pursue innovation diligently. Notably, Silicon Valley startup owners might pursue uncontested markets to build and sustain success beyond the first five years of operation. The blue ocean theory of Kim and Mauborgne (2015) served as the conceptual framework for this study. Kim and Mauborgne introduced the blue ocean theory in 2005. They explained it as the best strategy for creating an uncontested market space that drives positive sales and organizational growth. According to this theory, the pursuit of high product differentiation combined with low costs can make competition irrelevant. The measurable points of blue ocean theory are to 1) create untapped market space, 2) increase profits, and 3) use strategy value innovation.

Blue Ocean Theory

Blue ocean theory involves creating products and services in new, uncontested markets (Kim & Mauborgne, 2015). The theory includes a "strategy canvas," which serves as a key diagnostic tool and action framework for adopting a blue ocean strategy (Kim & Mauborgne, 2015). The goal of the blue ocean theory is to identify competitors' weaknesses and reach customers with new value offerings. Creativity arises from looking beyond owners' internal perceptions and viewing products and services from the consumer's perspective. The strategy canvas provides principles that a business owner in information technology startups can use to organize, repack, redefine, and redraw market boundaries. During this process, the owner can move away from longstanding demand-driven practices and embrace innovative trends. In the 1990s, new waves of competitors emerged, such as the Internet and e-commerce. Applying the principles of the blue ocean theory to practice can help business owners succeed in both new and established industries by leveraging this innovation-driven approach. The theory encourages marketers, entrepreneurs, and businesspeople to shift from the crowded, competitive red ocean to the uncontested waters of the blue ocean. Moving into these blue oceans boosts the likelihood of business success.

The blue ocean strategy includes six principles that business owners can apply to reduce risks and maximize opportunities when building a business (Kim & Mauborgne, 2015). First, reconstructing market boundaries can create uncontested space across various industry segments. Second, startup owners in information technology should focus on the big picture rather than just the numbers, aiming to build a business beyond traditional accounting and strategic plans, which often lead to incremental improvements. Third, these owners need to go beyond current demand to create the highest possible demand for their products or services. Fourth, they should carefully plan the strategic sequence—covering utility, price, cost, and adoption—to foster and sustain profitable growth, reducing risk when applied correctly. Fifth, owners must overcome key organizational hurdles that block the creation of a blue ocean strategy. These hurdles include cognitive, resource-based, motivational, and political issues that managers need to address for successful implementation. Lastly, incorporating execution into the strategy

motivates people to adopt the blue ocean approach over the long term. Applying these principles helps manage risks related to the human element in organizations, particularly regarding the attitudes and behaviors of those working in information technology.

Evolution of Blue Ocean

In the 1990s, new waves of competition for technology market share emerged, such as the Internet and e-commerce. The trends that followed included mobile and real-time media (Bartet et al., 2016). Advances in technology from the 1990s to 2019 influenced other areas, including transportation and communication, leading to the global flow of business ideas (Warnecke, 2017). With the advent of the Internet, people worldwide gained a streamlined and affordable way to interact globally, both personally and as consumers and business entities (Khan et al., 2017). The Internet enabled global awareness of products and services, whether positive or negative (Khan et al., 2017). Kim and Mauborgne (2015) laid the foundation for conceptualizing, creating, and implementing blue ocean strategies. Kim and Mauborgne studied the successful execution of 108 large companies. The frameworks they developed offer business owners a way to escape highly competitive environments (red oceans) and enter an uncontested market space called a blue ocean (Kim & Mauborgne, 2015).

An analysis of how to apply these frameworks to small businesses can help owners achieve long-term sustainability. The strategy canvas is a tool that guides business owners in developing services and products to create positive change for consumers (Kim & Mauborgne, 2015). Using the strategy canvas, information technology business owners gain perspectives that differ from those of their competitors. The strategy canvas helps owners achieve outcomes that support business longevity beyond 5 years. Its key feature is the value curve, which outlines a company's products and services and how they compare within their industry. Often, the results show that consumers prefer similar products at lower costs, and the strategy canvas also helps IT business owners identify ways to attract new customers (Elfarmawi, 2019). After completing the strategy canvas, the four-action framework tool is applied. This framework includes an eliminate-reduce-raise-create grid. It guides IT business owners to eliminate industry-competitive factors, reduce or raise existing factors, and create new value elements. Business decision-makers adopting a blue ocean strategy include Cirque du Soleil, which created an uncontested market segment by blending elements of the circus without animal acts (Kim & Mauborgne, 2015).

Value innovation strategy. Value innovation involves creating value for consumers, making the competition irrelevant, and thereby establishing an uncontested market space (Kim & Mauborgne, 2015). New venture models driven by value innovation include Apple iPads in early 2001, cellphones in 1973, Southwest Airlines, and Cirque de Soleil. Kim and Mauborgne (2015) described the concepts that led to the success of these companies, along with insights from over 100 companies spanning 100 years, forming the framework now called blue ocean. Since

some technology startup owners lack new venture modeling strategies to sustain their businesses beyond five years, adopting blue ocean strategies could help them achieve that. Blue ocean strategy serves as the means to leave the competitors behind and create new markets (Kim & Mauborgne, 2015). At the center of Kim and Mauborgne's (2015) tools for success in blue ocean strategy is the concept of the strategic move, which, when executed by business owners, could lead to success and drive growth and profitability. After researching 30 industries, Kim and Mauborgne developed their blue ocean strategy (Kim & Mauborgne, 2015). Some information technology startup owners lack new venture modeling strategies to sustain their businesses beyond 5 years; adopting blue ocean strategies could help them do so.

Supporting and Contrasting Models

Competitive advantage theory, introduced by Porter and Millar (1985), aligns with company owners to build sustainable and competitive businesses. Managers seeking to gain a competitive edge should have a clear path to success. In this context, a blue ocean strategy could be helpful, as some information technology startup owners lack new venture models to sustain their businesses beyond five years. Fillingim (2018) proposed a strategy to create and maintain a strategic advantage that could lead to higher satisfaction rates among business customers than competitors. Additionally, considering the value of competitive advantage, defining it as a process of continuous improvement and creative reengineering supported by investments adds to the product or service elements that generate value (Fillingim, 2018). Fillingim stated that maintaining a competitive advantage over time yields strategic or sustainable benefits and that such an advantage enhances an organization's dynamics and helps eliminate waste. Blue ocean strategy and competitive advantage strategies are tools that help information technology business owners avoid fierce competition (Agnihotri, 2015). Conversely, Downing (2018) argued that competitive advantage is a theoretical approach to the value creation and appropriation process that involves elements such as capital, politics, price elasticity, and mobility barriers. Downing (2018) stated that capital has three forms of competitive advantage: economic, cultural, and social. Economic capital is convertible into money (Downing, 2018). Cultural capital exists both formally and informally within an organization and represents an internal, non-transferable component. Downing (2018) described social capital as an individual investment consisting of social connections and credentials, which amount to perceived credit for the individual. Through blue ocean strategies, a business owner could identify social capital as a new venture strategy to help sustain their business beyond five years.

The cost leadership strategy could give business owners an edge when competitors compete on cost advantages unrelated to organizational capabilities (Wada, 2018). A cost leadership strategy is a tool used by company owners to boost efficiency and cut costs in development and production, as part of organizational learning (Wada, 2018). In contrast, build-to-order personal computer manufac-

turers like Dell created an operation without manufacturing capabilities, based on the procurement of generic modules and an assembly process that employees with little experience can operate. This approach might help information technology startup owners with a new venture modeling strategy to keep their business going for five years or more. A system developed by Fujimoto (2001) helped ensure just-in-time delivery, short lead times, and adaptability to changes in models and quantities. Dell leaders proposed a more advanced solution than IBM and Hewlett-Packard. Similar to Dell's personal computers, a cost leadership strategy fails with a highly modularized architecture (Kremer et al., 2016). For a cost leadership strategy to be sustainable over the long term, leaders must make significant improvements in design and production. For example, consumer expectations for safer cars that provide better rides, lower fuel consumption, and reduce environmental impact are appropriate objectives. Firm leaders can gain a competitive advantage through leadership, with current sales increasing through advertising that boosts awareness (McAlister et al., 2016). Another relevant theory is the resource-based managerial view, as articulated by Harney and Trehy (2016).

Resource-Based View

The resource-based view is a managerial tool for determining strategic resources that, when applied by management, could deliver a competitive advantage for a firm (Harney & Trehy, 2016). Harney and Trehy's (2016) intentions were for managers to analyze the firm from the resource side rather than the product side. Few studies assess the strategies of international brands in relation to market-based theory and social media users in local markets (Gao et al., 2018). Gao et al. (2018) argue that three resource-based attributes correlate with the success of an international brand's use of social media in local markets: value, inimitability, and rarity. Value, distinctiveness, and quality could prove beneficial to business startup owners since some information technology startup owners lack new venture modeling strategies to sustain their businesses beyond 5 years. Value is the foundation for relational resources in social media. Together, inimitability and rarity are the focal points of the international brand strategy. Gao et al. (2018) conclude that a combination of incentives presented in social media should specifically focus on brand type and user tie. Research on international marketing has developed from a resource-based strategy and concludes that market-based relational ties (social ties linking international brands to local consumers) are valuable components for doing business in local markets and are not easy for competitors to imitate (Gao et al., 2018). This strategy aligns with the competitive advantage strategy.

