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Strategies Used by Retail Business Managers to Address Disruptive Changes in Technology

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Abstract

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MS, University of Liverpool, 2016

BS, London Metropolitan University, 2009

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Disruptive changes in technology have shifted the competitive landscape in the retail travel industry and have led to high failure rates of traditional brick-and-mortar travel agencies. Retail business leaders have estimated the loss of market share to new market entrants at approximately 40% in 5 years. Responding to disruptive changes in technology may increase market share and survival rates of incumbent firms. Grounded in Christensen's theory of disruptive innovation, the purpose of this qualitative multiple case study was to explore the strategies used by retail business managers to address disruptive changes in technology. Participants were 6 owners of travel agencies located in Nairobi, Kenya, who had owned their travel agencies for more than 5 years. Data were collected through semistructured interviews and review of company documents and archival records. Data were analyzed using Yin's 5-step data analysis approach. Five themes emerged: business opportunities, competitive strategies, changes in technology, dynamic capabilities, and the business model. A key recommendation is to encourage retail business leaders to optimize their dynamic capabilities through collaborations with experienced partners for developing technology, products, and processes. Implications for positive social change include the potential to encourage retail business leaders to focus on sustainable business practices, thereby contributing to increased longevity and sustainability of retail travel businesses, which may lead to increased meaningful employment for unemployed individuals to enhance their quality of life.

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Dedication

I dedicate this doctoral study to my family, who believed in me throughout the challenging yet fulfilling journey. In particular, I wish to thank my wife, Peninah, for her constant encouragement during this journey and belief in my abilities to achieve this goal. To my children, Avishai and Elisha, thank you for allowing me to dedicate some of the family time toward achieving this goal; I hope this achievement will inspire you to keep learning and appreciate the importance of goal setting and dedication. I also dedicate this work to the memory of the late Dr. Myles Munroe, who inspired not only me but many people across the world with his assertion that "the greatest tragedy in life is not death, but living a life without a purpose." Above all, this journey would not have been successful without the grace of God. Accomplishing this milestone is symptomatic of the fact that with God, all things are possible. Throughout the journey, I drew inspiration from the holy book that "many plans are in a man's heart, but the purpose of the Lord will prevail."

Acknowledgments

I would like to thank the Lord, Jesus Christ, for enabling me to go through this journey all the way to the finish line. It would not have been possible to complete this study without the relentless guidance, encouragement, and immense support from my committee chair, Dr. Robert Banasik. I also wish to sincerely thank my previous second committee member, Dr. Douglas Keevers, my current second committee member, Dr. Lisa Pearo, and my university research reviewer, Dr. Diane Dusick, for their support and constructive feedback. My special appreciation goes to the company leaders who participated in this study; this journey would not have been complete without your input. Finally, I would like to thank all of the Walden faculty, staff, and fellow scholars who contributed to the success of my doctoral journey.

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Section 1: Foundation of the Study

Modern technologies are transforming industries, challenging traditional marketing channels, and providing digital avenues for dynamic growth (Crittenden, Crittenden, & Crittenden, 2017). These technologies have often disrupted existing business models, causing leading companies to become obsolete (Christensen, 2016). In an era of increasing disruptive changes in technology, the lines among industries, competitors, and companies are blurring as firms and platforms combine to create unique methods for engagement (Crittenden, Crittenden, & Crittenden, 2019). Disruptive changes in technology and the presence of an ever-changing competitive market structure require the leaders and managers in the incumbent retail industries to adapt their practices accordingly (Kumar, Anand, & Song, 2017). The business managers in these retail industries often face competitive pressures to adopt and assimilate disruptive innovations that modify the traditional business model to attract new markets and value networks (Karimi & Walter, 2016; Lui, Ngai, & Lo, 2016). As such, these business managers should be aware of disruptive threats to their firms. In the current study, I explored the strategies that retail business managers use to address disruptive changes in technology.

Background of the Problem

Technology is transforming industries, challenging traditional marketing channels, and providing digital avenues for dynamic growth (Crittenden et al., 2017). Firms are seizing the opportunity to share resources and increase profits from convenient transactions among digitally connected marketplaces (Harrison & Hair, 2017). Digitally connected marketplaces are evident in retail industries often associated with the sharing economy and access-based business models (Harrison & Hair, 2017). The increased adoption of Internet-based business models has shifted the competitive landscape in these industries. The rise of online travel agencies (OTAs), such as Expedia, Travelocity, and Orbitz, illustrates the ongoing disruption of traditional brick-and-mortar travel agencies in the tourism sector (Christensen & Raynor, 2003). The ongoing disruption has created opportunities for startups to shake up the status quo and transform the industry (Crittenden et al., 2017). Crittenden et al. (2019) suggested that changes affecting incumbent firms require new ways of thinking, and managers of these firms must create dynamic business models that trigger self-reinforcing cycles of growth. The purpose of this study was to explore the strategies that retail business managers use to address disruptive changes in technology.

Problem Statement

Changes in technology have disrupted incumbent businesses and impacted traditional channels of distribution across various industries (Crittenden et al., 2017). Between 2007 and 2012, disruptive changes in technology in retail industries such as the travel sector led to a 14.8% reduction in the number of travel agencies in the United States (U.S. Census Bureau, 2016). The general business problem is that changes in technology are affecting the sustainability of businesses. The specific business problem is that some retail business managers lack strategies for addressing disruptive changes in technology.

Purpose Statement

The purpose of this qualitative multiple case study was to explore the strategies that retail business managers use to address disruptive changes in technology. The targeted population included six owners of travel agencies located in Nairobi, Kenya, who had implemented successful strategies to address disruptive changes in technology. The implications for positive social change include the potential to increase longevity and sustainability of businesses, contributing to job creation and economic stimuli that can lead to increasing the quality of living in the local communities.

Nature of the Study

Qualitative methodology is associated with the interpretive worldview. Researchers use qualitative methodology to understand aspects of social life and its methods through words rather than numbers for analysis (McCusker & Gunaydin, 2015). In qualitative research, the attached meanings and perspectives of the participants are important in understanding a phenomenon (Sneison, 2016). Employing qualitative research methodology allowed me to obtain an in-depth understanding of the solutions to the business problem by using different data collection techniques. In contrast to qualitative research methodology, quantitative research methodology involves examining relationships among operationalized variables and testing hypotheses about the significance of the variables' relationships or differences (Ma, 2015).

Quantitative research methodology was not appropriate because I was not seeking to test hypotheses, to examine variables' relationships, or to compare variables' effects or groups' differences. Researchers who use the mixed-methods approach include both quantitative and qualitative methods in a single study (Hughes, 2016; McCusker & Gunaydin, 2015). Although using a mixed-methods approach would have addressed the qualitative aspects of my study, it would also have required quantitative methodology that was not relevant to my research purpose. Therefore, I concluded that a mixed-methods approach was not appropriate for this study.

Principal qualitative research designs include case study, ethnography, narrative research, and phenomenology. Researchers use case study designs for in-depth inquiry into a topic or phenomenon within its real-life context (Yin, 2014). In a case study design, the case under investigation may involve individuals, groups, or organizations, and researchers may consider a variety of data collection methods to gain an in-depth understanding of the case (Zou, Sunindijo, & Dainty, 2014). Researchers use ethnographic designs to study people and interpret the cultural behaviors of a group (Cardoso, Gontijo, & Ono, 2017). In narrative research, researchers study lifelong experiences of the participants through their stories (Marshall & Rossman, 2016). Researchers use phenomenological research designs to understand a phenomenon through the meanings of the participants' lived experiences (Percy, Kostere, & Kostere, 2015). I did not select the ethnographic or phenomenological research design because I was not studying the culture of a group or the meanings of lived experiences of individuals. I did not choose a narrative research design because the focus of this study was to explore strategies rather than meanings of participants' stories. The focus of this study was the strategies that retail business managers use to address disruptive changes in technology. Using a multiple case study research design, I explored the phenomenon using multiple data collection methods (see Yin, 2014). The case study design was appropriate to answer my research question.

Research Question

The primary research question for this study was the following: What strategies do retail business managers use to address disruptive changes in technology?

Interview Questions

1. Please describe your experiences with changes in technology in your business.
2. How did you ensure your organization remained competitive in the wake of these changes in technology?
3. How did you select and implement the strategies for addressing disruptive changes in technology?
4. Could you describe your experience while using these strategies?
5. How did you convey these strategies to gain buy-in from all stakeholders?
6. How did you assess the effectiveness of using these strategies?
7. What additional information would you like to add regarding the successful strategies your organization uses for addressing disruptive changes in technology?

Conceptual Framework

Christensen (1997) pioneered the theory of disruptive innovation (DI) and used the theory to explain how innovation could change prevailing markets. Researchers use the terms *disruptive technologies* and *disruptive innovations* interchangeably in the literature. However, the term disruptive technology predates the term disruptive innovation. Christensen introduced the term disruptive innovation so that it would include services as well as products (Ciutiene & Thattakath, 2014). The key constructs underlying the DI theory are simplicity, affordability, accessibility, and convenience. Over time, the concepts from DI theory have influenced thinking and research in the areas of technological innovations and strategic organizational management. The DI theory is well suited for explaining why companies succeed or fail when responding to disruptive changes in business environments and technologies (Karimi & Walter, 2015). I found the DI theory appropriate for this study because the underlying constructs could be useful for gaining an in-depth understanding of the strategies that retail managers use to address disruptive changes in technology.

Operational Definitions

Business model innovation (BMI): BMI is a new system of creating and capturing value of a firm, its alliances, and customers (Bouncken & Fredrich, 2016).

Dynamic capabilities: Dynamic capabilities are a firm's ability to sense and seize new opportunities to create a competitive advantage by reconfiguring its resources to align with changes in its environment (Teece, 2014).

Small and medium-sized enterprises (SMEs): Although there are various definitions of SMEs globally, the Organization for Economic Cooperation and Development defined SMEs as firms with fewer than 199 employees, excluding nonemploying businesses and those in the financial service industry (Li, 2015).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are researchers' assertions that are difficult to prove (Probst & Berenson, 2014). Researchers assume certain claims to be true or valid for the study (Valentine, 2014). In the current study, I made four assumptions. The first assumption was that participants would understand the interview questions and would be open and honest when answering questions. The second assumption was that the participants would allow sufficient time to provide detailed answers to the interview questions. The third assumption was that secondary data would be available to support the interview data and that participants would be willing to share documents that support their statements. The fourth assumption was that the findings of the study would offer value to owners of retail businesses who are seeking to address disruptive changes in technology.

Limitations

Limitations are the weaknesses or areas of deficiencies in a study due to factors beyond the researcher's immediate control (McCarthy & Muthuri, 2018). Constraints on generalizing, applying appropriate research methods, and applications of best practices can also be a source of research limitations (McCarthy & Muthuri, 2018). One potential limitation of my study was accessibility of owners of travel agencies and interview availability for a time frame most convenient for them. Another limitation was that the participants may not fully disclose information regarding the strategies they use in their businesses, which could affect the accuracy of the data. The short time frame for conducting this research could also be another potential limitation.

Delimitations

Delimitations refer to the boundaries of the research and deliberate limits set by a researcher on the focus and scope of the study (Marshall & Rossman, 2016; Yin, 2018). The delimitation of the study was the travel agency sector; I excluded other retail industries. I focused on the travel sector because owners of travel agencies face competition from the adoption of emerging Internet-based business models. The targeted participants also work within one geographical area: Nairobi, Kenya. Therefore, the results might not reflect the retail industry worldwide.

Significance of the Study

Businesses face sustainability challenges because of disruptive changes in technology (Crittenden et al., 2017). Business managers seek to understand and implement effective strategies to enable them to remain competitive and sustainable in a dynamic and changing business environment (Karimi & Walter, 2015). This study is of potential significance to business practice because the findings may contribute to knowledge regarding effective business practices for coping with challenges caused by disruptive changes in technology.

A possible outcome of the study is that business managers in the retail sector are encouraged to use strategies for addressing disruptive changes in technology. Successful adoption of such strategies could enable managers to enhance their competitive capabilities leading to longevity and sustainability of businesses. The implications for positive social change include the potential to provide significant knowledge to business managers conducive to increasing longevity and sustainability of businesses and contributing to job creation and economic stimuli that can lead to increasing and maintaining the quality of life in local communities.

A Review of the Professional and Academic Literature

Pertinent literature indicated that different kinds of innovations have different competitive effects and produce different kinds of markets. This literature review includes the theory of disruptive innovation and the principle of business models. Furthermore, I provide an in-depth overview of the history, related concepts, application, critique and countercritique, and managerial implications of disruptive innovations theory, followed by a discussion of the concepts of business models, business model innovation, dynamic capabilities, and business model adaptation.

The primary sources of information were the search engines that the Walden University Library provided, such as ProQuest, SAGE Premier, ABI/FORMS Complete, Business Source Complete, Science Direct, and Emerald Management. Based on saved searches, some of the search engines automatically presented additional research. Furthermore, Google Scholar, linked to Walden's library, proved to be a valuable search engine.

Key words used for the searches included (either individually or combined) the following: *disruptive innovation*, *disruptive technology*, *diffusion of innovations*, *business model*, *business model innovation*, *business model adaptation*, *competitive advantage*, *competitive strategy*, and *dynamic capabilities*. I used citation chaining to identify additional useful sources from the reference lists of articles that I read, thereby expanding my collection of relevant literature. The literature reviewed contains 92 sources, including 82 (89%) peer-reviewed articles and 72 (78%) sources published between 2015 and 2019.

Disruptive Innovation

Christensen and Bower (1995) introduced the concept of disruptive technologies and defined these technologies as enabling the creation of a new set of product features from products associated with mainstream technologies. Changes in technology are either disruptive or sustaining (Hang, Garnsey, & Ruan, 2015). The notion of disruptive innovations theory underscores the ability of initially inferior new technologies to overturn mainstream technologies (Christensen, 1997; Christensen & Bower, 1995). Christensen (1997) also advanced the theory of disruptive innovation to explain the phenomenon by which an innovation changes a current market. Disruptive innovation is premised on the view that new technologies can create new markets or can alter the status quo in existing markets and thereby displace established firms in favor of new firms (Feder, 2018; Nagy, Schuessler, & Dubinsky, 2016). The focus of existing disruptive innovation theory is on market characteristics, new markets, and low-end innovations (Nagy et al., 2016). Disruptive innovation could occur in any established marketplace due to technological or nontechnological factors (Christensen & Raynor, 2003). Moreover, the concept of disruptive innovation has been broadened over the years to include not only technologies but also products and business models (Christensen, Raynor, & McDonald, 2015). Conversely, continuing innovations reinforce the technological paradigm and business routines, and enable business owners to focus on the development of existing products (Feder, 2018).

Christensen and Raynor (2003) recognized that technology is not the only source of innovation, and they used the term disruptive innovation to acknowledge service, process, or business model innovations. This concept attracted the attention of scholars and led to an extensive body of research focused on defining the term and distinguishing it from other types of innovation. For example, Markides (2006) called for a better theory of disruptive innovation and provided an analysis that started to enable a more general approach. Markides differentiated business model innovations and product innovations by noting that the former does not necessarily come to dominate the whole market as new and old models may coexist such as Internet and branch banking. Further, these innovations arise in different ways, have different competitive effects, and require different responses from incumbents (Markides, 2006).

Theories centered on disruptive innovations must also consider customers. Christensen and Raynor (2003) identified two types of customers: entirely new nonconsumers in markets outside of existing markets, and overshot customers in existing markets. Disruptive innovations affecting either type of customer could occur in two ways. First, incumbent firms could concentrate on serving old needs while the new players capture a major portion of the market by serving new needs (Christensen, 1997). Alternatively, firms could form a new market where none existed previously (Christensen, 1997).

New-market disruptive innovations provide new value to nonconsumers through innovations that establish new markets; these new markets subsequently cause disruptive innovations in existing markets (Tomofumi & Junichi, 2015). Low-end disruptive innovations provide products and services that grant value in line with low-end overshot customers, but subsequently target customers from the high end (Tomofumi & Junichi, 2015). Although new-market disruptive innovations may lag in conventional performance, they secure new markets in higher ancillary performance and permeate from new markets to existing markets (Tomofumi & Junichi, 2015). On the contrary, low-end disruptive innovations have poor conventional performance; nonetheless, innovations with lower cost allow these low-end disruptive innovations to withdraw customers from existing markets (Christensen, 1997).

The decision to adopt innovation comes with risk and uncertainty. Danneels (2004) posited that the levels of uncertainty about products' success increase when the technology under consideration is a disruptive innovation. The success of innovations depends on knowledge about early adopters (Reinhardt & Gurtner, 2015). Understanding the dynamics underlying the diffusion of new ideas or technology in a society is an important task. Such knowledge has implications for not only social sciences such as sociology and economics but also for important business applications, especially in marketing (Mehmood, Barbieri, & Bonchi, 2016). Research on diffusion describes how innovation is adopted in a social system. The concept of diffusion of innovations has been widely applied by communications scholars since the publication of Rogers's (1962) seminal book. Diffusion refers to the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1962).

The core concepts of diffusion of innovations encompass innovation, time, communication channels, and social systems (Rogers, 1962). Initially, Rogers (1962) proposed a model with the two stages of adoption and implementation to analyze innovation diffusion within organizations. The adoption stage was further divided into the substages of knowledge acquisition, persuasion and learning, and decision (Rogers, 1962). All of these stages lead to the adoption decision (Wu & Chiu, 2015). The implementation stage includes the preparation of change to task organization, task process, and technology necessary for innovation deployment (Wu & Chiu, 2015). The diffusion of innovations theory provides a categorization of individuals, based on their propensity to innovate, into five classes: innovators, early adopters, early majority, late majority, and laggards (Rogers, 1962). Innovators tend to be the first to adopt innovations while early adopters tend to adopt ideas after innovators and to hold leadership roles in the social system (Mehmood et al., 2016). Early adopters play a critical role in bringing innovation to the attention of the mass market while the early majority waits until most of their peers adopt the innovation while the late majority tends to adopt an innovation after the majority of the society does (Mehmood et al., 2016). The final category, laggards, is the last group to adopt an innovation (Mehmood et al., 2016).

Extending Rogers's work, Hohnisch, Pittnauer, and Stauffer (2008) developed the stochastic percolation concepts that describe how the market times the adoption of innovations. Because individual customers have different requirements, preferences, and information (Kiesling, Gunther, Stummer, & Wakolbinger, 2012), customer heterogeneity in a diffusion process has received particular attention (Hohnisch et al., 2008). The basic idea is that there is a network of agents who have different states. The stochastic percolation and other diffusion models use simple decision rules based on cost minimization or heterogeneous reservation prices (Kiesling et al., 2012). These models assume falling prices due to learning effects and tend to interpret social influence as benefits due to network externalities (Kiesling et al., 2012). These network externalities occur when the utility of a network increases with the number of peers or when the share of the market has adapted to noted externalities (Kiesling et al., 2012).

Hohnisch et al. (2008) explained the empirical finding of a delayed takeoff of a new product by a drift of the percolation dynamics from a nonpercolating regime to a percolating regime, which occurs because the probability of buying increases over time with the cumulative number of buyers. Heterogeneity in reservation prices plays a critical role in this process and determines whether diffusion takes place or fails (Kiesling et al., 2012). In the context of technology diffusion, the percolation model represents the word-of-mouth process in social networks accompanying the diffusion of newest technologies (Hohnisch et al., 2008). *Word of mouth* means that agents who adopt a new technology or product will recommend the new technology or product to their acquaintances in the social network. Zeppini and Frenken (2018) underscored the importance of understanding the diffusion process because it is key to market strategies as well as innovation and sustainability policies. In promoting new products and technologies, agents, firms, and governments need to understand the conditions favoring the successful spread of these products (Zeppini & Frenken, 2018). Disruptive changes in technology could be one small segment of a much larger set of marketing principles.

Sachdeva, Kapur, and Singh (2016) proposed a three-dimensional innovation diffusion model based on the assumption that the value of the product plays a crucial role as the major driver of diffusion. Sachdeva et al. classified value into three main factors: (a) continuation time of the product in the market, (b) price of the product, and (c) marketing efforts of the firm. Ax and Greve (2017) developed and tested an adoption model that draws on two previously introduced ideas about innovation adoption: the notion of compatibility between organizational culture and the values and beliefs embedded in innovations, and the perspective that early and late adopters might be motivated to adopt based on expected economic and social gains and losses. Signals of social identity are known to influence individual behaviors in the adoption of innovations (Smaldino, Janssen, Hillis, & Bednar, 2017). Jacobs, Swink, and Linderman (2015) examined the impacts of early and late adoption of a widely diffused innovative program: Six Sigma. Empirical results suggested that although late adopters may enjoy greater performance gains than early adopters, the advantages late adopters experience tend to be moderated by certain environmental and structural characteristics of a firm (Jacobs, et al., 2015). Jacobs et al. (2015) noted that late adoption may be favorable when firms are large and have good financial performance prior to adoption. Understanding the effects of these factors can enhance managers' abilities to determine appropriate adoption timing to increase performance (Jacobs et al., 2015).

Wan, Williamson, and Yin (2015) noted that realizing disruptive innovation opportunities requires proactive initiatives. Managers need to take a broad view of where the opportunities and threats from disruptive innovation may emanate (Wan et al., 2015).

Reinhardt and Gurtner (2015) contended that the inability to distinguish between different types of innovation and different types of early adopters bears a substantial risk. However, a deeper understanding of early adopters could assist managers in developing new products that meet the needs of customers who are the initial buyers of their products (Reinhardt & Gurtner, 2015). Knowledge of early adopters could influence product development and marketing strategies based on the type of innovation.

Vecchiato (2017) noted that beliefs about customer needs affect incumbents' market choices and beliefs about traditional markets may prevent incumbents from identifying new markets. For instance, a primary reason why incumbents lose their leadership is the inability to recognize either the rising social market or the esteem market (Vecchiato, 2017). The former refers to a situation in which customers use products for fulfilling their need for friendship while the latter depicts a situation in which customers use products for fulfilling their need for achievement (Vecchiato, 2017). Business leaders need to consider the effects of disruptive innovation on firms and competition outcomes.

Disruptive Innovation Application

Disruptive innovation is an idea that has long impacted the sustainability of businesses. The concept is premised on the notion that new technologies can create new markets or radically change, or disrupt, the status quo in existing markets (Christensen & Bower, 1995). Incumbent firms can avoid the adverse consequences caused by ignoring a disruptive innovation if the leaders can anticipate and predict the potential outcomes of disruptive innovations (Nagy et al., 2016). These adverse outcomes include reduced market share, decreased status, or bankruptcy or death of an organization (Christensen &

Bower, 1995). Predicting the effects of changes in technology can enable managers to turn potential marketplace disruptions into new opportunities and prevent failure of organizations (Nagy et al., 2016). Wan et al. (2015) found that understanding the antecedents of disruptive innovation is not sufficient to explain the preconditions that create a favorable environment for disruptive innovation to emerge. Managers need to be alert to the fact that disruptive innovation can stem from a much broader set of sources than breakthrough technologies alone (Wan et al., 2015). For example, some of the innovations that are potentially most disruptive to incumbents with legacy products, processes, and assets have their antecedents in market conditions that encourage and facilitate the development of innovative business models (Wan et al., 2015).

Perez, Dos Santos Paulino, and Cambra-Fierro (2017) argued that disruptive innovation does not always imply that entrants or emerging businesses will replace incumbents or traditional businesses. The effect of market-related resources and competencies on incumbent-entrant dynamics, as reflected in their likelihood to exit or reposition in different submarkets, has not been explored (Uzunca, 2018). New entrants are often seen as radical innovators because they are not weighed down by the perceived liabilities of incumbency (Sarkar, Osiyevskyy, & Clegg, 2018). Incumbent firms may respond to disruptive innovations by either creating new capabilities or reconfiguring existing ones (Sarkar et al., 2018). Therefore, incumbent response to disruptive innovation is best done through capability enhancement aligned with an established technological trajectory and resource base in which its existing strengths reside (Sarkar et al., 2018). Taking advantage of disruptive innovations requires managers to develop a thorough grasp of their firms' capabilities and an in-depth understanding of all internal processes (Perez et al., 2017).

Incumbent firms can survive or succeed in the face of disruption by forging effective partnerships with challenger firms (Ansari & Krop, 2012) or establishing separate entities to fend off the threats (Christensen et al., 2015). Ansari and Krop (2012) asserted that the success or failure of incumbent firms could be better understood when the underlying constructs of industry setting, the incumbent firm, and the challenge are concurrently analyzed. Vecchiato (2017) incorporated managerial cognition or sense making to understand organizational responses to challenges. Managerial cognition or sense making refers to how top management perceives and interprets the environment (Sarkar et al., 2018). Sense making of the events and understandings of change that constitute the external environment produces managerial cognitions that represent filters for understanding the present capability and potential incapability in the face of the new challenges grasped (Sarkar et al., 2018). Incumbents who respond creatively to challenges sense changing events as threats demanding action (Sarkar et al., 2018).

Managerial cognition influences the market choices of organizations and affects their long-term performance in the face of disruptive technologies (Vecchiato, 2017). Further, this cognition plays a key role in sensing, interpreting, encoding, and retaining prior experiences in the construction of organizational routines and responses to competitive threats (Sarkar et al., 2018). Frequent sensing and reconfiguring have stronger positive effects in environments characterized by high competitor turbulence (Wilden & Gudergan, 2015). Dynamic capabilities enable firms to sense opportunities sooner than rivals, seize them more effectively, and support the organizational transformation needed to sustain market leadership (Day & Schoemaker, 2016). These capabilities vary across firms because some firms are adept at anticipating and exploiting the opportunities created by technological advances and rapid changes in their markets, while others struggle or go out of business (Day & Schoemaker, 2016). Strategic leaders can make judicious choices about which capabilities to develop depending on the situation (Day & Schoemaker, 2016). Response to disruptive innovations is viewed in the context of a dynamic environment where there is a need to constantly adapt, reconfigure, and renew resources and capabilities to address changes in business environment. Karimi and Walter (2015) associated first-order dynamic capabilities with technological capabilities that impact the performance of response to disruptive changes in technology. Dynamic capabilities such as relational capability, sensing capability, absorptive capacity, and integrative capability affect stages of the adoptive management innovation process (Lin, Su, & Higgins, 2016).