Social Media Word-of-Mouth. Social media word-of-mouth is the conveyance of information from one person to another (Haikel-Elsabeh et al., 2019). To assess social media word-of-mouth (WOM), management must use measures of volume (e.g., the number of messages transmitted) or valence (e.g., the sentiment of the information disseminated). Measuring social media word-of-mouth volume could help information technology startup owners who lack new venture modeling strategies sustain their businesses beyond 5 years and track their progress. WOM used

on social media platforms by managers can influence customers' product adoption by decreasing quality uncertainty while improving product awareness (Li & Wu, 2018). A key factor is that WOM on social media can prompt online visitors to visit the site, whereas recommender-based WOM sites are useful after a site visit. WOM implementation helps a company drive sales through product awareness and, with volume, influence product sales (Li & Wu, 2018). Using the WOM approach could help spread the innovative concepts created by information technology startup business owners.

Structural Role Theory

In the structural role theory, different user types engage in dialogue and exchange in online communities (Akar et al., 2019). These online environments allow professionals to understand community members' motivations and devise ways to keep them engaged. From this understanding, professionals can provide goods and services that members find necessary. The sale of goods and services contributes to the profit margins of company decision-makers who serve these online communities. In addition, professionals can learn to develop motivational strategies to maintain high satisfaction among all users in such communities. For information technology startups, startup owners who lack new venture modeling strategies, an understanding of community members' motivations, and the ability to keep them engaged could help sustain the business beyond 5 years.

Competitive Advantage and Globalization

The globalization of commerce through information technology, known as e-commerce, has increased competition both domestically and globally as products are copied before and after launch (Jordan, 2018). Jordan (2018) argued that to maintain a competitive advantage, organizations need to enhance marketing strategies to adapt to short product life cycles. According to Jiménez and Zheng (2018), the global startup revolution grew from \$140 billion in 2017 in venture capital investments for startups. The total value created by the global startup economy from 2015 to 2017 reached \$2.3 trillion, a 25.6% increase over the period from 2014 to 2016 (Jiménez & Zheng, 2018). The early years of the information technology sector included global social media apps, digital media, and Internet companies (Jiménez & Zheng, 2018). Emerging trends in sectors like fintech, cybersecurity, and blockchain point to a new direction for tech startups. This shift, along with Silicon Valley's position as the top tech hub, offers significant advantages. Recently, companies in 1) Frankfurt, 2) Tel Aviv, 3) Prague, and 4) Toronto have gained prominence as emerging tech startup centers mentioned earlier (Jiménez & Zheng, 2018). With this new wave of information technology startups, founders achieve success by partnering with companies such as Uber in mobility and Airbnb in peer-to-peer hospitality services (Pappas, 2017). More startups in this wave could reduce the number of entrepreneurs struggling to develop new strategies to sustain their businesses beyond five years.

Gunasekaran et al. (2015) identified 1) global production strategies, 2) reduced costs, 3) increased quality, and 4) production allocations that benefit a country

while decreasing production in less advantageous areas. Other country leaders have gained prominence in recent years, while the United States maintained the highest number of companies valued at \$1 billion, with 65% of these companies in the U.S. in 2016-2017 (Gunasekaran et al., 2015). In the competitive information technology sector, startup founders create opportunities for ecosystem builders to focus on startup subsectors. Blue ocean strategies may exist within these subsectors. An example of a blue ocean strategy in startup subsectors is transforming automated call prompts into a business Chatbot—an AI-powered system designed to facilitate discussion and provide a user-friendly experience.

Shortages in Successful Information Technology Startups

Many reasons contribute to shortages in successful information technology startups: economic downturns, a lack of experienced employees, and outsourcing the observation of the business segment are a few (Holstein & Eschenfelder, 2017). Challenges in information technology startups include barriers within the technology sector. For example, software startup owners with no operating history (lack of experience) may often merge and expect to revolutionize technologies (Mchawrab, 2016). Support services for information technology startup owners, known as accelerators, help foster rapid growth in some startups (outsourcing the observation of the business); however, many startups still fail at a higher rate (Holstein & Eschenfelder, 2017). Other issues include a shortage of qualified employees, which could lead to fewer successful startups (Holzmann & Golan, 2016).

Managerial decisions related to technological innovation can pose challenges to startup success. Employee input influences which factors support or hinder innovation (Bubel, 2015). The definitions of success and failure depend on the organization's management choices. Bubel (2015) pointed out that an organization, as a complex system, must coexist with other systems, including innovation models and the environment. Viewing the organization as a vital system that interacts with other systems, including innovation models, could reduce the chances of startup failures. Warnecke (2017) argued that technological investment is concentrated in the formal sector of the economy, which offers more stable employment opportunities. Investing in the informal (unregulated) sector is riskier because operations often happen without oversight and may frequently shut down (Autrey et al., 2015). These obstacles could contribute to or cause shortages of successful information technology startups.

Startup Challenges

In the previous section, shortages in successful information technology startups are addressed and positioned before this section on startup challenges. This section discusses the challenges faced by the few successful startups that survive beyond five years. These include issues such as misalignment, location choices, adoption of change, and management risks specific to information technology startups. Overall, this section provides a more detailed and in-depth look at the problems encountered by startup owners. Startups and small to medium-sized businesses are vital to the economy because they drive job growth and account for 60% to

70% of new jobs (Wiid et al., 2015). Additionally, in some cases, small businesses grow faster than larger ones (Bravo-Biosca et al., 2016). Furthermore, small and medium-sized businesses play a significant role in job creation and revenue generation, thereby contributing to government tax revenue (Adelino et al., 2015). Managers and other employees involved in marketing face numerous challenges when developing startup marketing strategies, which could lead some managers to respond more effectively to these challenges (Deligianni et al., 2015). One proposed principle for overcoming startup challenges is to reconstruct market boundaries to identify blue ocean opportunities (Kim & Mauborgne, 2015). Reconstructing market boundaries could help some information technology startup owners who lack new-venture modeling strategies sustain their businesses beyond five years.

Small- and medium-sized business owners face challenges in human resources, finances, and marketing management (Holzmann & Golan, 2016). The challenges that startup owners and managers encounter include adapting to change, securing organizational commitment, and management-driven restructuring (Wali et al., 2016). Additional challenges include incorrect pricing strategies, choosing the wrong business location, and providing inaccurate information, which can lead to little or no demand for the product or service due to these misalignments (Holzmann & Golan, 2016). Startup owners may also struggle with resource scarcity during planning and strategizing. Kim and Mauborgne (2015) proposed integrating execution into strategy to motivate employees during planning and strategizing and applying the blue ocean strategy to mitigate management risks. Overcoming these risks could help some information technology startup owners, who lack new venture modeling strategies, sustain their businesses beyond 5 years.

Relevance of New Venture Modeling

New venture modeling relates to the blue ocean theory, especially regarding innovation components for information technology startup owners. Innovation is crucial to new venture modeling because of the factors that promote or hinder innovation and creativity (Bubel, 2015). Using organizational management to get the strategic sequence right is an innovation factor that can offer valuable insights for startup business owners in certain situations (Kim & Mauborgne, 2015). For instance, a manager could review external issues that need correction. Consequently, addressing these issues ensures proper alignment and execution of the innovation process (Bubel, 2015). Both new venture modeling and leadership are essential parts of an innovation leader's profile (Bubel, 2015). Bubel (2015) concluded that a strong link exists between business intent and design strategy, which could help shape business strategies and guide new venture modeling for information technology startup owners.

Venture Modeling Gaps

Venture modeling gaps are identified in the management of business models during the initial stages, when an information technology startup may fail due to poor accounting, financial issues, fraud, or earnings misstatements. Gaps in en-

trepreneurship include how entrepreneurs handle their business models early on (Kallio et al., 2016). Kallio et al. (2016) argued that mobilizing resources in the early stages of business model management is crucial. They concluded that small ventures in the early stages could benefit from developing a set of management activities to address their resource needs. This insight from Kallio et al. (2016) could help IT startup founders avoid venture modeling gaps and craft strategies to sustain their businesses beyond five years. The findings of Kallio et al. are important when considering venture-modeling gaps, particularly regarding the severity of an IT failure. Benaroch and Chernobai (2017) argued that operational IT failures can be as severe as negative accounting and finance events. For example, fraud and earnings misstatements may lead to changes in corporate governance (Agrawal & Cooper, 2017).