Firm-level capabilities are essential for surviving disruptive changes (Danneels, 2004). The knowledge of how corporate entrepreneurship influences adoption of disruptive business models is essential in developing a strategy for survival and in making and executing management decisions to respond to disruption (Karimi & Walter, 2016). Business leaders' adaptation to changing environments is related to their ability to exploit existing competencies and build new capabilities (Schmitt, Barker, Raisch, & Whetten, 2016). Strategy theorists have described this adaptive process as *strategic renewal*, which refers to a firm's ability to disrupt inertia by modifying or replacing its core competencies to ensure long-term performance (Schmitt et al., 2016). Strategic renewal is a key consideration in understanding a firm's long-term survival and prosperity, especially in times when the firm requires constant transformation (Schmitt, Raisch, & Volberda, 2018). This capability can also enable innovation and evolution (Schmitt et al., 2018). Related to this core issue is the insight that, to thrive and survive in the long run, firms should align their internal actions with conditions in the external environment (Al Humaidan & Sabatier, 2017).

Al Humaidan and Sabatier (2017) found that depending on the orientation of the top management team, the managerial perception of the firm's environment within the same scarcity situation can lead to different strategic renewal responses. For instance, internally oriented top management teams may engage in incremental business model changes while externally oriented top management teams may engage in disruptive business model changes. Strategic renewal is also conditioned by the orientation of the top management team and their attitude toward technology (Al Humaidan & Sabatier, 2017). Leaders of incumbent firms facing disruptive changes can consider strategic renewal throughout the technology investments and business model evolution (Al Humaidan & Sabatier, 2017).

Resource endowment also has an impact on the strategic renewal path that leaders adopt (Xiao, Wu, Xie, & Hu, 2019). Leaders of incumbent firms facing disruption may adopt either incremental resource-complementing renewal or discontinuous resource-substituting transformation renewal path. Incumbent firms with strong information technology (IT) resources and capabilities are more likely to succeed if leaders adopt the incremental resource-complementing renewal path (Xiao et al., 2019). High coordination costs could favor a vertically integrated firm during the early stages of a new technology's evolution (Helfat & Campo-Rembado, 2016). However, what is most relevant in the early stages of a new technology's evolution is not the dichotomous distinction of whether a firm is vertically integrated; rather, the firm's value chain activities require appropriate configuration at the right timing of technological evolution (Roy, Lampert, & Stoyneva, 2018). The relevant complementary technologies of firms also act as catalysts for strategic renewal during times of disruptive changes (Roy et al., 2018).

Disruptive innovations do not always start in the low-end market; they can also start market penetration by offering high-quality products with different features and functionalities (Christensen et al., 2015). However, business leaders need to segment customers to fulfill customer needs according to the end they are trying to achieve with the product (Christensen & Raynor, 2003). Rasool, Koomsap, Afsar, and Panezai (2018) emphasized the need to understand that a large percentage of the customers are outside the continuum of the existing customer base. Business leaders need to obtain insights regarding the needs and demands of customers and noncustomers to cater their needs adequately (Christensen & Raynor, 2003). Disruptive innovation does not always imply that emerging businesses will replace incumbents or that disruptors are necessarily start-ups (Christensen et al., 2015). Business leaders in the incumbent firms with existing high-end technologies can survive by concentrating on how to satisfy their most demanding but least-price-sensitive customers (Rasool et al., 2018). These leaders can still maintain a profitable niche market at the very high end without total displacement by disruptive innovation. Rasool et al. (2018) indicated that a disruptive innovation ultimately could have a major impact on an existing market without totally displacing it.

Wan et al. (2015) identified three sets of preconditions for disruptive innovations: organizational structure, resource allocation, and organizational culture. The structure of the organization influences the probability of disruptive innovation. Business leaders can leverage the internal strengths and flexibility of their firms to invest in disruptive innovations. SMEs may have advantages over larger enterprises to invest in disruptive innovation because of their more flexible structure and strategy development and their relatively small organizational and strategic barriers (Chen, Zhu, & Zhang, 2017).

Christensen and Raynor (2003) found that the size of the firm is negatively correlated with the success of disruptive innovation. Business leaders in large corporations wishing to promote disruptive innovation should attempt to foster flexibility by having smaller business units (Wan et al., 2015). Although new start-ups are found to be relatively fertile ground for disruptive innovation, they lack complementary assets that are often critical to developing potentially disruptive ideas because these complementary assets are captive within incumbent leaders (Wan et al., 2015). Although focusing on continuing innovations may be a good competitive strategy for many firms, such plans are inadequate to start a new business (Christensen & Raynor, 2003). Managers who want to push incumbent companies out of the market need disruptive, not sustaining, strategies (Christensen & Raynor, 2003).

Christensen (2016) discovered that startup companies introducing disruptive innovations often have leaner organizations and, as a result, a substantially lower cost structure than incumbents, which enhances the attractiveness of these newcomers to the market. By the time the leaders of incumbent firms realize the threats posed by the disruptive technology, they typically decide to adopt this recent technology; however, because these leaders are too late or unable to offer comparable price levels, they quickly lose market share (Christensen, 2016). In contrast to theoretical predictions, there are cases where incumbent leaders successfully dealt with disruptive innovations that emerged in their industries. For instance, Gilbert's (2005) multicase study of newspaper organizations' responses to digital media showed that one newspaper maintained its market leadership position in the transition from print to digital by launching a structurally differentiated venture from the outset. Studies of other cases of successful response to disruption revealed the same insight: When faced with disruptive innovations, owners of leading incumbent firms can maintain their position by setting up an autonomous business unit, separate from the parent company, which has the freedom to enact its business model and pursue the disruptive opportunity (Gilbert, 2006). Business leaders would leverage the smaller size and overhead of these separate start-up companies and resources from the main companies to discover new markets that would appreciate the possibilities of disruptive technology (Christensen, 2016). Leaders who successfully developed a disruptive technology in their organization realized their processes, culture, and cost levels would be unsuitable for further nurturing the innovation (Christensen, 2016).

Disruptive innovations have different effects. Feder (2018) suggested that, sometimes, the macroeconomic effects of disruptive innovations are opaque. Although disruptive innovations were initially assumed to take root in the lowest tiers of established markets, instances surfaced in which entrants seemed to be competing in entirely new markets (Christensen, McDonald, Altman, & Palmer, 2016). Markides (2006) focused on more precise definitions that encompassed different types of disruptions. The initial model of disruptive innovations is typified by low-end disruptions, where disruptive upstarts enter at the bottom of the market and take hold within an existing value network before moving up-market and attacking incumbents (Christensen & Raynor, 2003). Examples of low-end disruptions include the steel industry (Christensen & Raynor, 2003). By contrast, new market disruptions take hold in a completely new value network (Christensen et al., 2016). New market disruptions compete against the nonconsumption by customers who would otherwise go without the product or service, so incumbents tend to ignore them instead (Christensen et al., 2016). Considering the new definitions, a clearer conceptualization captures different circumstances of disruptive innovations. Christensen and Raynor (2003) argued that managers should investigate if their innovations are disruptive to all incumbents; otherwise, their disruptive strategy may fail.

The effects of technology shifts are not purely a problem of technological innovation but are also closely related to the inertia of business models and business model innovation (Tongur & Engwall, 2014). Business leaders utilizing a disruptive low-cost business model to establish themselves and later grow their business could generate substantial profits (Christensen & Raynor, 2003). Leaders of established high-cost companies attempting to start low-cost businesses regularly experience financial losses as they continue to base overheads on their core business model (Christensen & Raynor, 2003).

Christensen and Raynor (2003) enhanced the theory by arguing disruption could result from different value networks or business models. A value network refers to a set of roles and interactions in which organizations engage in both tangible and intangible value exchanges to achieve economic or social good. Additional consumption by new users creates a unique value network (Christensen & Raynor, 2003). Contrary to low-end disruptions in existing markets, different value networks result in new-market disruptions (Christensen & Raynor, 2003). Nonetheless, Christensen and Raynor argued that many disruptions combine both value networks.

Christensen et al. (2015) added the disruptive business model aspects by pointing out that disruptive innovation originates in two types of markets that leaders of incumbent firms overlook: low-end footholds and new-market footholds. Low-end footholds exist because incumbents typically focus on their most profitable and demanding customers. These leaders provide the customers with improved products and services, and they pay less attention to less-demanding customers (Christensen et al., 2015). Disruptors seek opportunities in low-end footholds whereas incumbent firms focus on their most profitable clients or in the case of new-market footholds, they create a new market (Christensen et al., 2015). An example of a low-end disruption was the Korean automakers’ entry into the US market. Instead of creating a new market, they targeted customers whom the incumbents considered less attractive because they could not afford more expensive cars. Perez et al. (2017) argued that disruption should be seen as a process in which entrants can challenge established incumbent firms by offering new technology — often at a lower price — to the overlooked customer segments. When initially launched, the new technology is inferior regarding performance, according to the performance criteria of mainstream customers; it does, however, have unique features that appeal to new market footholds (Perez et al., 2017). The new entrants then move upmarket and deliver the performance that the mainstream customers of incumbent firms require as the new technology improves (Perez et al., 2017). When mainstream customers start adopting the entrant's new technology in volume, disruption has occurred (Christensen et al., 2015).

Christensen and Raynor (2003) argued that one of the key elements of disruptive innovation is that markets have distinct trajectories of improvement that innovating companies provide as they introduce new and improved products. Disruptive innovations can affect both engineered products and mass-produced goods (Dedehayir, Nokelainen, & Makinen, 2014). Dedehayir et al. (2014) presented the results of a case study investigating the different aspects of disruptive innovations in complex product systems (CoPS) versus mass-produced goods.

CoPS differ from standard products in their value, buyer-seller relationships, high levels of customization, and longer and more complicated development processes (Dedehayir et al., 2014). Unlike disruptions in commodity product industries, the incumbent CoPS technology does not overshoot mainstream market performance demand

(Dedehayir et al., 2014). Dedehayir et al. (2014) indicated that disruptive innovation in the CoPS industry has more distinct characteristics than what Christensen included in the theory. Notwithstanding, innovations in CoPS may exist alongside existing technologies for extended periods of time (Dedehayir et al., 2014).

Critique and countercritique. Many scholars criticized Christensen's theory of disruptive innovations. The strong expost perspective on disruptive innovations, the choice of cases, and the insufficient definition of the theoretical construct are the main critiques in the literature (Klenner, Husig, & Dowling, 2013). Weeks (2015) posited that the framework does not have a consistent unit of analysis, while Tellis (2006) argued that it lacks sufficient academic rigor. Some critics argued that the framework lacks ex-ante application (Danneels, 2004; Klenner et al., 2013; Tellis, 2006) because it was founded on post hoc examples only (Markides, 2006; Reinhardt & Gurtner, 2015; Weeks, 2015). Tellis (2006) and Danneels (2004) questioned the sample of industries used by Christensen to test his theory. Tellis also critiqued the predictive value the concept of disruptive innovations has if one must wait until the disruption has occurred. Klenner et al. (2013) argued that the existing ex-ante approaches fail to focus on the analysis of the market factors from the perspective of a potential threat of disruptive innovations. Klenner et al. (2013), therefore, noted a research gap in identifying the conditions under which disruptive innovations will likely become a threat for established companies.

Christensen's work has been rarely subjected to the peer reviews that most academics undergo (Weeks, 2015). Christensen published mostly in nonpeer reviewed publications, such as books and the *Harvard Business Review*. Therefore, King and

Baatartogtokh (2015) contended that Christensen did not provide the opportunity for other scholars to test the theory using quantitative research. This lack of academic rigor led to Christensen incorrectly predicting the failure of Apple's iPhone (Weeks, 2015). Although Christensen believed the iPhone was a sustaining innovation, Weeks (2015) argued that the iPhone did not fit Christensen's framework as it was neither a sustaining nor a disruptive innovation. Weeks further questioned the application of the concepts even when the outcome of a particular technology trajectory seems to fit Christensen's framework. Weeks also noted that Christensen incorrectly included cases such as Kodak's leaders not reacting adequately to the disruption of digital photography. Weeks further indicated that, although digital photography disrupted the film industry, the technology did not follow Christensen's model in most ways.

The term *disruption* has a different connotation to many people. Tellis (2006) noted that the problem in the definition lies in the term *disruption*, which is at once a characteristic of the innovation and its most interesting and valuable prediction. Tellis, questioned the predictive value of the concept as a business leader can only tell a *disruption* after it has occurred. Gans (2016) argued that the term *disruption* has led to confusion, primarily because Christensen did not define it accurately. Christensen also contributed to the confusion by covering two situations that have a different effect on existing markets: low-end innovations and new market innovation (Nagy et al., 2016).

Besides ambiguity in the definition of the term *disruption*, some scholars criticized sampling methods used by Christensen. Tellis (2006) argued that the use of samples to build or to test the theory was not evident. Many disruptive technologies have failed, and, for this reason, Christensen has been accused of carefully selecting examples to buttress this theory (Danneels, 2004). Danneels (2004) argued that business theories are only valuable to managers when they can apply them to portend situations; however, unfortunately, Christensen based this concept on post hoc evidence only. Reinhardt and Gurtner (2015) discovered statistical significance that the theory of disruptive innovation is also useful for ex-ante predictions.

Disruptive innovations (DI) and disruptive technologies (DT) are not synonymous. The terminological confusion highlights the conceptual ambidexterity and ongoing dialogue about the theory behind the DI and DT concepts. What is clear in the literature is that scholars struggle to distinguish between the concepts of DI and DT. DI and DT are used synonymously throughout the text in most literature. Due to this ambiguity, it seems unavoidable that any analysis of DT spills over into aspects of DI (Li, Porter, & Suominen, 2018). Markides (2006) noted that the different types of DI and disruptive technological innovation are only one manifestation of a disruption. Markides further argued that the acceptance of Christensen's disruptive technology theory to explain disruptive innovations is not correct, as they are different events. Following the critique by Markides, Christensen (and Raynor) later expanded the scope of the theory from *disruptive technologies* to *disruptive innovation* in order to highlight the argument that the disruption is not an intrinsic feature of the technology but, instead, emerges through practice (Flavin, 2016).

Markides (2006) indicated that only two types of disruptive innovation exist: business-model innovations and radical innovations. These types of innovations are fundamentally different although they may cause similar disruptions as explained in Christensen's theory (Markides, 2006). Markides further developed Christensen's work by identifying subcategories of innovation, including disruptive business model innovation, and disruptive product innovation. As Markides noted, disruption can be created by astute marketing redefining practices. Therefore, Markides's reading of disruption is distinctive because he argued that disruption could be created consciously and through preplanning (Flavin, 2016).

Markides (2006) and Tellis (2006) advocated that disruptive innovations change the performance metrics, or consumer expectations, of a market. Christensen et al. (2016) characterized marketplace disruptions or the effects new technologies can have on existing marketplaces; thus, an opportunity exists to define how new technologies facilitate these market changes. Nagy et al. (2016) studied how to redefine and identify disruptive innovations. Nagy et al. revealed that most scholars who have attempted to describe disruptive innovations mostly focused on market characteristics, low-end innovations, and new markets. By using the innovation adoption theory, three innovation characteristics are identified as ground disruptive innovations in technology, not a marketplace (Kaivo-oja & Lauraeus, 2018). These characteristics are an innovation's technical standard, functionality, and ownership (Nagy et al., 2016).

Not all innovations are disruptive. Adner (2002) argued that the shift of customer expectations to new performance attributes was not well explained in Christensen's (1997) theory. Adner, therefore, introduced a demand-based view and suggested that an absolute lower unit price is crucial for the disruption to occur. Adner's view fits with

Christensen and Raynor's concept of low-end disruptions, which target existing customers with significantly lower prices. Govindarajan and Kopalle (2006) identified high-end disruptive innovations that initially seem to contradict Adner's view; they argued that the disruptiveness of innovations is a latent variable, linked to the abilities of an organization. Christensen's framework is suitable to make ex-ante decisions about the level of disruptiveness of innovations and to identify which companies are more appropriate to develop such innovations (Govindarajan & Kopalle, 2006). A high-end disruption starts more expensive than the existing solution and for this reason, is ignored by leaders of incumbent firms, such as the case of the iPod. In this view, the price is simply one more performance attribute of the product or service.

Govindarajan and Kopalle (2006) followed a demand-based view and explained that the shift in customer expectations with the disruptive innovation eventually offers sufficient performance in established attributes while also offering additional performance attributes. With the marginal utility of performance in the established attributes declining once sufficiency is reached (Adner, 2002), the utility derived from the additional attributes may become decisive for customers. Adner's view does not contradict, but rather extends, Christensen's supply-based explanation, where oversupply in existing attributes eventually shifts competition to new performance attributes.

Markides (2006) noted that different types of disruptive innovations might entail different competitive and disruptive effects. Business-model innovations and radical innovations emerge differently, leading to different threats to established firms, and requiring other responses (Markides, 2006). Charitou and Markides (2003) introduced the concept of a *disruptive strategic innovation*, which is based on a new business model and potentially allows for a long-term coexistence of entrants and incumbents. Markides argued that using the term *strategic innovation* was incorrect; *business model innovation* is a more precise term.

Business model innovation (BMI) is a systematic way of defying conventional ways of doing business by the core business elements and their interrelationships, including the operational, financial and marketing model or the value proposition (Markides, 2006). Business model innovations happen when a company introduces radically different business models in an existing market, as Amazon, EasyJet, Charles Schwab, or Dell did (Markides, 2006). These types of innovations do not introduce different products or services but differentiate their offering, thereby increasing the size of the marketplace by attracting new users or by increasing customer spending (Markides, 2006). Markides (2006) also argued that disruptive business model innovations cannot be directly compared with disruptive technological innovations. Contrary to disruptive technologies that tend to overtake the market eventually, the business model innovation takes a certain percent of the market but does not entirely change the way of competing (Markides, 2006). As Markides and Govindarajan and Kopalle (2006) pointed out, companies engaged in business model innovation require different organizations, culture, technologies, and value chains than traditional businesses. Business leaders trying to combine both innovative and traditional business models could encounter many difficulties and may suffer from being stuck in the middle (Markides, 2006).

Despite their differences, the similarities between business-model innovations and Christensen's (1997) original disruptive technology theory have erroneously led scholars to believe they are the same (Markides, 2006). Govindarajan and Kopalle (2006) had a different point of view and argued that the amount of disruptiveness of innovations is dependent on how many new customers are interested in the product, as opposed to what the innovation means to mainstream customers. Assessing potential disruptiveness of innovations is an important but challenging task for incumbents. Guo, Pan, Guo, Gu, and Kuusisto (2019) argued that Govindarajan and Kopalle discussed the disruptiveness of innovations from a firm perspective and did not pay sufficient attention to the external environment.

Guo et al. (2019) proposed a multidimensional measurement framework that includes technological features, marketplace dynamics, and external environment to assess the disruptive potential of product innovations. Disruptive products initially underperform mainstream products in the critical performance feature that mainstream customers demand (Govindarajan & Kopalle, 2006). Obal (2017) noted that Canon was able to break into the mainstream market in the late 1970s and 1980s by creating smaller but more inexpensive copiers than Xerox. Initially, Canon copiers were too slow for bigger businesses. As the quality and speed of the copiers improved, larger businesses began switching from Xerox copiers to the cheaper and more flexible Canon products (Govindarajan & Kopalle, 2006). Govindarajan and Kopalle (2006), therefore, argued that disruptive innovation allows organizations to focus on changing or introducing new features, performance, and price attributes through the process of innovation.

Often technology, instead of customer demand, pushes radical innovations. Markides (2006) argued another type of disruptive innovation occurs when radical, innovative technologies—such as cars, television, personal computers, or mobile phones—emerge. Markides argued that these innovations are not, in general, driven by demand but by supply. Regularly, significant amounts of newcomer companies offer similar but slightly different products (Markides, 2006). After a period of turmoil, the market often collapses when a dominant technology emerges, such as the VHS recorders. Triumphant companies usually time their entry into the market, implement the prevalent technology just before it surfaces, develop strong brands, control the channels of distribution, and, thus, build a niche into a mass market (Markides, 2006). Markides dismissed most of Christensen's disruptive innovation examples such as Honda motorcycles, Canon copiers, and Seiko watches. Instead, Markides argued that these firms transformed a niche into a mainstream market. Flavin (2016) thus noted that Markides's most significant contribution to disruptive innovation is to steer understandings of innovation away from ideas of unfettered, spontaneous creativity. Flavin (2016) further suggested the need to steer understandings of innovation as being structured and planned within existing market practices and behaviors; thus, innovation is malleable through effective product development and marketing.

Christensen and Raynor (2003) wrote a book on providing solutions for leaders of companies confronted with disruptive innovations. Unfortunately, Weeks (2015) lamented, Christensen and Raynor still did not reveal further research on the role of the manager but just provided anecdotal evidence that often was mispresented. Christensen and Raynor further argued that company founders are more effective in responding to disruptive innovation threats than their succeeding managers, but they did not provide any evidence for this position. Christensen (1997) applied the disruptive innovations theory to companies, industries, leaders, business models, and diffusion of innovations; thus, Weeks questioned Christensen's lack of a unit of analysis. Christensen's ambiguity not only created difficulties in applying the theory successfully but also in understanding the generalizable dynamics of disruptive innovation. Weeks questioned whether the theory can explain the agency of business leaders. Likewise, as the theory is two dimensional: it is too simplistic as it forces each innovation into being either disruptive or sustaining (Weeks, 2015). Weeks also indicated that Christensen's theory could be a powerful lens for examining certain technological advances.

One of the fundamental aspects of a disruptive technology is the innovation possessing a characteristic that makes it superior to the existing product. From a technology perspective, it is unclear the point at which innovation becomes disruptive, making it possible to declare something disruptive after the fact (Danneels, 2004). Existing technology cannot simply be substituted for disruptive technology (Takamatsu & Tomita, 2015). Thus, the view of existing versus disruptive technologies is an oversimplification (Tellis, 2006). Tellis (2006) argued that this favored feature often is a new facet that the current product is lacking. Therefore, Christensen's second premise is unfounded (Tellis, 2006). The term *disruptive* is confusing as it describes a potential consequence of innovations and not the real outcome (Reinhardt & Gurtner, 2015). Reinhardt and Gurtner (2015) inferred, following the manner Christensen described disruptive innovations, that these inventions could be vanguards that do not disrupt or could be disruptions not caused by innovations.

The theory of disruptive innovation has prominence with business practitioners and has been a powerful tool for predicting which industry entrants will succeed. Christensen et al. (2015) feared that the theory was widely misunderstood and that critiques often misinterpreted the premises and ignored subsequent refinements of the concept. Consequently, scholars criticized the theory for shortcomings that the authors already addressed (Christensen et al., 2015). Christensen et al. further observed that people are typically using the term *disruption* without having read any of the pertinent literature. They thus incorrectly add this connotation to describe any situation in which market newcomer shakes up well-established incumbents, such as the case of Uber (Christensen et al., 2015).

Denning (2016) argued that while Uber has quickly become a high-value and famous company, transforming the taxi business, they did not disrupt the taxi industry intrinsically. Business leaders in Uber and other firms such as Google, Apple, and Tesla focused on creating new value for customers and aggressively pursuing both market-creating and sustaining innovations. In the case of Uber, business leaders increased demand by offering lower-priced services, but it did not create a new market; neither were leaders of traditional taxi companies investing in growing services for their customers (Christensen et al., 2015). Contrary to the theory, Uber immediately started to offer improved services compared to existing taxi companies.

Denning (2016) observed that some of this innovation creates massive disturbance in the marketplace, even if it is not *disruption from the bottom* in the classic sense of disruptive innovation. In the case of Uber, the business leaders built a position in the mainstream market and later appealed to historically overlooked segments. Therefore, Uber may be disruptive to limousine rental companies instead of the taxi industry (Christensen et al., 2015). Christensen et al. (2015) used the Uber example to emphasize the correct use of their theory is necessary to identify real disruptive innovations when they emerge. Disruptive innovation is the evolution of a product or service over time, and sometimes this process takes many years to displace incumbent firms (Christensen et al., 2015).

Christensen acknowledged the first version of the theory missed the type of disruptions that companies such as Uber, Google, Tesla, and Apple with their iPhones caused (Denning, 2016). Besides the primary two forms of innovation—sustaining innovations and disruptive innovations—the theory needs to be updated to include three ways of innovations: market-creating innovations, sustaining innovations, and efficiency innovations (Denning, 2016). Sustaining innovations were already covered in Christensen's original theory and are not disruptive because they are intended for making improvements to existing products.

Efficiency innovations, such as those Walmart introduced by displacing many competitors by operating more efficiently, are deemed disruptive (Denning, 2016). Klenner et al. (2013) argued that the maturity of the marketplace is tightly linked to its disruptive susceptibility. Denning (2016) dismissed this position by pointing out the speed of some technological advancements such as Google Maps, Apple iPhone, Tesla, or Uber and how that quickness disrupted incumbent industries as taxi firms, digital map companies, and mobile phone makers. Sampere, Bienenstock, and Zuckerman (2016) emphasized the significance of Christensen's theory for business leaders because of its importance when developing strategies. Sampere et al. (2016) further indicated that, before Christensen's theory, there was uncertainty regarding why well-run companies suddenly failed or stopped growing.

Managerial implications. Managers should apply business theories in the appropriate circumstances. Although the term *disruption* has an alarming connotation among business leaders (Gans, 2016), Christensen's (1997) theory of disruptive innovation has value but should be applied sparingly and in the right situation (King & Baatartogtokh, 2015). Recognizing disruptive innovations before they disrupt a business or industry is critical for any firm. This position is only possible when managers gather *disruptive intelligence*, information about actual or potential disruptive innovations (Vriens & Soilen, 2014). Managers should gather information on whether disruptions are possible in the industry or business, whether the industry is already facing disruption, and whether there are any systematic barriers to discovering disruptive intelligence (Vriens & Soilen, 2014).