The Information Technology Landscape Frontier

Differentiation could be crucial in the pursuit of technology (Newell, 2015). Solutions to needs and problems faced by some information technology startup owners concerning new venture modeling strategies may serve as a means of differentiation to sustain their businesses beyond 5 years. Salunkhe and Kadam (2018) argued that solving problems before the competition allows business owners to create an efficiency advantage. They did not use a traditional research method but included examples of organizations that utilize innovation, knowledge funnels, and personal knowledge systems to build value within their companies. This approach clarifies an owner's expectations and commitments, emphasizes recognizing gradual momentum over time, and highlights the importance of bringing talented, innovative solutions before competitors do. Krüger (2017) discussed how technological progress is more likely to enhance specific production factors. He found that leaders in affluent countries tend to rely more on skilled labor than those in poorer countries; however, poorer countries are more efficient at employing unskilled labor. Kruger's discussion could include solutions for information technology startup owners who lack new venture modeling strategies to sustain their businesses beyond 5 years. The business environment, including the information technology sector, has become more volatile, uncertain, complex, and ambiguous (Cook, 2016). There is a demand for individuals and business owners to become more inventive to survive turbulence during unexpected changes (Cook, 2016). Cook (2016) provided a perspective on emerging information technology businesses that could align with the blue ocean strategy, incorporating innovation and creative concepts.

Information Technology Changes and Factors

A notable issue in information technology changes involves startups led by CEOs with prior experience managing organizations that continue to succeed in the industry (Santisteban & Mauricio, 2017). Another factor is that information technology in organizations must include speed, flexibility, integrity, and innovation to achieve successful outcomes (Yuliaty, 2017). Additionally, the expectations of information technology users vary, necessitating more effective strategies, meth-

ods, techniques, and efforts. Therefore, the possibility of blue ocean strategies for new venture modeling could be effective in this type of information technology change. Kim and Mauborgne (2015) state that it is important to go beyond existing demand to reduce risks and meet the greatest demand for a new offering. Applying this principle by Kim and Mauborgne (2015) could help information technology startup business owners overcome the lack of new venture modeling strategies to sustain their businesses beyond five years. Success-oriented owners in the information technology industry focus on ensuring speed, flexibility, integrity, and innovation, adopting blue ocean strategies that account for employees' value factors. Managers should appreciate their employees; therefore, organizational decision-makers must implement smart technology within the organization (Yuliaty, 2017). As a result, employees can contribute to a startup's success in the information technology sector.

Globally, owners of information technology startup businesses gain recognition for their contributions to economic stability, growth, and job creation (Sulayman et al., 2014). One impact of information technology startups is the potential for profitable growth and increased profits over a short period. However, about 80% of these startups fail within the first year (Hyder & Lussier, 2016). From launch to success or failure, several stages influence the development of information technology startups. According to Bocken (2015), these stages include the beginning (seed) stage, which is the startup's inception. The next stage is the growth stage, during which significant revenue is generated, and infrastructure is added to support further expansion. The mature stage involves transitioning into organizations that establish a strong market share. The seed stage, also called the startup stage, is characterized by entrepreneurs' own capital, along with support from family, friends, and the government (Bocken, 2015). A successful startup is a new company that offers products and services that create positive market factors, build a repeatable, profitable, and scalable business model, generate jobs, or transform how people work (Santisteban & Mauricio, 2017). These factors could influence how information technology startup owners apply new venture modeling strategies to maintain business success beyond five years.

Aligning Information Technology Industry and Startup Dynamics

The alignment of information technology startup business dynamics is an important factor in this study. Reynolds and Yetton (2015) posit that many studies have shown how increasing knowledge reduces overconfidence and helps individuals recognize the limits of their knowledge. Overcoming the comfort of familiar situations is the key hurdle faced in opportunity creation (Khaola & Ndovorwi, 2015). Davidsson (2015) suggests that opportunities emerge from pattern recognition, which could help startup owners achieve success beyond five years. Applying blue ocean theory can help create business opportunities in uncontested market segments. Wogwu and Hamilton (2018) state that entrepreneurial education, information asymmetry, social networks, personality traits, and unique opportunities all influence the creation process. Creative individuals and entrepreneurs in

the United States continue to drive innovation, with information technology startup owners accessing knowledge through the combination of existing businesses, academia, self-regulation, and capital resources to develop technology-based firms (Wali et al., 2016). A key factor in aligning information technology and startup dynamics is that user acceptance of technology is crucial for success (Tavana et al., 2018). Al-Qaysi et al. (2018) argued that user acceptance is especially important when introducing new information technology. Developing effective venture strategies is an important aspect of achieving this acceptance. Gaining user acceptance of new technology is vital for startup owners, as sustainability-focused business strategies can provide a competitive edge. Blue ocean theory may help startup IT business owners craft strategies for long-term success (Kallio et al., 2016). In this study, strategies for lasting success include ensuring information technology startups can sustain themselves beyond their first five years.

Discussing the Topic in Relevance to the Theory

The new millennium marks a time when globalization, along with advancements in technology, transportation, and communication, has led to the spread of business ideas, knowledge, and information (Warnecke, 2017). Information technology owners have driven the reconfiguration and disruption of traditional business models in recent years. Specifically, Khan et al. (2017) argued that the Internet provides a convenient and less expensive way for consumers and businesses to interact. Business owners must recognize the need to adapt to the rapid changes that information technology can bring. Internet-based business owners have made unrestricted communication accessible for multiple users to share experiences and track both positive and negative outcomes (Khan et al., 2017). Implementing new strategic business approaches in response to the competitive landscape, driven by information technology, has led to the development of products and services aligned with these changes (Wogwu & Hamilton, 2018). Technologies such as smartwatches, medical bots, smartphones, wrist-worn exercise trackers, online networks including Instagram, and rideshare services like Uber have spurred the expansion and innovation of new products and services. The growth of technology has also prompted new ways of thinking among organizational employees concerning strategic decisions and venture modeling for sustainability. These innovative ideas and contributions can enable business owners to differentiate themselves from competitors. Kim and Mauborgne (2015) state that a key feature of a good strategy is diverging from competitors. This approach can help some technology startup owners—who lack new venture modeling strategies sustain their businesses beyond five years.

The success of organizations depends on how owners value supply and demand, which includes innovation in information technology (Mącznik et al., 2015). Leaders of entrepreneurial start-up organizations often must multitask extensively, as these owners are involved in many aspects of the business (Sharafizad & Coetzer, 2016). If a company owner is not attentive to new, innovative, and disruptive technologies, competitors using the blue ocean strategy could surpass the company.

Blue ocean strategy can be applied to market space, creating market segments or entirely new markets where no competition exists (Wogwu & Hamilton, 2018). New venture modeling strategies in the information technology startup segment are influenced by herd behavior in the use of information technology (Lee, 2018). Herd behavior in technology adoption occurs when individuals follow others' actions without considering their own information or knowledge. Kim and Mauborgne (2015) described the red ocean environment as one of intense competition, where the atmosphere becomes combative. Conversely, the blue ocean strategy seeks to counter such dynamics by creating businesses in uncontested markets (Wogwu & Hamilton, 2018).

According to Swapana and Padmavathy (2017), the attributes of blue ocean theory are 1) social needs; 2) convenience; 3) brand name; 4) price; 5) product features; and 6) social influence, which play a vital role in affecting dependency on smartphones. These attributes, social influence, and brand name influence students' dependency on smartphones (Suki, 2013). Consumers' ability to gather information affects technological innovation, market demand, and technological dynamics (Giones & Brem, 2017). Littlechild (2018) indicated that, to reduce innovation risk, a supply chain manager must seek feasible innovation strategies that align with the degree of ecological niche matching and should avoid the hazardous nature of pure competition, which affects innovation output. The blue ocean strategy of creating uncontested markets and making competition irrelevant could help some information technology startup owners who lack new venture modeling strategies to sustain their business beyond five years. Pure competition may not align with the blue ocean theory because entrepreneurs use this method to seek new ventures that are unique and not in direct competition with other businesses.

E-commerce is the business model for business-to-consumer and business-to-business operations that are effective and profitable, as consumers acquire products and services (Leischnig et al., 2017). Entrepreneurs believe market values are not fixed but merely constructs of the mind that can change when a new perspective is adopted (Kim & Mauborgne, 2015). Using new perspectives in thinking when designing a new venture could help information technology startup owners sustain their businesses beyond five years. Organizational leaders can redefine the market space and achieve differentiation and low-cost operations (Kim & Mauborgne). Blue ocean theory in the 20th century involved decision makers from Ford Motor Company, Xerox in the copier industry, and McDonald's in fast food. These decision makers created a mass market for their industries. Turning a technology innovation into a value innovation is one of the key aspects of the blue ocean theory. For example, in the 1950s, Ampex owners developed video recording technology, and in the 1980s, Sony and JVC owners adopted the blue ocean concept to reach a mass market, making products more affordable for consumers (Kim & Mauborgne, 2015). New venture modeling strategies that help sustain information technology startups beyond five years could benefit from creating a mass market for their products and services.

A successful blue ocean process involves the right-to-grow approach. The right-to-grow approach entails selecting a single offering and applying the blue ocean strategy, which then leads to other initiatives within the portfolio (Kim & Mauborgne, 2015). Red oceans represent all existing industries within a knowledgeable market space where industry boundaries are accepted, and the strategy focuses on outperforming rivals, achieving differentiation, and gaining a competitive advantage to survive (Webb, 2015). Webb (2015) states that, inevitably, as the market becomes more crowded, opportunities for growth and increased profits diminish, and firms need to become more innovative. A red ocean strategy is a business strategy focused on competition (Webb, 2015). The foundations of blue ocean strategy are uncontested markets, which could help some information technology startup owners who lack new venture modeling strategies to sustain their businesses beyond five years.

In the pursuit of blue ocean theory success, expanding partnerships to strengthen innovation capabilities will accelerate the discovery of new technologies and business models (Loebbecke & Picot, 2015). According to Loebbecke and Picot (2015), CEOs in nearly every industry have recognized the need for customers, partners, and employees to collaborate to move forward more quickly in an era of rapid innovation. In just one year, the number of CEOs committed to opening up their organizations increased by an impressive 27% (Loebbecke & Picot, 2015). Enhanced partnerships and collaboration among employees, customers, and partners to speed up innovation could help information technology startup owners, who lack new venture modeling strategies, sustain their businesses beyond five years.

CEOs are pushing the boundaries of their organizations and encouraging collaboration among individuals, moving away from command-and-control hierarchies (Loebbecke & Picot, 2015). Additionally, owners are giving their employees access to products, which could lead to satisfied internal customers. Satisfied internal customers can share positivity, creativity, and innovation with the company by contributing their talents, ideas, and blue ocean strategies, thereby extending these benefits to external customers. Loebbecke and Picot (2015) describe internal customers as those who take action to embrace disruption or step outside the organization's boundaries. Bringing together people from different industries, backgrounds, regions, and even generations can be crucial for predicting and responding to new competitive threats.

Heckmann and Maedche (2018) argue that, in highly dynamic industries, business processes include exploitation, such as activities that increase productivity through automation, standardization, integrated architectures, and the use of existing information technology resources. Heckmann and Maedche (2018) also mention that, as a complementary capability, exploration is essential, such as the ability to implement new and innovative information technology resources. Flexibly adopting new and innovative IT resources is crucial to the implications of blue ocean theory within an organization for making competition irrelevant (Heckmann

& Maedche, 2018). To achieve this, college leaders are redesigning MBA programs to pursue a blue ocean strategy, aiming to counteract the surge of automation, robotics, and AI developments that could replace white-collar jobs that students learn to perform (McKinley et al., 2017). In the technology sector, redesigning certain business models could help IT startup owners, who lack new venture modeling strategies, sustain their businesses beyond five years.

The issue of robots replacing human jobs reflects a major change in the workplace, and leaders in higher education must develop first-to-market strategies to prevent imitation-driven disruption (Wang & Baker, 2015). Von Briel et al. (2018) noted that digital technologists act as external enablers of new venture creation in the information technology hardware sector, helping entrepreneurs develop market offerings that extend beyond traditional industry and market boundaries. This process involves developing innovations around existing business models. This approach could serve to apply the blue ocean strategy to new venture creation in information technology hardware. Improvements in existing business models could lead to new strategies that help IT startup owners sustain their businesses beyond five years.

Applying blue ocean theory to business model creation can help existing firms stay ahead in rapidly changing markets by fostering model variation and innovation tools (Kim & Mauborgne, 2015). Ebel et al. (2016) found that current tools for business model innovation lack full alignment due to limited support. They analyzed existing business model designs and developed new models to assist the tech giant SAP, a German multinational software company that produces enterprise software for managing business operations and customer relations. Developing new business models can lead to innovative strategies that help IT startup owners sustain their businesses beyond five years. The new system by Ebel et al. (2016) is a virtual collaboration platform for online knowledge sharing and business model innovation, featuring a set of tools that did not exist at the time of their research. This technology for developing new business models exemplifies how owners can use the blue ocean theory and design tools to build innovative businesses. Creating businesses based on this innovation model could provide significant value to startups.

Startup owners who leverage new product development in information technology rely on managers. According to Kawakami et al. (2015), an executive-level champion for information technology is a key influence in promoting the use and replacement of information technology and can help generate awareness and support for increased investments, enabling the firm to develop information technology capabilities for successful new product development. Small-business startup owners are likely to fall into this category, as noted in this study. Agnihotri (2015) provided an analysis of applications discussed in Blue Ocean Strategy. He then explored how the blue ocean theory applies in emerging markets. Agnihotri proposed the blue ocean theory and its applications through radical, disruptive, and frugal innovation, as well as strategic differentiation, related to the value of innovation. He further advances the blue ocean strategy by stating that the blue ocean

strategy canvas applies to all types of innovation. Additionally, Agnihotri (2015) examined how the theory offers a better path to profitability, which is a key factor in modeling information technology startups aiming to survive beyond their first five years.

Since blue ocean strategies occur at different stages in the entrepreneurial process, practitioners and scholars can benefit from a detailed exploration of the blue ocean theory (Kim & Mauborgne, 2015). Agnihotri (2015), Webb (2015), Loebbecke and Picot (2015), and Hackman and Maedche (2018) described blue ocean theory in the context of information technology and new venture modeling in startups, which could help information technology startup owners. Many of these owners lack new venture modeling strategies to keep their businesses going beyond five years, and research on information technology within the blue ocean theory could help them increase their business longevity.

In their study of how blue ocean theory applies to developing business model tools, Ebel et al. (2016) emphasized the need to stay ahead by applying its concepts. Agnihotri (2015) used blue ocean theory to show that the concept extends beyond the initial idea introduced by Kim and Mauborgne (2015) and has many business applications. Using blue ocean theory, Von Briel et al. (2018) suggested that adopting new venture modeling strategies could significantly increase value by creating new uncontested market segments in the information technology sector. Successful companies like Pinterest, Snapchat, and Twitter use new venture modeling strategies that other new technology firms can adopt to sustain their business beyond five years.

3. Method, Conclusions, Recommendations

Researchers who use purposive sampling criteria for participant selection enhance both the depth and breadth of understanding of the phenomenon being studied (Booth, 2016). The criteria for participants in this study included: 1) being an information technology business owner, 2) demonstrating appropriate criteria for participant selection and interview setting, 3) implementing strategies that resulted in successful business growth, and 4) owning a business for at least 5 years. The participant population for this study comprises technology startup owners aged 18 or older in California. These business owners have at least 5 years of experience managing strategies that enable them to succeed in their segment. The business owners reflected the information technology population in California that has sustained their businesses for over 5 years. The rationale for selecting individuals with specific criteria was to obtain valuable insights from their unique experiences (Li et al., 2017). Wallace and Sheldon (2015) indicated that, through telephone communication and in-person encounters, the researchers' goal in making contact was to secure the business owners' participation in the study. I contacted the business owners' workplaces to arrange the study. Maintaining a positive professional relationship with interviewees involves contacting their respective workplaces. The purpose of contacting a participant's workplace is to in-

introduce myself, explain the purpose of the interview, and outline the ethical guidelines governing the process (Houghton et al., 2013). During the phone call, I introduced myself, clarified my role, described what I was seeking from the interviewees, and reaffirmed my commitment to ethical standards before, during, and after the interviews. I then emailed consent forms for the interviewees to sign before conducting the phone interviews. Once I received the signed consent forms, I informed the interviewees of the scheduled times for their phone interviews in this research study.

Research Method and Design

This study conducted a qualitative multiple-case analysis of the venture modeling strategies used by information technology companies in California to sustain their operations beyond five years. I held semistructured phone interviews with business owners to address the research question and explore successful strategies for long-term viability. I employed a qualitative research approach and a multiple-case study design to investigate the research question. Researchers adopt a qualitative approach to describe, explain, explore, and deepen understanding of a current phenomenon through participants' personal experiences (Marshall & Rossman, 2016). The qualitative method allowed me to examine the effective venture modeling strategies employed by owners of information technology companies to keep their businesses going. Yin (2017) described a case study as an empirical investigation of a specific case, such as a group, individual, or organization, aimed at understanding an issue or phenomenon and expanding knowledge. I selected a multiple-case study design because I studied more than one participant and organization in the information technology sector to identify successful venture strategies and similarities and differences across the cases.

Population and Sampling

The population for this study consisted of information technology business owners operating in California. These owners have at least 5 years of business experience and employed strategies that allowed them to succeed in their sector. They represented the California IT community that had maintained their businesses for over 5 years. The selection process used purposive sampling. Sanusi et al. (2017) explained that purposive sampling involves choosing participants who meet specific criteria. In this method, selected individuals are knowledgeable about the subject and can offer valuable insights from their experience and expertise. I aimed to select knowledgeable participants with valuable insights into the study and strategies derived from their backgrounds. Purposeful sampling provides access to individuals with relevant information in the field. I used this approach to identify participants whose strategies aligned with the goals of this study. Additionally, I selected participants who 1) have been in business since 2014, 2) have established and maintained an IT startup with up to 500 employees, and 3) have businesses located in California. The participants included three California-based startup owners in the information technology sector who used innovative venture-modeling strategies to keep their business running for more than five years. Using purposive sampling to select these business owners likely

provided insights into the broader population of entrepreneurs within this segment of the California tech industry. I reached data saturation by analyzing themes and patterns until no new information or themes appeared. [Marshall et al. \(2013\)](#) noted that data saturation occurs when themes become repetitive, and no new insights are found. Interviews were conducted by phone with startup owners until data saturation was reached. If needed, follow-up interviews would continue until no additional insights were gained. [Ragab and Arisha \(2013\)](#) explained that data saturation occurs when new information adds little to existing themes or topics.