Disruptive intelligence allows managers to not only protect the firm adequately and react to disruption but also understand what they might expect when they enter the market with potentially disruptive innovation. Vriens and Soilen (2014) noted three indicators that a market is disruption-prone: The degree to which (a) a business has expensive or inaccessible products and services, (b) current products or services do not entirely meet the needs of customers, and (c) customers are overserved, or there is saturation of the dominant product characteristic. Business managers may gain insights regarding ongoing disruption based on the number of start-up companies emerging. Managers can also consider whether sales patterns follow those of disruptive innovations, whether incumbent firms are losing customers from the low end of the market, or whether the value networks or business models are changing.

Countering disruptive innovation requires managers to compute the value of winning, find ways of leveraging present capabilities, and collaborate with other companies (King & Baatartogtokh, 2015). Managers who fail to gather disruptive intelligence are suffering from myopia or disruptive blindness (Vriens & Soilen, 2014). Vriens and Soilen (2014) suggested that the indicators of disruptive blindness include a bias toward sustaining innovations over new product concepts; a dismissive attitude of managers toward losing low-end customers; and a complacent attitude regarding the high levels of business success. Without knowledge of disruptive innovations and their drivers, managers will tend not to pursue or react appropriately to disruptive innovations.

With knowledge of potentially disruptive innovations managers can determine the possible effects of the innovation on the organization. Nagy et al. (2016) suggested that using a three-step process can further aid to predict how innovation may disrupt an organization. The first step is to identify the innovation and its characteristics, then identify at what point in an organization’s value chain the organization can use the innovation. The final step compares the technical standards, functionality, and ownership of the existing technology with that of the potentially disruptive technology. If an innovation differs from existing technologies by one or more of these characteristics, that innovation has the potential to be disruptive (Nagy et al., 2016). The point in the value chain at which the organization uses the technology can also have an effect on the magnitude of the potential disruption and how incumbent firms respond (Nagy et al., 2016).

Besides responding to innovative unsettlement, managers also need to prepare for future disruptions. Klenner et al. (2013) advised managers to generate a pipeline of ideas in times of little disruptive susceptibility. Such ideas, together with constant market surveying, may be used in the period of high disruptive susceptibility before newcomers introduce disruptive innovations. Christensen et al. (2015) warned that the theory of disruptive innovations is not a lens that managers use to determine how to respond to disruptions. Instead, the concept supports making strategic choices between investing in sustaining or disruptive innovations (Christensen et al., 2015). Wan et al. (2015) noted that success is not a characteristic of disruption. Some disruptive innovations succeed while others do not, but managers of established firms should not overreact when facing disruption. Managers of incumbent firms should instead seek to invest in sustaining innovations, strengthen relationships with priority customers, and pursue the disruption in a separate business unit (Christensen et al., 2015; Wan et al., 2015). While leaders and managers should not overreact when facing disruption, ensuring the management approach is appropriate is also critical.

Disruptive innovations require a specific management approach to be successful. In the separate business units, managers should closely coordinate and monitor the various aspects of the product, platform, and market scale-up (Von Pechmann, Midler, Maniak, & Charue-Duboc, 2015). Business leaders should also experiment and implement pilot systems that will encourage learning across the organization during the innovation process (Denning, 2016; Von Pechmann et al., 2015). Wan et al. (2015) suggested that managers of established firms should seek to unlearn core values that impede innovation or exchange their dominant logic for a novel logic. The critical competency of unlearning helps to remove mental models that act as barriers to innovation. These management principles and approaches can be useful to leaders of companies facing disruption.

Osiyevskyy and Dewald (2015) presented a categorization of adaptions of disruptive business model innovation for incumbents. Disruptive technologies are just precursors of disruptive business model innovations (Markides, 2006; Osiyevskyy & Dewald, 2015). Technological discontinuities have been the basis of many business model innovations. Managers of established firms often encounter difficulties to decide whether to explore new disruptive business models or exploit existing models that provided past success. Business models are the foundation of a company's competitive advantage and are separate from market positioning or market strategies (Osiyevskyy & Dewald, 2015). Osiyevskyy and Dewald considered that companies can still lucratively apply innovations in different business models.

Business Models

The notion of business models in management literature has evolved to become popular in the second decade of the 21st century. Despite many studies on business models, a standard definition is still lacking (Christensen et al., 2016). Amit and Zott (2015) defined a business model as a set of organizational structures implemented to maximize opportunities that arise in the market. Hacklin, Bjorkdahl, and Wallin (2018) defined the business model as the logic and the activities that create and appropriate economic value as well as the link between value creation and value capture. The essence of business models is to perform two important functions: value creation and value capture. Value creation focuses on increasing benefits to consumer segments, while value capture focuses on profitable delivery (Priem, Wenzel, & Koch, 2018; Rayna & Striukova, 2016). Value delivery involves delivering value to customers through distribution channels (Rayna & Striukova, 2016). Managers need to be cautious while communicating the value their products and services offer to customers and partners.

Metallo, Agrifoglio, Schiavone, and Mueller (2018) noted that some literature on the business model tends to concentrate on value creation in networked markets, implying that organizations create value in concert with partners. Business leaders and managers should innovate their business models taking into account that value creation and value capture occur in a value network (Metallo et al., 2018). These value networks include suppliers, partners, distribution channels, and coalitions that extend the firms' resources (Metallo et al., 2018).

Metallo et al. (2018) further noted that other scholars had paid attention to the business models in the domains of innovation and technology management. These scholars developed a perspective that views the business model concept as a mechanism to connect firm technology and customer needs (Metallo et al., 2018). The concept of the business model is market centric because it extends beyond firm boundaries and gives primary consideration to consumers in the formulation and delivery of a viable value proposition (Schneckenberg, Velamuri, Comberg, & Spieth, 2017; Wirtz, Pistoia, Ullrich, & Gottel, 2016). Metallo et al. (2018) underscored the importance of business models in enabling firms to exploit the value potential embedded in new technologies and converting it into market outcomes.

Business models are essential in innovation whether they are the innovation or act as the vehicles for innovation. Technological innovation by itself does not guarantee performance, but business models can be used to facilitate the success of technological advances (Hu & Chen, 2016). Evidence from the analysis of industries facing disruption suggested that the fundamental challenge of disruptive technologies is a business model problem, rather than a technology problem requiring a change in the firm's value proposition (Karimi & Walter, 2016). Disruptive products and services typically promise a lower profit margin than the existing ones (Christensen & Raynor, 2003). As a result, there is a conflict between the current business model and the one needed to exploit the emerging disruptive technology (Christensen & Raynor, 2003). Disruptive innovations always require a change in the firm's value proposition and a change in the business model.

Business model innovation (BMI), or the introduction of new business models can be a source of environmental change to existing industries. BMI forces leaders of incumbent firms to respond to the emergence of new ecosystems that make traditional ways of competing unviable (Snihur, 2018). The concept of business models relates to the firm's strategy to gain and sustain competitive advantages (Bertels, Koen, & Elsum, 2015; Gamble, Brennan, & McAdam, 2017). However, leaders of incumbent firms often overlook or underestimate the environmental change. Starbuck (2017) suggested that companies react to crises in their industry, such as the introduction of BMI, by engaging in three stages of behavior. These stages include withering the storm, unlearning, and bankruptcy or rebirth. During the first phase, companies continue operating without change while the unlearning phase involves progressively discarding old routines to make way for new ones (Starbuck, 2017). In the final phase, companies survive and become profitable again (Starbuck, 2017). The essence of replacing the old business model with a new one is to offer novel products or services. While business model or process changes may facilitate novel value delivered to customers (Wan et al., 2015), technological innovation advances its potential disruption in the way it is delivered to customers. BMI is a significant deviation from the established products, services, or production processes in an industry (Karimi & Walter, 2016) to a new system of value creation and capture (Bouncken & Fredrich, 2016).

Active response to disruptive business model innovation follows along two generic strategies: (a) strengthening the existing business model and (b) adopting a disruptive business model (Osiyevskyy & Dewald, 2015). The latter approach may also imply considering some elements of a disruptive business model, with adaptations to match the company's existing competencies (Osiyevskyy & Dewald, 2015). The choice of either of the strategies is consistent with the traditional divergence between the exploration of new opportunities and the exploitation of established certainties in organizational learning. The notion that the economic value of any innovation can be materialized only through commercialization via a business model suggests that innovations should be broadened, embracing new business models along with new technologies or research and development process (Osiyevskyy & Dewald, 2015). The incumbent responses to a technology that has disruptive potential do not have to be homogenous (Osiyevskyy & Dewald, 2015).

Implementing an advanced business model can be a daunting task for managers of incumbent firms. Berends, Smits, Reymen, and Podoynitsyna (2016) discovered that companies innovate their business models according to a drifting or a leaping pattern. The drifting pattern mostly originates from an operating business model, uses experiential learning, followed by a cognitive search in later stages (Berends et al., 2016). The leaping pattern is a cognitive model going into operation late, followed by a phase of experimental learning (Berends et al., 2016). As differences exist in how business leaders plan to innovate and operate their business models, Berends et al. (2016) argued that business models are a combination of mental models and organizational implementation. Innovating business models does not follow a simple two-step process of design and implementation. Instead, such innovations are processes of continuous development with feedback loops, following either a drifting or a leaping model (Berends et al., 2016).

A firm's results depend on the effectiveness of the business model in converting available resources into value. A business that is unable to innovate continually cannot operate in an increasingly competitive market, and will consequently lose its competitive advantage (Yu, Zhang, Lin, & Wu, 2017). From the perspective of business models, such businesses tend to enter unfamiliar domains to create and commercialize products (Carayannis, Sindakis, & Walter, 2015). Carayannis et al. (2015) considered the influence of organization design and governance on BMI. Carayannis et al. anticipated that the use of different business models benefits firms, providing them with the advantage of flexibility and with the opportunity to remain current and innovative. BMI requires the application of organization design and governance competencies (Carayannis et al., 2015). BMI should further incorporate resources, dynamic capabilities, and entrepreneurship to develop such competitive advantages and explore new business opportunities so that firms may achieve organizational sustainability (Carayannis et al., 2015). Innovative business models, therefore, promise organizational sustainability (Carayannis et al., 2015).

Business leaders need to rethink and redesign their business models periodically as technology advances and customer preferences change. Amit and Zott (2015) noted that when examined from a process angle, BMI is a dynamic capability. Firms with high dynamic capabilities can adapt to BMI better while those with moderate to low dynamic capabilities display low levels of adaptive BMI (Ricciardi, Zardini, & Rossignoli, 2016). The concept of dynamic capabilities is a useful theoretical construct for understanding competition. Dynamic capabilities vary across firms in that some firms are adept at anticipating and exploiting the opportunities created by technology advances and rapid changes in their markets, while others struggle or go out of business (Day & Schoemaker, 2016). These capabilities govern other capabilities and managers to differentiate the company's products and services leading to market positioning and profit maximization. Managers can use dynamic capabilities to reduce costs associated with production, quality enhancement, or revenue generation (Mikalef & Pateli, 2017). Coupling the firm's unique resources with its dynamic capabilities and strategy can result in a competitive advantage (Karimi & Walter, 2015).

Dynamic capabilities are innovation based and provide the capacity to create, to extend, and to modify a firm's resource base (Warner & Wager, 2018). These capabilities allow firms to reconfigure their resource bases and are therefore an essential driver of the firms' strategic renewal. Birkinshaw, Zimmermann, and Raisch (2016) developed a conceptual integration of the dynamic capabilities and ambidexterity perspectives to understand how firms adapt to discontinuous change. Based on three case studies, Birkinshaw et al. found that a distinct set of capabilities is required depending on which of three modes of adaptation (structural separation, behavioral integration, or sequential alternation) has been prioritized. Tejeiro Koller (2016) introduced the concept of adaptive advantage and addressed the problem of its implementation in an organization by looking at innovation culture, decision making style, and accumulated experience of a sample of incumbent innovative firms. These firms' cultures promote innovation, are analytic and adaptive in their decision making, and have relatively high levels of accumulated experience (Tejeiro Koller, 2016). Purkayastha and Sharma (2016) emphasized the criticality of the business model as a higher level construct formed from multiple structural and strategic decisions that, eventually, become a source of competitive advantage. Such a perspective of business models is a useful guide for business managers to identify sources of competitive advantage through the innovative business models.

Formal and informal institutions constrain and enable BMI by giving legitimacy to certain types of business model innovation (Saebi, Lien, & Foss, 2017). The robustness of BMI and adaptability to changes in the external environment are significant for ensuring a firm's survival and success (Amit & Zott, 2015). From the institutional perspective, business model innovation is motivated by constraints in institutional contexts (Amit & Zott, 2015). The success of a business model does not only rely on whether the value creation or value capture activities could result in competitive advantage but also depends on the legitimacy gained from institutional contexts (Wu, Zhao, & Zhou, 2019). The legitimacy on firm's action of adaptive business model innovation is therefore essential, especially when facing institutional constraints in emerging markets.

Business model adaptation is the process of continuous search, selection, and improvement based on the surrounding environment (Dopfer, Fallahi, Kirchberger, & Gassmann, 2017; Markides, 2006). An external threat in the business environment is a strong predictor of business model adaptation, implying that firms are more likely to adapt their business model under conditions of perceived threats than opportunities (Saebi et al., 2017). Saebi et al. (2017) argued that the past strategic orientation of a firm creates path dependencies that influence the propensity of the firm to adapt its business model. Strategic orientation geared toward market development is more conducive to business model adaptation than an orientation geared toward defending an existing market position (Saebi et al., 2017). Business managers should improve their understanding of business model dynamics and consider effective strategic practices for adapting business models in the face of threats and opportunities.

The process of how business model adaptation unfolds concerning resource utilization and development depends on the level of dominance a company holds with the industry. For a new venture, the resources and capabilities are not only used to realize the desired customer value proposition, but they also put a limit on what it is possible to accomplish (Dopfer et al., 2017). Therefore, new ventures face the challenge of making the best possible use of their resources and capabilities to enhance value creation and capture mechanism (Dopfer et al., 2017). Dopfer et al. (2017) noted that bringing a resource perspective into the process of business model adaptation implies practical implications for new ventures. These new ventures are developing and adapting their business models to strategically co□develop their offerings with their resources such that they match required adaptations (Dopfer et al., 2017).

Transition

Section 1 provided the foundation for the current study. I discussed the background of the problem, formulated the problem statement, purpose statement, and the research question. Christensen's theory of disruptive innovation was the conceptual framework used for the research. I discussed the conceptual framework, the theory of disruptive innovation, along with other concepts that may have been useful for exploring strategies for addressing disruptive changes in technology. These concepts included business model innovation, dynamic capabilities, and the theory of diffusion of innovation. Next, I discussed the operational definitions, assumptions, limitations, delimitations, and significance of the study. The information in Section 2 includes the purpose statement, a review of my role as the researcher, the participants, and an overview of the research method and design, population and sampling method, and ethical research. The section also describes the data collection instrument, techniques of data organization, and data analysis. Section 3 includes the research study findings, including applications to professional practice, implications for social change, and recommendations for future study.

Section 2: The Project

Purpose Statement

The purpose of this qualitative multiple case study was to explore the strategies that retail business managers use to address disruptive changes in technology. The targeted population included of owners of six travel agencies located in Nairobi, Kenya, who had implemented successful strategies to address disruptive changes in technology. The implications for positive social change include the potential to increase longevity and sustainability of businesses, contributing to job creation and economic stimuli that can lead to increasing the quality of living in the local communities.

Role of the Researcher

A researcher's preconceived views, assumptions, concepts, and hypotheses underwrite their approach to the study and influence the outcomes of a qualitative study (Collins & Cooper, 2014). Unlike quantitative studies in which researchers employ numerical measures to evaluate constructs, in qualitative research the role of the researcher is that of interpreter (Anderson, Guerreiro, & Smith, 2016). The investigator in qualitative analysis is the instrument carrying out the study (Anderson et al., 2016; Yin, 2014). The role of a qualitative researcher encompasses data gathering, data organization, and data analysis (Collins & Cooper, 2014). As the primary data collection instrument in the current study, I was responsible for data collection, analysis, and reporting.

Researchers play a critical role in data analysis. Reflexivity or awareness of biases is essential for maintaining rigor (Silver & Rivers, 2016). Berger (2015) asserted that a researcher's personal experience and acquaintance with participants' experiences could influence facets of the research process including the recruitment of participants, data gathering, and data analysis. As the researcher, I did not research the subject of this study before, and I did not have any previous relationship or engagement with any of the targeted companies or participants. I decided to research this topic out of interest. Obtaining prior information about the participants is essential when conducting case studies to develop an advanced understanding of the case (Yin, 2014). To have a better understanding of the target companies, I searched the Internet, used my professional network, and attended conferences.

In qualitative research, reflexivity is the ability to evaluate oneself, and bracketing is the capacity to exclude personal experiences, biases, and preconceived notions about the research topic (Sorsa, Kiikkala, & Astedt-Kurki, 2015; Tufford & Newman, 2012). Bracketing involves researchers reserving their preunderstanding and operating nonjudgmentally (Sorsa et al., 2015). Bracketing allows the researcher to mitigate the potentially harmful effects of unacknowledged preconceptions to increase the rigor of the study (Sorsa et al., 2015). I used reflexivity and bracketing techniques to reflect on my biases and avoid making biased interpretations of data and information. I consistently bracketed my views as I interviewed the participants. To mitigate personal bias, I also controlled my reactions to the interview responses during the interviews. An interview protocol permits the researcher to maintain consistency in the data collection process (Yin, 2014). An interview protocol is a useful guide for the participants and the researcher through the semistructured interview process (Gould et al., 2015). Researchers who use interview protocols benefit from the increased organization and interview systematization and can gather the best possible statements from participants (Benson & Powell, 2015). Using interview protocols to establish rules and guidelines is crucial when carrying out qualitative interviews (Dikko, 2016; Yin, 2014). Researchers who use interview protocols can preempt unexpected situations. Some of the useful guidelines include strategies such as getting access to the venue, bringing sufficient interview resources, precise schedules, and contingency plans (Yin, 2014). Qualitative investigators use interview protocols while analyzing collected data to identify recurring trends, common themes, and patterns (Yin, 2014). I developed and followed an interview protocol (see Appendix A) with each participant to ensure increased organization and gather the best possible statements from participants.

Miracle (2016) noted that The Belmont Report, released in 1978 and created for the protection of human subjects participating in research, serves as an ethical framework for research. The fundamental principles of the Belmont Report are to protect the participants, be truthful, ensure voluntary participation, and provide beneficence and justice (U.S. Department of Health & Human Services, 2015). In my role as the researcher, I ensured that I conducted data collection processes ethically and respectfully in alignment with ethical principles and guidelines of The Belmont Report. As suggested by Bahraminejad et al. (2015) and Nepper and Chai (2016), participants must voluntarily agree to take part in the study and sign the consent forms before commencing the interviews. I explained to the participants the purpose of the research, including its risks and benefits, so that they could determine whether they wanted to participate. I used pseudonyms to reference specific individuals to protect participants' identities. I also obtained permission and approval from Walden University's Institutional Review Board (IRB) before collecting information, commencing the semistructured interviews, and analyzing the results from the data to identify emerging trends, common themes, and patterns.

Participants

Identifying appropriate participants is important when designing a study. Marshall and Rossman (2016) suggested that the participants for a study need to have relevant experiences related to the research question to offer valuable insights. Researchers who carry out a qualitative case study need to consider how the experience of participants relates to the overarching research question (Yin, 2014). Yin (2014) noted that participants' willingness to partake in the study is critical. Researchers employ eligibility criteria to help in the selection of knowledgeable, willing participants who can present pertinent data on the study topic (Latiffi, Brahim, & Fathi, 2016). The primary criterion for inclusion in this study was that the participants were owners of travel agencies located in Nairobi, Kenya, who had implemented successful strategies to address disruptive changes in technology. I selected participants who met the following qualifications: (a) were willing to participate; (b) were owners of travel agencies in Nairobi, Kenya; and (c) had successfully implemented strategies to address disruptive changes in technology. I identified owners of six successful travel agencies to conduct this study.

Gaining access to participants requires a combination of strategic planning, hard work, and luck (Neale, Miller, & West, 2014). Using the Internet and social media is a useful approach for researchers to identify participants (Burke, Fish, & Lawton, 2015). I searched the Internet and social media platforms such as Facebook or LinkedIn, and public documents to identify companies that had used successful strategies to address disruptive changes in technology. I then contacted the potential participants via e-mail and telephone to determine eligibility and willingness to participate and to arrange the interviews. I also provided prospective participants with a copy of the site proposal so that they could understand their role and potential benefits of participating in the study. The site proposal allows the interviewer to define his or her role, clarify participants' tasks, and establish ground rules (Benson & Powell, 2015). Upon confirmation of the participants' participation, I sent them an informed consent form for their perusal and signature. When researchers use consent forms, participants understand their cooperation is voluntary, and know how interviews are conducted and recorded (Doody & Noonan, 2013).

Establishing rapport and explaining interview ground rules is widely recommended in qualitative research (Bowden & Galindo-Gonzalez, 2015). Creating and maintaining a positive working relationship with participants is essential when conducting case studies (Seitz, 2016). Rapport building increases participants' engagement and feelings of empowerment while reducing anxiety during the interview process (Cope, 2014). Close relationships and trust between participants and the researcher ensure their retention. I maintained regular contact with the confirmed participants throughout the study. During the interview process, I continued to establish a professional working relationship with participants. For example, I ensured that the participants were comfortable by conducting the interview in the participants' offices. I also explained the type of secondary data I needed from participants, and ensured confidentiality of the information received.

Research Method and Design

Research Method

The three main research methods are qualitative, quantitative, and mixed methods. Researchers use qualitative methodology to understand aspects of social life and its methods through words rather than numbers for analysis (McCusker & Gunaydin, 2015). Researchers who use a qualitative method seek an in-depth understanding of a phenomenon (Barnham, 2015). In this study, I employed the qualitative method to obtain an in-depth understanding of the strategies that retail business managers used to address disruptive changes in technology. In contrast to qualitative methodology, researchers use a quantitative method to examine relationships among numeric variables and to test hypotheses about the significance of the variables' relationships or differences (Ma, 2015). Quantitative methodology is appropriate when the purpose of a study is to predict outcomes of the variables (McCarthy & Muthuri, 2018).

A mixed-methods approach is a combination of the quantitative and qualitative approaches. Researchers find the mixed methods approach useful when either the quantitative or qualitative approach by itself is inadequate for addressing a research problem (Annansingh & Howell, 2016). My goal for this study was not to test hypotheses, to examine relationships among variables, or to compare variables' effects or groups' differences. Therefore, I determined that neither the quantitative method nor the mixed-methods approach was suitable for this study.

Research Design

Principal qualitative research designs include case study, ethnography, narrative research, and phenomenological research (Singh, 2014). For this qualitative study, I used a multiple case study research design. Researchers use this design to get a deeper understanding of a real-world event that has multiple types of data sources (Yin, 2014). The case study research design is grounded in a philosophical foundation used to obtain detail regarding a stated phenomenon (Dasgupta, 2015). Employing a case study research design allowed me to gain a holistic, in-depth understanding of the successful strategies that retail business managers used to address disruptive changes in technology.

Researchers use phenomenological research designs to understand a phenomenon through the meanings of the participants' lived experiences (Quay, 2016). In narrative research, researchers study lifelong experiences of the participants through the participants' stories (Marshall & Rossman, 2016). Researchers use ethnographic designs to study people and interpret the cultural behaviors of a group. The purpose of my study was not to transform participants' lived experiences into a textual description of their essence; therefore, neither the phenomenological research design nor the ethnographic research design was appropriate for this study. I did not choose a narrative research design because the focus of this study was to explore strategies rather than the meanings of participants' stories.

A method to increase the validity of a study is to obtain data saturation. Researchers are unable to generate an accurate conclusion if they have not reached data saturation. Data saturation is the point at which no new information or themes emerge from the collected data despite the inclusion of additional interviews or cases (Dasgupta, 2015; Fusch & Ness, 2015). I achieved data saturation by ensuring that no new and meaningful information surfaced after final interviews were conducted.

Population and Sampling

A sample is a group or part of the whole population (Gog, 2015). Robinson (2014) emphasized that to identify a sample, researchers need to specify inclusion or exclusion criteria, or both, for the study. The population of the current study included owners of six travel agencies located in Nairobi, Kenya, who had implemented successful strategies to address disruptive changes in technology. Sampling involves the selection of specific data sources to address the research objectives. The sample selected should also be representative of the population (Boddy, 2016). Researchers use purposeful sampling to avoid sample bias by selecting firms based on their relation to the phenomenon of interest (Morse, 2015; Salmon, 2016). According to Starr (2014), purposeful sampling refers to selecting participants who the researcher thinks will provide the best perspectives about the phenomenon under inquiry. This approach is suitable when researchers want to select specific case types to study more intensely (Ishak & Abu Bakar, 2014). Based on the principles of purposeful sampling, I used a sample of six participants, one from six different companies.

Determining the number of participants for a qualitative multiple case study depends on the depth and breadth of information rather than the number of participants. In qualitative research, the sample size depends on the amount of information the participant possesses, rather than on mathematical formulas (Malterud, Siersma, &

Guassora, 2015). Deradjat and Minshall (2015) used a sample of four companies for their multiple case study. The goal of qualitative research is to reach data saturation, or the point at which no new information is revealed (Winter & Collins, 2015). I reached data saturation after interviewing five participants and reviewing company documents. I interviewed one additional participant and reviewed more documents until no new information emerged. I also conducted face-to-face interviews in private locations that were convenient for each participant.

Ethical Research

Researchers have a moral obligation to adhere to an ethical code of conduct when conducting research (Dongre & Sankaran, 2016). Scherzinger and Bobbert (2017) noted that researchers should not only protect the study participants against potential harm but should also follow values such as respect for persons, beneficence, and justice. I followed the procedures of Walden University IRB and the Belmont Report's guidelines to ensure that I protected the rights of all participants. Following suggestions by Patel, Moore, Craver, and Feldman (2016), I ensured that the participants gave informed consent to participate voluntarily in the study. Yip, Han, and Sng (2016) defined informed consent as a process whereby participants voluntarily confirm their willingness to participate in a study after having been informed of all aspects of the study that may affect them. The goals of informed consent are to respect the participants' autonomy and protect them from harm (Tam et al., 2015). I informed the participants that there was no financial compensation for participating in the study and that they had a right to withdraw from the study at any time without repercussions.