Data Collection Instruments

I served as the primary data collector. The qualitative research study used the researcher as the instrument for data collection and aimed to capture the study's meaning through participants' words ([Marshall & Rossman, 2016](#)). Data collection is the method researchers use to gather information from interviewees for the research. Sources for data collection included archival records, participant observations, physical artifacts, and documentation ([Yin, 2017](#)). According to [Lewis \(2015\)](#), an unbiased trait of the qualitative researcher is setting aside personal views of the phenomenon and focusing solely on participants' perspectives in their own words. The data collection process through qualitative interviews allows researchers to gather, explore, and reconstruct events from participants' viewpoints in ways that a quantitative research method could not ([Silverman, 2015](#)). The interviews were recorded using the voice recorder feature of a cell-phone. Before starting the interviews, each participant signed an informed consent form. Once IRB approval was obtained, the data collection followed the interview protocol. Providing a brief interview protocol was intended to support structure, consistent planning, and the research process ([Arsel, 2017](#)). The interviews with participants lasted 30 - 45 minutes. According to an agreed-upon schedule, interviews were conducted on specific days, dates, times, and at locations most convenient for the participants. Participants reviewed their responses for clarification as part of the member checking process. [Fusch and Ness \(2015\)](#) confirmed that data saturation occurs when no new themes or information emerge. I reached data saturation through phone interviews with owners of information technology startup businesses. [Boddy \(2016\)](#) suggested that data saturation can occur between 1 and 12 samples. Choosing phone interviews for participants in California ensured comfort and convenience. I proposed a private space within the business owners' company locations for the phone interviews to create a comfortable environment for participants to share their experiences. Interview protocols serve as standards and guides for qualitative research during the interview process ([Dikko, 2016](#)).

Data Collection Technique

Prior to starting the interviews, the process was explained to participants as outlined in the informed consent form, and it was confirmed that each participant understood their rights to participate in the research. Participants were informed that the interview would be recorded and that transcripts would be available for

review to ensure accuracy. Participants' identities remained confidential, and a convenient location was chosen to provide a comfortable environment for sharing experiences (Peterson, 2014). Interviews continued until data saturation was reached, at which point no new information emerged. The interviews were audio-recorded using my phone application, then transcribed, and a member-checking summary was sent to each participant after each interview. Once all confirmations were received and any additional information was collected, data analysis was conducted using NVivo software, with proper and confidential data organization. The advantage of this data collection method was that the insights gained from open-ended questions could serve as useful tools for developing new venture modeling strategies that help information technology startups succeed beyond their first five years. The goal was to ensure participants felt comfortable during data collection (Arsel, 2017). A limitation of this approach was that participants might not always provide accurate information, and time constraints could limit the amount of data collected (Topkaya, 2015).

Data Organization Technique

Data organization techniques include systems for tracking data, emerging understandings of research logs, reflective journals, and cataloging or labeling systems. I organized the interview data for this study by storing it, with each participant's information being coded. Participant confidentiality was a top priority; therefore, I stored all files and transcripts on a second secured, dedicated memory card. A researcher has a responsibility to protect the privacy and confidentiality of study participants (Mealer & Jones, 2014). Participants are concerned about their anonymity when involved in a study (Namageyo-Funa et al., 2014). Coding was applied to all participants, designated as Participant 1, Participant 2, and Participant 3, later referred to as P1, P2, and P3, on the reserved memory card. This coding system aligns with approaches used to safeguard identities (Mozaffari et al., 2015). The secured memory card and electronic recording device are stored in a safe deposit box at a remote bank location for five years; after that period, all data will be destroyed. This process of data storage and organization follows the protocol described in Leung (2015), which involves securely storing the data in a safe location.

Data Analysis

Qualitative data analysis includes the researcher labeling, categorizing, and thematically grouping data from cases, participants' statements, and document reviews (Yin, 2017). Immediately after each interview, I transcribed the responses, compared the audio recordings with my field notes, and coded, categorized, and identified major themes in the data. Additionally, I assigned each participant an identifier, such as P1, P2, and P3, to protect their identities. Yin (2017) recommended that data analysis techniques involve searching for every meaning by analyzing and reducing statements into themes. Moreover, triangulation is a recommended practice for analyzing multiple types of data in research (Migala & Flick, 2019; Natow, 2019). In addition to using semistructured interviews during data

collection, I reviewed public company documents, including sales sheets, participants' websites, and other relevant company information, from global sustainability databases. I then identified major themes from each participant's interviews and supporting company data, focusing on new venture modeling strategies and the integration of sustainability in exploring the research question, the underlying conceptual framework of blue ocean strategy, and my literature review.

I used triangulation in my data analysis of the various types of collected data. According to Henry (2015), researchers use triangulation to analyze multiple data sources and gain richer perspectives on the study. Also, researchers use triangulation to strengthen the credibility of participants' responses and enhance the rigor of the research (Carnevale, 2016). I applied triangulation in analyzing semistructured interviews, audio transcripts, document reviews, and my field notes to improve the rigor of my study and support the findings. During data analysis, researchers use software such as ATLAS ti, NVivo, and MAXQDA to assist with coding, categorization, and the finalization of the study's findings (Oswald, 2019). After comparing various software programs, including Atlas ti and NVivo, I selected NVivo for my study's data analysis. NVivo appeared to have a more user-friendly interface, and I used it to categorize the data. Researchers choose NVivo for its coding query features, which expand the scope of data analysis, clarify themes, and help readers visualize the study's results (Paulus et al., 2017). I used NVivo 12 to code and organize the data into themes, then identified patterns within and across categories. Additionally, throughout the data analysis process, I consistently examined the data through the lens of blue ocean strategy and the major themes identified in the literature review. Researchers use these themes to align with the study's overall purpose, answer the research question, and build a valid argument by referencing the literature review (Nowell et al., 2017). I applied these themes and codes, along with current and emerging findings, to substantiate my study's results and to relate them to my conceptual framework, literature review, and overarching research question.

3.1. Presentations of the Findings

Three participants from different companies were interviewed using a semistructured format. These interviews were recorded on my cellphone, and notes were taken and included as supplementary notes in NVivo 12 for data analysis. One participant is the founder of an e-learning platform, another heads an information technology sales compensation company, and the third leads a venture startup that develops tools for analyzing information technology companies. All participants indicated that success in their businesses began with sales, which in turn led to the development of new venture-modeling strategies. They answered 8 questions about strategies for sustaining a business beyond 5 years. All participants are IT startup owners who have successfully used new venture modeling strategies to achieve this goal. Each participant used the Blue Ocean Strategy to make the competition irrelevant during the first five years of operation.

Respondents' answers and the themes identified in the data analysis align with new venture modeling strategies in the literature and with the blue ocean framework. Four themes emerged from the data collected through semistructured interviews, public information about their companies, and notes I compiled during the interview process. The themes were: 1) disruptive technology, 2) value/cost tradeoff, 3) agility in technology, and 4) data analytics. Regarding the theme of disruptive technology, three participants responded. The consensus was that differentiating their businesses in the market required disruptive tactics. Business owners in the cases presented here have differentiated their information technology startup businesses through enhanced products, product or service customization, and competitive pricing.

The recurring theme of value and cost regarding the new venture modeling strategies used by the participants was derived from the participants' applying innovation to succeed and scale. When asked which new venture modeling strategies are most helpful for managing information technology startup businesses, the majority believed that implementing innovation early, using value-driven models, fostering engagement, professionalism, and expertise are key. Each participant perceived the value of the applied new venture modeling strategies in a unique way for their respective businesses.

Flexibility in implementing new and innovative information technology resources is essential for applying the blue ocean strategy within an organization to make competition irrelevant (Heckmann & Maedche, 2018). In the technology sector, redesigning certain business models could help IT startup owners lacking new venture-modeling strategies sustain their businesses beyond five years. Given the competitiveness of the IT segment, it is important to explore participants' actions and responses to an ever-evolving market. When asked how they stay agile in technology, all participants responded that the ability to introduce new approaches and tools to the market before competitors allows them to remain flexible. In their study of how blue ocean theory applies to developing business model development tools, Ebel et al. (2016) emphasized the need to stay ahead of the curve by applying its concepts. A key factor in aligning information technology with startup dynamics is user acceptance, which is crucial for success (Tavana et al., 2018). Al-Qaysi et al. (2018) argued that user acceptance is especially important when introducing new information technology. Regarding the theme of data analytics, consumers' ability to gather information affects technological innovation, market demand, and technological dynamics (Giones & Brem, 2017). Sentiment analytics is one way information technology startups determine the direction to take in new venture modeling strategies.