I did not commence data collection before receiving IRB approval. For this study, I obtained IRB approval (07-09-19-0713500). Further, I did not schedule any interviews before the signed consent forms were received. In the informed consent form, I explained the purpose of the study, the expectations of participation, and the participants' rights. To ensure the privacy and confidentiality of the participants, I ensured their identities were not disclosed to anyone. As recommended by Koonrungsesomboon, Laothavorn, and Karbwang (2015) and in line with privacy guidelines illustrated in the IRB's approval process, I used pseudonyms and codes to protect the confidentiality and privacy of study participants and case organizations. I will store all of the data and information in a password-protected disk lodged in a secure fireproof safe. Five years after the completion of this study, I will destroy all of the data and information.

Data Collection Instruments

Yin (2014) noted that the researcher is the primary data collection instrument in qualitative studies. As the data collection instrument for the current study, I developed and used an interview protocol in collecting primary data through semistructured interviews with participants at their respective locations. Yin noted that additional data could be collected through archival records, observations, participant observations, and physical artifacts in a qualitative study. I used two techniques to ensure reliability and validity: member checking and methodological triangulation. Member checking is a strategy used in qualitative research to increase the quality and rigor of studies (Cope, 2014). Member checking also referred to as respondent or participant validation, involves the researcher providing the participant research data to confirm and validate (Birt, Scott, Cavers, Campbell, & Walter, 2016). The research data may include a transcript of the participant's own interview, a copy of emerging findings, or the draft and final versions of the doctoral study. Following recommendations by Marshall and Rossman (2016), I ensured member checking by providing the participants with a summary of the interpretations of the interview transcripts. In methodological triangulation, the researcher will correlate data from multiple data collection methods (Fusch & Ness, 2015). I collected data from several sources, including a review of company documents, archival records, and interview data.

Data Collection Technique

My primary data collection technique was face-to-face semistructured interviews conducted using the interview protocol. Morse (2015) and Yin (2014) noted that researchers use interview protocols as a valuable tool to reduce researcher bias and enhance research reliability. When conducting semistructured interviews, a researcher asks open-ended interview questions to explore the phenomenon (Marshall & Rossman, 2016). An advantage of using interviews as a data collection technique is that an interview yields data in quantity quickly and the researcher might follow-up to clarify as needed (Marshall & Rossman, 2016). The semistructured aspect of the interview allows the participant freedom in answering the open-ended questions, while the researcher may probe the participant's responses to the open-ended questions (Castillo-Montoya, 2016; McIntosh & Morse, 2015). Yin (2018) noted that an advantage of audio recording the interview is that audio recordings provide a more accurate rendition of the interview. The audio devices also assist in creating validity (Nordstrom, 2015). Following suggestions by Yin (2014), I ensured accuracy, transferability, and dependability by obtaining consent from the participants to record the interviews. I also used member checking to improve reliability and validity.

I reviewed company documents such as internal memos, reports, and presentations. Internal company documents are a valuable source of information about a company's activities (Wieland et al., 2014). Yin (2014) noted that documentation is a primary source for case study data because researchers do not create them as part of a study, they do not change over time, and are specific and comprehensive. However, collected documentation might be biased, difficult to acquire, or selectively provided by candidates (Yin, 2014).

Data Organization Technique

Researchers may rely on computer programs to organize and manage the vast amount of information they collect during a qualitative study. Watkins (2017) suggested that researchers may use more general-purpose software packages such as Microsoft Word and Excel to organize, reduce, and analyze qualitative data. I created a folder for each case on the computer and labeled according to the name of the company. I then created subfolders under each case for purposes of storing company documents provided in electronic form. After transcribing the interview, I organized the data using word processing and spreadsheet software. Each interview transcript was saved as a separate file according to the date of the interview. Each interview transcript was assigned a unique code ranging from BUS1 to BUSx. I assigned each company document a unique code ranging from DC1 through DCx. I then stored the files in the designated folders within my personal computer. Following suggestions by Woods, Paulus, Atkins, and Macklin (2016), I utilized qualitative data analysis software to keep track of all data and to support data organization and analysis. Researchers who use case study designs employ various strategies to ensure rigor and minimize bias, including the use of a journal or diary to document personal feelings and reactions (Cope, 2014). Reflective journals can be used to record the steps taken, by the researcher, to make decisions about the study (Cope, 2014). Reflective journals also help to provide transparency to the data collection method, to document potential challenges, and to keep track of everything the researcher does throughout the study (Teusner, 2015). I used a reflective journal while conducting the current study to document as many of my thoughts and experiences that I faced when collecting and analyzing data. To protect participants' rights, I will store the study data in a password protected digital drive, lodged in a fireproof safe, for 5 years. I will then destroy all the electronic data and shred paper documents 5 years after the publication of my study.

Data Analysis

Researchers who use qualitative methodology collect large amounts of data, which require analysis, coding, and organization to establish linkage between the research participants' experiences and existing literature. Data analysis is a procedure that researchers utilize to arrange, to assess, and to interpret all information from the data gathering process (Yin, 2014). Yin (2014) suggested a five-phase process for researchers to carry out qualitative data analysis. These phases include compiling, dissembling, reassembling, interpreting, and concluding (Yin, 2014). First, researchers accumulate all the data then disassemble the collected data into manageable fragments. Next, investigators generate codes and clusters. After forming the relevant themes, the researcher commences the data interpretations. In the final phase, the researcher would make conclusions from the analysis from the previous stage.

I employed the Yin's (2014) five-phase approach as a systematic way of analyzing the data. Triangulation refers to the validity procedures researchers follow when collecting and analyzing data from multiple sources (Fusch & Ness, 2015). For case studies, methodological triangulation using multiple resources to collect data is the most appropriate way for researchers to corroborate their findings (Yin, 2014). To confirm data, researchers can triangulate interview data with data collected from other sources, such as archival documentation, company documentation, and media documentation (Yin, 2014). I performed methodological triangulation to improve data credibility by showing alignment among interview data, document review, literature review, and the conceptual framework. I also used methodological triangulation to test validity and reliability through the convergence of information from multiple sources and to check the consistency of the findings.

Researchers must relate key themes with the conceptual framework (Moon, Brewer, Januchowski-Hartley, Adams, & Blackman, 2016). I explored how the themes supported or contradicted the conceptual framework. Using data analysis tool or software can help make the task of data analysis easier (Bourque & Bourdon, 2017). Qualitative researchers use computer-assisted qualitative data analysis software, such as NVivo, ATLAS.ti, and MAXQDA, to enhance their efforts to organize data, code data, and to analyze data (Woods et al., 2016). Bengtsson (2016) explained that researchers who use computer-assisted qualitative data analysis software could more easily transform data expressed as words instead of numbers into meaningful qualitative analyses. I used NVivo software during the coding, organizing, and analysis phases of the current study. Using the NVivo software, I imported and coded all the interviews transcripts. I organized the data according to key themes generated from the reviewed academic literature and the conceptual theory. I also searched for new studies published since writing this proposal and used NVivo software to generate new themes. I used the code mapping functionality to organize data into (a) nodes, (b) cases, (c) relationships, and (d) node matrices. I then used the NVivo software to correlate and categorize the interview data according to key themes, draw comparisons between the participant responses, and look for new themes as well as relationships within the data.

Reliability and Validity

Reliability and validity are both concepts that pertain to the rigor and trustworthiness of the research findings (Kornbluh, 2015; Noble & Smith, 2015; Yin, 2014). Reliability in a qualitative study is how dependability is addressed based on accuracy, precision, and consistency of the procedures used to conduct the study (Marshall & Rossman, 2016).

Johnson and Rasulova (2017) described the validity of a qualitative study as the extent to which the assessment is testing what a researcher is measuring to support credibility, transformability, and confirmability. Macduff, Stephen, and Taylor (2016) detailed the most common criteria used to assess the rigor of qualitative research as dependability, credibility, confirmability, and transferability. Reliability and validity of research are achievable and depend on the level of discipline on the part of the researcher (Smith & Chudleigh, 2015).

Reliability

Reliability or dependability in qualitative research shows research consistency, meaning if replicated under similar conditions, the research findings will be the same (Cope, 2014). Marshall and Rossman (2016) noted that the dependability of a qualitative study depends on the nature of freedom, precision, accuracy, consistency of data collected, and the reliability of the measurement instrument researchers disseminate. Following suggestions by Morse (2015), I enhanced dependability through strategies such as member checking of data interpretation, reviewing transcripts, interview protocols, and triangulation of data sources. Noble and Smith (2015) proposed researchers should present participants with a copy of their interview transcripts as well as the researchers' findings and interpretations for verification.

I ensured member checking by providing the participants with a summary of the interpretations of the interview transcripts for review. I also replicated and transcribed participants' interviews verbatim and used NVivo software to analyze and code data from participants. I then searched for variations among participants' responses, appropriately detected emerging codes, examined the data amassed by using triangulation techniques, and after the transcript reviews, recoded data when necessary.

Validity

Validity is the accuracy of the results of the study (Teusner, 2015). To validate research, researchers conduct creditability, transferability, and confirmability tests (Heale & Twycross, 2015; Noble & Smith, 2015). Credibility refers to the extent to which the research results represent the true meanings of the participants (Cope, 2014; Moon et al., 2016). Credibility is especially important if the reader is to implement the recommendations from the study (Moon et al., 2016). Both credibility and dependability influence how accurately the research question is answered (Moon et al., 2016). Noble and Smith (2015) noted that researchers could ensure credibility by member checking as well as triangulation. I analyzed interview data, reviewed company documents, and used methodological triangulation to ensure credibility. Following suggestions by Bahraminejad et al. (2015) and Cope (2014), I included verbatim quotes from participants in the study to help support the findings.

Transferability is a type of external validity that refers to the applicability of the findings in other contexts (Cope, 2014; Moon et al., 2016). In qualitative research, transferability addresses the concerns on whether the findings from the study are generalizable and could be transferable to other contexts (Moon et al., 2016). In comparison with quantitative standards, qualitative findings are not typically generalizable given the small number of participants in the study (Moon et al., 2016). Yin (2014) recommended that researchers should provide as much information as possible about the nature of their study so other researchers could replicate. Qualitative study findings can enable researchers to generate hypotheses about the phenomenon for further research (Moon et al., 2016). Researchers should state the extent to which other scholars and practitioners can apply the findings to other contexts (Cope, 2014; Moon et al., 2016). I explained how the current study relates to the conceptual framework, the current study's limitations, and highlighted opportunities for future research.

Confirmability involves the degree to which researcher bias influences the research findings (Cope, 2014; Moon et al., 2016). Researchers should ensure the study findings reflect accuracy and genuine reflections of participants' perspectives and that their biases do not interfere with the findings (Noble & Smith, 2015). Similar to credibility, confirmability ensures that the research can be replicated with the same results (Moon et al., 2016). Researchers should report their predispositions, beliefs, and assumptions (Noble & Smith, 2015). I used interview protocol as a guide to establish validity by reviewing transcribed interpretations, accurate definitions, and detailed explanations of experiential accounts of the phenomena with study participants. I further probed the participants during interviews and conducted follow-up interviews to support confirmability. Following suggestions by Cope (2014), I reported on my views regarding the phenomenon and presented a detailed methodological description to enable the readers to follow the research process and determine confirmability. Participants' verbatim descriptions supporting themes that emerge also help to achieve confirmability (Bahraminejad et al., 2015).

Data saturation is a critical concern in qualitative case study research and occurs when researchers are unable to obtain any new relevant data (Yin, 2014). The validity of a qualitative study could be ensured by reaching data saturation (Marshall & Rossman, 2016). Fusch and Ness (2015) implied that no new data, no new themes, or no new coding are common characteristics used as a guide to reach data saturation. I used NVivo software to identify key themes and frequencies and member checking of data interpretation with participants to attain saturation. I also used methodological triangulation involving multiple data collection methods, including reviewing interview transcripts, interview protocols, and triangulation of data sources to attain data saturation.

Transition and Summary

In Section 2 of the current study, I presented a description of the project. I discussed my role as the researcher, the participants and the justification for research method and design. Next, I discussed population and sampling, ethical research and data collection instruments. I then discussed the data collection technique, data organization techniques, data analysis, and reliability and validity. In Section 3, I will present the findings of the study, the application to professional practice, the implications for social change, recommendations for action, recommendations for further research, a reflection on my experience within the DBA Doctoral Study process, and a conclusion of the study.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative multiple case study was to explore the strategies that retail business managers use to address disruptive changes in technology. The data came from interviews with business owners, company documentation, and archival records at six travel agencies in Nairobi, Kenya. Analysis of the data revealed five major strategies and six minor strategies that business leaders in the retail travel industry use to cope with disruptive changes in technology. The findings showed how owners of travel agencies used these business strategies to remain competitive and relevant in the wake of disruption. In this section, the findings are compared to those from previous studies and interpreted using the disruptive innovation theory.