3.2. Applications to Professional Practice

The findings of the study could help inform strategies that technology startup business owners use to survive beyond five years. Applying new venture modeling strategies—such as critical thinking, innovation, developing new technologies, de-

delivering value, understanding customer needs, networking with potential clients, staying up to date on the latest trends, and developing new business approaches—is essential to the success of technology startups. The themes derived from this study include a) disruptive technology; b) value/cost tradeoff; c) agility in technology; and d) data analysis, which may be useful for technology startup owners aiming to sustain their businesses beyond five years. Disruptive technology is a process that enables startup owners to develop innovations within their category. It can be a breakthrough that helps them become market leaders. For example, Tesla has become one of the most valuable automobile brands by leveraging disruptive technologies, such as self-driving features. Currently, small technology startups are also utilizing disruptive technologies, such as drones to detect wildfire sizes, inspect residential rooftops during appraisals, or deliver groceries. The value/cost tradeoff is helpful for startups in providing incremental deliverables to clients. These staged deliverables can enable clients to pay in installments for projects like implementing a new cybersecurity system. The study also finds that updating existing software rather than replacing it is a more cost-effective approach, which is a key professional practice for tech startups. Another use of the value/cost tradeoff is for small IT businesses with one or two employees that focus on technological agility. This agility helps small firms compete effectively with larger companies when entering new technology markets with limited staff.

3.3. Recommendations for Further Action

Recommendations for California-based technology startup owners include adopting new venture models and blue ocean strategies to sustain their businesses beyond five years. This study's findings should guide startup owners in creating innovative products and services, entering emerging technology markets, targeting uncontested, low-competition areas, and enhancing performance in existing markets. The goal is for these innovative efforts to boost customer satisfaction and make a significant impact on the tech industry. These strategies can be applied repeatedly to develop a system that continually fosters new trends and innovative technologies. I recommend sharing the study's findings with California business groups, such as the California Chamber of Commerce, technology incubators, and Small Business Administration offices in California, as well as reputable online business forums, to further assess and apply the data for the benefit of the local tech community.

3.4. Recommendations for Further Research

In future research, including a broader demographic could yield results that better represent the views of business owners across local, national, and international levels. Expanding the geographic scope of participating businesses could help develop new venture model strategies and blue ocean strategies for long-term sustainability. Data from additional studies on new venture model strategies for information technology startups could strengthen the validity of previous research

and broaden the current knowledge on the topic. Since information technology startups are crucial to the global economy, further research supporting the blue ocean strategy in this sector would benefit businesses worldwide. Adjusting the questions used in future studies might also reveal valuable insights. This study was limited to a qualitative approach; a quantitative study could provide useful data, particularly for research in other sectors such as healthcare or education technology. The study also involved only three business owners; future research could include 25 employees from IT companies to explore their perspectives on maintaining a business over ten years. Other limitations include the specific types of new venture models used by participants, which may not represent the entire IT industry. Additionally, the research was confined to Silicon Valley, California. Further research involving IT startup owners from other U.S. regions could offer important insights and build on these findings.

3.5. Conclusion

The qualitative multiple case study focused on identifying the new venture modeling strategies used by information technology startup business owners to sustain their businesses for more than five years. Three IT startup owners from Silicon Valley, California, who have maintained their businesses for over five years, were interviewed for this study. The findings should be valuable for IT startup owners aiming to develop innovative products and services, enter newly created technology markets, explore uncontested markets, and offer services that deliver better outcomes in existing markets. The key themes identified were 1) disruptive technology, 2) value/cost tradeoff, 3) agility in technology, and 4) data analysis; these themes may help IT startup owners achieve business longevity beyond five years. The study suggests that applying blue ocean theory to a new venture can lead to strategic models that create innovative market spaces, render competition irrelevant, and drive business success through long-term sustainability in the respective market segments. Developing a successful new venture strategy that incorporates engagement, professionalism, and expertise is crucial to sustaining IT startups beyond five years.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Adelino, M., Schoar, A., & Severino, F. (2015). House Prices, Collateral, and Self-Employment. *Journal of Financial Economics*, 117, 288-306. <https://doi.org/10.1016/j.jfineco.2015.03.005>
- Agnihotri, A. (2015). Extending Boundaries of Blue Ocean Strategy. *Journal of Strategic Marketing*, 24, 519-528. <https://doi.org/10.1080/0965254x.2015.1069882>
- Agrawal, A., & Cooper, T. (2017). Corporate Governance Consequences of Accounting Scandals: Evidence from Top Management, CFO and Auditor Turnover. *Quarterly Journal of Finance*, 7, Article ID: 1650014. <https://doi.org/10.1142/s2010139216500142>

- Aguinis, H., Ramani, R. S., & Alabduljader, N. (2018). What You See Is What You Get? Enhancing Methodological Transparency in Management Research. *Academy of Management Annals*, 12, 83-110. <https://doi.org/10.5465/annals.2016.0011>
- Akar, E., Mardikyan, S., & Dalgic, T. (2019). User Roles in Online Communities and Their Moderating Effect on Online Community Usage Intention: An Integrated Approach. *International Journal of Human-Computer Interaction*, 35, 495-509. <https://doi.org/10.1080/10447318.2018.1465325>
- Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2018). A Systematic Review of Social Media Acceptance from the Perspective of Educational and Information Systems Theories and Models. *Journal of Educational Computing Research*, 57, 2085-2109. <https://doi.org/10.1177/0735633118817879>
- Arsel, Z. (2017). Asking Questions with Reflexive Focus: A Tutorial on Designing and Conducting Interviews. *Journal of Consumer Research*, 44, 939-948. <https://doi.org/10.1093/jcr/ucx096>
- Autrey, R. L., Bova, F., & Soberman, D. A. (2015). When Gray Is Good: Gray Markets and Market-Creating Investments. *Production and Operations Management*, 24, 547-559. <https://doi.org/10.1111/poms.12254>
- Bartet, M., Fazekas, G., Alik, A. et al. (2016). From Interactive to Adaptive Mood-Based Music Listening Experiences in Social or Personal Contexts. *Journal of the Audio Engineering Society*, 64, 673-682. <https://doi.org/10.17743/jaes.2016.0042>
- Benaroch, M., & Chernobai, A. (2017). Operational IT Failures, IT Value Destruction, and Board-Level IT Governance Changes. *MIS Quarterly*, 41, 729-762. <https://doi.org/10.25300/misq/2017/41.3.04>
- Bocken, N. M. P. (2015). Sustainable Venture Capital—Catalyst for Sustainable Start-Up Success? *Journal of Cleaner Production*, 108, 647-658. <https://doi.org/10.1016/j.jclepro.2015.05.079>
- Boddy, C. R. (2016). Sample Size for Qualitative Research. *Qualitative Market Research: An International Journal*, 19, 426-432. <https://doi.org/10.1108/qmr-06-2016-0053>
- Booth, A. (2016). Searching for Qualitative Research for Inclusion in Systematic Reviews: A Structured Methodological Review. *Systematic Reviews*, 5, Article No. 74. <https://doi.org/10.1186/s13643-016-0249-x>
- Borgman, C. L. (2015). *Big Data, Little Data, No Data: Scholarship in the Networked World*. MIT Press.
- Bravo-Biosca, A., Criscuolo, C., & Menon, C. (2016). What Drives the Dynamics of Business Growth? *Economic Policy*, 31, 703-742. <https://doi.org/10.1093/epolic/eiw013>
- Bubel, D. (2015). Management of Innovations in the Aspect of an Enterprise Organization and Creativity of Employees. *International Journal of Arts & Sciences*, 8, 163-171.
- Carnevale, F. A. (2016). Authentic Qualitative Research and the Quest for Methodological Rigour. *Canadian Journal of Nursing Research Archive*, 34, 121-128. <https://cjr.archive.mcgill.ca/>
- Christofi, M., Leonidou, E., Vrontis, D., Kitchen, P., & Papasolomou, I. (2015). Innovation and Cause-Related Marketing Success: A Conceptual Framework and Propositions. *Journal of Services Marketing*, 29, 354-366. <https://doi.org/10.1108/jsm-04-2014-0114>
- Cook, P. J. (2016). Leading Innovation, Creativity and Enterprise. *Industrial and Commercial Training*, 48, 294-299. <https://doi.org/10.1108/ict-01-2016-0006>
- Davidsson, P. (2015). Entrepreneurial Opportunities and the Entrepreneurship Nexus: A Re-Conceptualization. *Journal of Business Venturing*, 30, 674-695. <https://doi.org/10.1016/j.jbusvent.2015.01.002>

- Deligianni, I., Voudouris, I., & Lioukas, S. (2015). Growth Paths of Small Technology Firms: The Effects of Different Knowledge Types over Time. *Journal of World Business*, 50, 491-504. <https://doi.org/10.1016/j.jwb.2014.08.006>
- Dikko, M. (2016). Establishing Construct Validity and Reliability: Pilot Testing of a Qualitative Interview for Research in Takaful (Islamic Insurance). *The Qualitative Report*, 21, 521-528. <https://doi.org/10.46743/2160-3715/2016.2243>
- Downing, J. A. (2018). Dimensions of Competitive Advantage. *The Journal of New Business Ideas & Trends*, 16, 1-8. <http://www.jnbit.org>
- Ebel, P., Bretschneider, U., & Leimeister, J. M. (2016). Leveraging Virtual Business Model Innovation: A Framework for Designing Business Model Development Tools. *Information Systems Journal*, 26, 519-550. <https://doi.org/10.1111/isj.12103>
- Elfarmawi, W. (2019). Correlation between Customer Relationship Management System Usage, Product Innovation, and Customer Satisfaction. *Foundations of Management*, 11, 23-32. <https://doi.org/10.2478/fman-2019-0002>
- Fillingim, W. A. (2018). *Small Business Sustainability Strategies*. Ph.D. Thesis, Walden University. <https://scholarworks.waldenu.edu/dissertations/5702/>
- Fujimoto, T. (2001). *Introduction to Production Management*. Nihon Keizai Shimbusha.
- Fusch, P., & Ness, L. (2015). Are We There Yet? Data Saturation in Qualitative Research. *The Qualitative Report*, 20, 1408-1416. <https://doi.org/10.46743/2160-3715/2015.2281>
- Gao, H., Tate, M., Zhang, H., Chen, S., & Liang, B. (2018). Social Media Ties Strategy in International Branding: An Application of Resource-Based Theory. *Journal of International Marketing*, 26, 45-69. <https://doi.org/10.1509/jim.17.0014>
- Giones, F., & Brem, A. (2017). From Toys to Tools: The Co-Evolution of Technological and Entrepreneurial Developments in the Drone Industry. *Business Horizons*, 60, 875-884. <https://doi.org/10.1016/j.bushor.2017.08.001>
- Gunasekaran, A., Subramanian, N., & Rahman, S. (2015). Supply Chain Resilience: Role of Complexities and Strategies. *International Journal of Production Research*, 53, 6809-6819. <https://doi.org/10.1080/00207543.2015.1093667>
- Haikel-Elsabeh, M., Zhao, Z., Ivens, B., & Brem, A. (2019). When Is Brand Content Shared on Facebook? A Field Study on Online Word-of-Mouth. *International Journal of Market Research*, 61, 287-301. <https://doi.org/10.1177/1470785318805301>
- Harney, B., & Trehy, J. (2016). Resource-Based View. In A. Wilkinson, & S. Johnstone (Eds.), *Encyclopedia of Human Resource Management* (pp. 377-378). Edward Elgar Publishing Limited.
- Heckmann, C. S., & Maedche, A. (2018). IT Ambidexterity for Business Processes: The Importance of Balance. *Business Process Management Journal*, 24, 862-881. <https://doi.org/10.1108/bpmj-04-2016-0078>
- Henry, P. (2015). Rigor in Qualitative Research: Promoting Quality in Social Science Research. *Research Journal of Recent Sciences*, 4, 25-28. <http://www.isca.in/rjrs/Introduction.php>
- Holstein, A. D., & Eschenfelder, M. J. (2017). Economic Analysis of Public Support for Technology Startups: A Case Study of Pittsburgh. *Journal of Business & Behavioral Sciences*, 29, 100-115.
- Holzmann, V., & Golan, J. (2016). Leadership to Creativity and Management of Innovation? The Case of the "Innovation Club" in a Production Company. *American Journal of Industrial and Business Management*, 6, 60-71. <https://doi.org/10.4236/ajibm.2016.61005>
- Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in Qualitative Case-Study

- Research. *Nurse Researcher*, 20, 12-17. <https://doi.org/10.7748/nr2013.03.20.4.12.e326>
- Hyder, S., & Lussier, R. N. (2016). Why Businesses Succeed or Fail: A Study on Small Businesses in Pakistan. *Journal of Entrepreneurship in Emerging Economies*, 8, 82-100. <https://doi.org/10.1108/jeeee-03-2015-0020>
- Jackson, S. A., Gopalakrishna-Remani, V., Mishra, R., & Napier, R. (2016). Examining the Impact of Design for Environment and the Mediating Effect of Quality Management Innovation on Firm Performance. *International Journal of Production Economics*, 173, 142-152. <https://doi.org/10.1016/j.ijpe.2015.12.009>
- Jiménez, A., & Zheng, Y. (2018). Tech Hubs, Innovation and Development. *Information Technology for Development*, 24, 95-118. <https://doi.org/10.1080/02681102.2017.1335282>
- Jordan, K. (2018). Validity, Reliability, and the Case for Participant-Centered Research: Reflections on a Multi-Platform Social Media Study. *International Journal of Human-Computer Interaction*, 34, 913-921. <https://doi.org/10.1080/10447318.2018.1471570>
- Kallio, H., Pietilä, A., Johnson, M., & Kangasniemi, M. (2016). Systematic Methodological Review: Developing a Framework for a Qualitative Semi-Structured Interview Guide. *Journal of Advanced Nursing*, 72, 2954-2965. <https://doi.org/10.1111/jan.13031>
- Kawakami, T., Barczak, G., & Durmuşoğlu, S. S. (2015). Information Technology Tools in New Product Development: The Impact of Complementary Resources. *Journal of Product Innovation Management*, 32, 622-635. <https://doi.org/10.1111/jpim.12244>
- Khan, H. U., Daud, A., Ishfaq, U., Amjad, T., Aljohani, N., Abbasi, R. A. et al. (2017). Modelling to Identify Influential Bloggers in the Blogosphere: A Survey. *Computers in Human Behavior*, 68, 64-82. <https://doi.org/10.1016/j.chb.2016.11.012>
- Khaola, P., & Ndovorwi, T. (2015). Beyond the Theory of Planned Behaviour—Viewing Entrepreneurial Intent through the Lens of Economic Powerlessness. *Journal of Enterprising Culture*, 23, 501-518. <https://doi.org/10.1142/s021849581550017x>
- Kim, W. C., & Mauborgne, R. (2015). *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Harvard Business School Press.
- Kremer, G. E., Haapala, K., Murat, A., Chinnam, R. B., Kim, K., Monplaisir, L. et al. (2016). Directions for Instilling Economic and Environmental Sustainability across Product Supply Chains. *Journal of Cleaner Production*, 112, 2066-2078. <https://doi.org/10.1016/j.jclepro.2015.07.076>
- Krüger, J. J. (2017). Revisiting the World Technology Frontier: A Directional Distance Function Approach. *Journal of Economic Growth*, 22, 67-95. <https://doi.org/10.1007/s10887-016-9136-5>
- Lee, Y. C., & Wu, W. (2018). Factors in Cyber Bullying: The Attitude-Social Influence-Efficacy Model. *Anales de Psicología*, 34, 324-331. <https://doi.org/10.6018/analesps.34.2.295411>
- Leischnig, A., Ivens, B. S., & Kammerlander, N. (2017). A New Conceptual Lens for Marketing: A Configurational Perspective Based on the Business Model Concept. *AMS Review*, 7, 138-153. <https://doi.org/10.1007/s13162-017-0107-6>
- Leung, L. (2015). Validity, Reliability, and Generalizability in Qualitative Research. *Journal of Family Medicine and Primary Care*, 4, 324-327. <https://doi.org/10.4103/2249-4863.161306>
- Lewis, S. (2015). Qualitative Inquiry and Research Design: Choosing among Five Approaches. *Health Promotion Practice*, 16, 473-475. <https://doi.org/10.1177/1524839915580941>
- Li, T., Liu, X., Pan, J., & Zhou, G. (2017). The Interactive Effect of Facial Appearance and

- Behavior Statement on Trust Belief and Trust Behavior. *Personality and Individual Differences*, 117, 60-65. <https://doi.org/10.1016/j.paid.2017.05.038>
- Li, X., & Wu, L. (2018). Herding and Social Media Word-of-Mouth: Evidence from Groupon. *MIS Quarterly*, 42, 1331-1351. <https://doi.org/10.25300/misq/2018/14108>
- Littlechild, S. (2018). Regulation and the Nature of Competition. *Journal of Air Transport Management*, 67, 211-223. <https://doi.org/10.1016/j.jairtraman.2017.03.003>
- Loebbecke, C., & Picot, A. (2015). Reflections on Societal and Business Model Transformation Arising from Digitization and Big Data Analytics: A Research Agenda. *The Journal of Strategic Information Systems*, 24, 149-157. <https://doi.org/10.1016/j.jsis.2015.08.002>
- Maćznik, A. K., Ribeiro, D. C., & Baxter, G. D. (2015). Online Technology Use in Physiotherapy Teaching and Learning: A Systematic Review of Effectiveness and Users' Perceptions. *BMC Medical Education*, 15, Article No. 160. <https://doi.org/10.1186/s12909-015-0429-8>
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does Sample Size Matter in Qualitative Research? A Review of Qualitative Interviews in IS Research. *Journal of Computer Information Systems*, 54, 11-22. <https://doi.org/10.1080/08874417.2013.11645667>
- Marshall, C., & Rossman, G. B. (2016). *Designing Qualitative Research* (6th ed.). Sage Publications, Ltd.
- McAlister, L., Srinivasan, R., Jindal, N., & Cannella, A. A. (2016). Advertising Effectiveness: The Moderating Effect of Firm Strategy. *Journal of Marketing Research*, 53, 207-224. <https://doi.org/10.1509/jmr.13.0285>
- Mchawrab, S. (2016). M&A in the High Tech Industry: Value and Valuation. *Strategic Direction*, 32, 12-14. <https://doi.org/10.1108/sd-03-2016-0036>
- McKinley, J., Houke, C., Kizer, L., & Raynor III, W. (2017). Blue Ocean MBA's in the Era of Wicked Problem Disruption from Automation, Robotics, & Artificial Intelligence. *Business Education Innovation Journal*, 9, 80-87. <http://www.beijournal.com/>
- Mealer, M., & Jones RN, J. (2014). Methodological and Ethical Issues Related to Qualitative Telephone Interviews on Sensitive Topics. *Nurse Researcher*, 21, 32-37. <https://doi.org/10.7748/nr2014.03.21.4.32.e1229>
- Migala, S., & Flick, U. (2019). Cultural and Individual Barriers to Palliative Care from Different Angles: Data Triangulation in Practice. *Qualitative Inquiry*, 25, 786-798. <https://doi.org/10.1177/1077800418809475>
- Mozaffari, N., Peyrovi, H., & Nayeri, N. D. (2015). The Social Well-Being of Nurses Shows a Thirst for a Holistic Support: A Qualitative Study. *International Journal of Qualitative Studies on Health and Well-Being*, 10, 27749. <https://doi.org/10.3402/qhw.v10.27749>
- Namageyo-Funa, A., Rimando, M., Brace, A., Christiana, R., Fowles, T., Davis, T. et al. (2014). Recruitment in Qualitative Public Health Research: Lessons Learned during Dissertation Sample Recruitment. *The Qualitative Report*, 19, Article 1. <https://doi.org/10.46743/2160-3715/2014.1282>
- Natow, R. S. (2019). The Use of Triangulation in Qualitative Studies Employing Elite Interviews. *Qualitative Research*, 20, 160-173. <https://doi.org/10.1177/1468794119830077>
- Newell, S. (2015). Managing Knowledge and Managing Knowledge Work: What We Know and What the Future Holds. *Journal of Information Technology*, 30, 1-17. <https://doi.org/10.1057/jit.2014.12>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16.

- <https://doi.org/10.1177/1609406917733847>
- Oswald, A. G. (2019). Improving Outcomes with Qualitative Data Analysis Software: A Reflective Journey. *Qualitative Social Work*, 18, 436-442.
<https://doi.org/10.1177/1473325017744860>
- Pappas, N. (2017). The Complexity of Purchasing Intentions in Peer-to-Peer Accommodation. *International Journal of Contemporary Hospitality Management*, 29, 2302-2321.
<https://doi.org/10.1108/ijchm-08-2016-0429>
- Parker, L. D., & Northcott, D. (2016). Qualitative Generalising in Accounting Research: Concepts and Strategies. *Accounting, Auditing & Accountability Journal*, 29, 1100-1131.
<https://doi.org/10.1108/aaaj-04-2015-2026>
- Paulus, T., Woods, M., Atkins, D. P., & Macklin, R. (2017). The Discourse of QDAS: Reporting Practices of ATLAS.ti and NVivo Users with Implications for Best Practices. *International Journal of Social Research Methodology*, 20, 35-47.
<https://doi.org/10.1080/13645579.2015.1102454>
- Peterson, M. (2014). Interviewing International Students to Understand the Process of Expatriate Acculturation. *Marketing Education Review*, 24, 59-62.
<https://doi.org/10.2753/mer1052-8008240110>
- Porter, M. E., & Millar, V. E. (1985). *How Information Gives You Competitive Advantage*. Harvard Business Review.
- Ragab, M. A. F., & Arisha, A. (2013). Knowledge Management and Measurement: A Critical Review. *Journal of Knowledge Management*, 17, 873-901.
<https://doi.org/10.1108/jkm-12-2012-0381>
- Reynolds, P., & Yetton, P. (2015). Aligning Business and IT Strategies in Multi-Business Organizations. *Journal of Information Technology*, 30, 101-118.
<https://doi.org/10.1057/jit.2015.1>
- Salunkhe, S., & Kadam, S. (2018). Design Thinking: An Approach for Bridging the Gap between Industry and Academics. *CLEAR International Journal of Research in Commerce & Management*, 9, 1-6.
- Santisteban, J., & Mauricio, D. (2017). Systematic Literature Review of Critical Success Factors of Information Technology Startups. *Academy of Entrepreneurship Journal*, 23, 1-23.
<https://www.abacademies.org/journals/academy-of-entrepreneurship-journal-home.html>
- Sanusi, I. T., Olaleye, S. A., & Atjonen, P. (2017). Assessment of Innovative Entrepreneurship Education in Nigerian Tertiary Institutions. *Journal of Entrepreneurship Education*, 20, 1-17.
<https://www.abacademies.org/journals/journal-of-entrepreneurship-education-home.html>
- Sharafizad, J., & Coetzer, A. (2016). Women Business Owners' Start-Up Motivations and Network Content. *Journal of Small Business and Enterprise Development*, 23, 590-610.
<https://doi.org/10.1108/jsbed-07-2015-0085>
- Silverman, D. (2015). *Interpreting Qualitative Data: Methods for Analyzing Talk, Text, and Interaction*. Sage.
- Suki, N. M. (2013). Green Awareness Effects on Consumers' Purchasing Decision: Some Insights from Malaysia. *International Journal of Asia-Pacific Studies*, 9, 49-63.
<http://ijaps.usm.my/>
- Sulayman, M., Mendes, E., Urquhart, C., Riaz, M., & Tempero, E. (2014). Towards a Theoretical Framework of SPI Success Factors for Small and Medium Web Companies. *Information and Software Technology*, 56, 807-820.

- <https://doi.org/10.1016/j.infsof.2014.02.006>
- Swapana, M., & Padmavathy, C. (2017). Factors Influencing Dependency on Smartphone and the Impact on Purchase Behaviour: An Empirical Research. *International Journal of E-Business Research*, 13, 79-92. <https://doi.org/10.4018/ijebr.2017040105>
- Tavana, M., Di Caprio, D., & Santos-Arteaga, F. J. (2018). An Extended Stochastic VIKOR Model with Decision Maker's Attitude Towards Risk. *Information Sciences*, 432, 301-318. <https://doi.org/10.1016/j.ins.2017.12.019>
- Topkaya, N. (2015). Factors Influencing Psychological Help Seeking in Adults: A Qualitative Study. *Educational Sciences: Theory and Practice*, 15, 21-31.
- von Briel, F., Davidsson, P., & Recker, J. (2018). Digital Technologies as External Enablers of New Venture Creation in the IT Hardware Sector. *Entrepreneurship Theory and Practice*, 42, 47-69. <https://doi.org/10.1177/1042258717732779>
- Wada, T. (2018). Capability-Based Cost Leadership Strategy of Japanese Firms. *Annals of Business Administrative Science*, 17, 1-10. <https://doi.org/10.7880/abas.0171018a>
- Wali, A. F., Uduma, I. A., & Wright, L. T. (2016). Customer Relationship Management (CRM) Experiences of Business-to-Business (B2B) Marketing Firms: A Qualitative Study. *Cogent Business & Management*, 3, Article ID: 1183555. <https://doi.org/10.1080/23311975.2016.1183555>
- Wallace, M., & Sheldon, N. (2015). Business Research Ethics: Participant Observer Perspectives. *Journal of Business Ethics*, 128, 267-277. <https://doi.org/10.1007/s10551-014-2102-2>
- Wang, R. J., Malthouse, E. C., & Krishnamurthi, L. (2015). On the Go: How Mobile Shopping Affects Customer Purchase Behavior. *Journal of Retailing*, 91, 217-234. <https://doi.org/10.1016/j.jretai.2015.01.002>
- Wang, Y., & Baker, R. (2015). Content or Platform: Why Do Students Complete MOOCs. *MERLOT Journal of Online Learning and Teaching*, 11, 17-30. <http://jolt.merlot.org/>
- Warnecke, T. (2017). Social Innovation, Gender, and Technology: Bridging the Resource Gap. *Journal of Economic Issues*, 51, 305-314. <https://doi.org/10.1080/00213624.2017.1320508>
- Webb, E. (2015). A Contract Manager Abroad: Cultural Awareness in Asia. *Proceedings of the Institution of Civil Engineers - Management, Procurement and Law*, 168, 261-268. <https://doi.org/10.1680/jmapl.15.00034>
- Wiid, J. A., Cant, M. C., & Le Roux, Z. (2015). Loyalty to SMEs: A Pipe Dream in the Current Economic Climate? *Journal of Applied Business Research (JABR)*, 32, 101-110. <https://doi.org/10.19030/jabr.v32i1.9526>
- Wogwu, V. E., & Hamilton, D. I. (2018). Reconfiguration Capability and Competitive Advantage: A Study of Port Harcourt Public Health Sector. *Management*, 8, 47-53.
- Yin, R. K. (2017). *Case Study Research and Applications: Design and Methods*. Sage Publications Inc.
- Yuliaty, F. (2017). Employee Empowering through IT and Creativity in Organizations. *Journal of Economic & Management Perspectives*, 11, 54-59.