Presentation of Findings

The overarching research question for this study was the following: What strategies do retail business managers use to address disruptive changes in technology? I used Christensen's (1997) theory of disruptive innovation as the conceptual framework for this study. Semistructured interviews, company documents, and archival records allowed me to obtain a deep understanding of the strategies used by business leaders in the retail travel industry to address disruptive changes in technology. The participants were coded as BUS1, BUS2, BUS3, BUS4, BUS5, and BUS6 to ensure confidentiality. After six interviews, I reached data saturation, and no further interviews were needed. I discovered congruence between the themes I identified and those in the peer-reviewed articles I reviewed. Most of the participants' responses regarding identifying business opportunities in disruptive changes in technology, adapting to changes in the business environment, and identifying effective competitive strategies supported Christensen's disruptive innovation theory. The discussion of the findings involved comparing the findings with those from previous studies and interpreting them using the conceptual framework.

The five major themes that emerged from the data were (a) identify business opportunities in disruptive changes in technology, (b) identify effective competitive strategies, (c) adapt to changes in technology and the business environment, (d) optimize dynamic capabilities, and (e) adapt the business model. Under Theme 1, the subthemes that emerged were (a) gather disruptive intelligence and (b) strategies to counter disruptive innovation. Under Theme 2, the subthemes that emerged were (a) differentiation strategy, (b) niche strategy, (c) strategic partnerships and alliances, and (d) distinctive customer experience strategy.

Theme 1: Identify Business Opportunities in Disruptive Changes in Technology

Participants identified leveraging disruptive innovation to transform businesses as an essential business strategy to sustain growth and profitability. All of the participants indicated that they leveraged changes in technology to identify business opportunities. BUS1 noted that business leaders could take advantage of the disruption to grow and enhance their businesses. According to BUS1, technology is essential for data collection, especially for airline bookings. BUS1 further noted that "with such systems, it is possible to make bookings almost instantly, but people have had to invest and cope with this massive change by learning their new systems and keeping up with the changes."

According to BUS1, the adoption of new technological innovation has brought about efficiency in doing business as the travel agencies now have access to information about all available flights and the airfares as well as the availability of seats in the specific flights.

The perceptions of BUS1 were also affirmed by BUS2 and BUS3, who noted that changes in technology in the retail travel industry have been fast and dynamic. BUS2 stated that “in terms of technology, we have invested in consolidation so that as some people are moving toward online booking, we do not lose that business.” BUS2 further noted that “within 2 years of using a new technological innovation, the specific business line started contributing to 14% of the total business, and now the focus is moving to 40% contribution by the 5th year.”

Presentations shared by BUS2 and video demos obtained from BUS2’s website affirmed that the company invested in technology to make business travel management simpler, faster, and more efficient. For example, a video demo obtained from the participant’s website indicated that BUS2 had deployed a mobile app that is powered by artificial intelligence. Insights from the presentations suggested that the mobile app is equipped with tools to assist travelers with activities such as booking flights, sharing information on hotels and ground transportation, and updating travelers on the weather at their destination. BUS2 noted that it is crucial to adopt and develop technology that enhances the experience of travelers on the go.

The participants’ views substantiated findings in the literature that the concept of disruptive innovation is premised on the notion that new technologies can create new markets or radically change, or disrupt, the status quo in existing markets (see Christensen & Bower, 1995). Nagy et al. (2016) noted that incumbent firms could avoid the adverse consequences caused by ignoring a disruptive innovation if the leaders anticipate and predict the potential outcomes of disruptive innovations. These adverse outcomes include reduced market share, decreased status, or bankruptcy or death of an organization (see Christensen & Bower, 1995). Predicting the effects of changes in technology can enable managers to turn potential marketplace disruptions into new opportunities and prevent failure of organizations (Nagy et al., 2016).

Gather disruptive intelligence. The responses from BUS1, BUS2, BUS3, BUS4, BUS5, and BUS6 reflected a general agreement that there is a need to keep up with changes in technology in the retail travel industry. All of the participants noted that they were aware of the major disruptors in the industry. These disruptors include the OTAs and online booking portals operated directly by the airline companies. BUS1 stated that

> Some of the competition we deal with are different versions of the OTAs such as Expedia and Kayak. These OTAs have a huge buying power with the airlines and can negotiate for better deals, which poses a serious competition for our businesses.

BUS2 noted that

> Other advancements in technology have also emerged in terms of online booking with systems such as Expedia, booking.com, and other online platforms. Adoption of these online platforms is quite high in Europe and America, more than 50%. Although in Africa the adoption rate is around 25%, it is increasing rapidly.

The perceptions of BUS2 were also affirmed by BUS1 and BUS5 who noted that there was a direct relationship between Internet penetration rates and the growth of online travel sales. The participants` perceptions aligned with statements in the documents regarding the penetration rates of OTAs. For instance, a strategy presentation provided by BUS2, which referenced reports on industry travel trends, revealed that more travelers were booking online using OTAs. Further insights from the presentation revealed that the online bookings uptake was more prominent among millennials who are tech savvy and can compare booking options, pricing, and reviews in one platform. Insights from the presentation further revealed that, between 2017 and 2018, online marketplaces such as Viator and Tourradar increased by 5.9%. Evidence from these data suggested that penetration rates were high in mature markets such as the United States and Europe, while Africa lagged because of low penetration rates of the Internet and low adoption rates of credit cards.

The participants' responses regarding the strategies used to obtain knowledge of a potentially disruptive innovation corroborated other findings in the literature reviewed in this study. Recognizing disruptive innovations before they disrupt a business or industry is critical for any firm. This is possible only when managers gather intelligence about actually or potentially disruptive innovations (see Vriens & Soilen, 2014). Managers should gather information regarding whether disruptions are possible in the industry or business, whether the industry is already facing disruption, and whether there are any systematic barriers to discovering disruptive intelligence (see Gans, 2016).

Strategies to counter disruptive innovation. The responses from the six participants indicated that they considered working with other companies to counter the effects of disruptive changes in technology. All of the participants noted that they collaborated with global distribution system (GDS) providers such as Amadeus and Travelport. According to BUS2, the most commonly used case of the emerging online booking platforms is viewing and inquiry because, in Africa, most people have not developed confidence in booking online. BUS2 stated that "among the inhibiting factors to the uptake is the payment method because the adoption of the credit card system is still low in Africa." BUS2 further stated that

> Most online platforms require customers to pay for tickets using credit cards; thus, the adoption would be low if the credit card penetration is low. This is an advantage for us because we end up issuing most of those tickets.

The participants' views were affirmed by insights from presentations provided by BUS1 and BUS5, as well as a white paper obtained from the website of BUS2. These data suggested that although there was an uptake on online travel sales, consumers continued to seek out the counsel of travel agents, especially when looking for new travel ideas and when purchasing travel services that involved a more complex itinerary. Further insights from the presentations suggested that consumers were willing to pay service fees, but the percentage could be altered based on gender, income, and the travel segment. BUS2 suggested that travel agencies could implement better marketing techniques that reach the types of consumers inclined to invest in the professional services of a travel agent.

The participants' views regarding strategies to counter disruption substantiated findings in the literature that countering disruptive innovation requires managers to compute the value of winning, find ways of leveraging present capabilities, and collaborate with other companies (see King & Baatartogtokh, 2015). Managers who fail to gather disruptive intelligence are suffering from myopia or disruptive blindness (see Vriens & Soilen, 2014). Vriens and Soilen (2014) suggested that the indicators of disruptive blindness include a bias toward sustaining innovations over new product concepts, a dismissive attitude of managers toward losing low-end customers, and a complacent attitude regarding the high levels of business success.

Theme 2: Identify Effective Competitive Strategies

The second main theme that emerged from the analysis of participants' responses was the need to identify effective competitive strategies. Participants mentioned the importance of understanding the market and customer needs before selecting the strategies to respond to disruption. All of the participants stated that they focused on understanding the circumstances under which a customer would prefer booking directly online instead of contacting a travel agency. Participants noted that there are customer segments that are not likely to adopt online bookings owing to the complexity of their needs. For instance, five out of the six companies focused primarily on corporate travel and emphasized that corporate organizations would prefer the services of a travel agency. All of the participants noted that some customers would require help with additional services such as visa applications, travel insurance, and the flexibility to make changes whenever their travel arrangements change. Such flexibility is among the incumbent competencies that the OTAs lack.

Insights from the content obtained from the websites of BUS1, BUS2, BUS5, and BUS6 affirmed their assertions that they focused on corporate travel segments. For example, the participants have published their corporate value proposition as including a package of services such as air travel reservations and ticketing, hotel accommodation reservations, visa processing, immigration assistance, travel insurance, management information, and meet-and-greet services. Insights from a presentation provided by BUS5 suggested that unlike traditional travel agencies, OTAs have few differentiation points; therefore, the owners of such firms face challenges of building customer loyalty. BUS5 also suggested that OTAs are losing customers to traditional travel agencies and new online competitors such as travel websites built around user-generated content.

This finding is consistent with the argument that disruptive innovation does not always imply that entrants or emerging businesses will replace incumbents or traditional businesses (see Perez et al., 2017). The effect of market-related resources and competencies on incumbent-entrant dynamics, as reflected in their likelihood to exit or reposition in different submarkets, has not been explored (see Uzunca, 2018). Business leaders in the incumbent firms may respond to disruptive innovations by either creating new capabilities or reconfiguring existing ones. Incumbent response to disruptive innovation is best done through capability enhancement aligned with an established technological trajectory and resource base in which its existing strengths reside (Sarkar et al., 2018). Taking advantage of disruptive innovations requires managers to develop a thorough grasp of their firms' capabilities and an in-depth understanding of all internal processes (see Perez et al., 2017). Christensen and Raynor (2003) emphasized that companies formulating strategies should endeavor to understand how and under what circumstances customers use resources, not focus on the customers themselves.

Differentiation strategy. Responses from all of the participants depicted a distinct and efficient differentiation strategy. All participants argued that adopting a product and service differentiation strategy helped them gain a competitive advantage over rivals to sustain their operations. Using a differentiation strategy facilitates distinctiveness, which enables a business manager to create barriers and reduce substitutes, thereby leading to higher margins that decrease the necessity for a low-cost advantage (see Sihite & Simanjuntak, 2015). Five out of six participants in the current study mentioned that focus on uniqueness, service innovation, and dedicated customer support helped them to attain efficient differentiation strategies. BUS2 stated that "personalized and dedicated service is what differentiates us from our competitors." This finding is consistent with the argument that technologies are not the central service but a means to delivering service to the customer (see Helkkula, Kowalkowski, & Tronvoll, 2018). The service systems archetype emphasizes the social connectedness and dynamic interplay of resources in which the customer is the central actor (see Buhalis et al., 2019). The analysis of the documents used for triangulation in the current study corroborated participants' responses related to differentiation strategies.

Five out of the six participants mentioned that apart from travel, they had also provided tourist services to benefit from the relatively successful tourism business in the country. Manrai, Lascu, and Manrai (2019) noted that tourism attractions include the scenes that may draw a tourist to a destination; interest is sparked in a destination when there are unique attractions, such as safari opportunities. In the case of incoming tourists, the participants indicated that they invested in relationships with strategic partners from other countries. The participants noted that they leveraged these relationships to support incoming tourists with logistical support to the various tourist destinations. BUS4 stated that they provided tourist services as a separate business line to leverage the demand side of the tourism sector and to bridge the gaps they experienced in the travel business. BUS4 further stated that

> Customers seeking tour services are required to book and pay for services upfront. Some customers make such payments several months in advance. We are then able to use this money to bridge the gap occasioned by the credit line we advance to our corporate travel clients. So I would say we try to stay afloat and this seems to be working for us.

Travel and tour firms may leverage the tourism demand side if they understand the concerns of tourists traveling to different destinations. BUS1 noted that

> Tourists may book Airbnb accommodation to a place like Maasai Mara (one of the tourist destinations in Kenya), and then they do not know how to get there. It could take them about five hours traveling on the road or even hire public means. Being tourists, they may be exposed to road safety risks and other risks related to insecurity. In our case, we emphasize on traveling responsibly and sustainable tourism.

The perceptions of BUS1 were affirmed by insights from a white paper obtained from the website of BUS2. These data suggested that corporate leaders had invested in travel risk management and had made the security of travelers part of corporate travel management. These data also indicated that a majority of business travelers had modified travel itineraries due to health or security concerns. These data further suggested that the heightened global risk of terrorism, coupled with natural and man-made disasters were among the concerns of business travelers. BUS2 noted that corporate leaders should ensure that the steps they take to protect their employees are proportionate and based on real threats.

The participants' views substantiated findings from research regarding the factors that influence a tourist's choice of travel destination. Manrai, Manrai, and Friedeborn (2018) highlighted factors such as health risks, pollution, quality of life, medical care, and literacy, as influencing a tourist's choice of travel destination. Strong, enforced regulations promoting a high quality of life and a sustainable tourism industry that ensures quality services for tourists are essential (see Manrai et al., 2018).

BUS1 stated that they focused on sustainable travel and tourism as their strategy to grow their tours business and offer differentiated safari packages. BUS1 further noted

> When it comes to promoting sustainable tourism and sustainable travel, we have made some investments. We try to say we are more sustainable in the way we operate. Even within the office, we recycle paper in different ways. We also try to get people to go to better lodges, which are sustainable in the use of energy. Such

> partners invest in creating employment for local communities and in preserving the environment.

BUS1 further indicated that they also used an online platform known as safari bookings for advertising their travel products and services and for obtaining reviews from clients. A walkthrough of the online platform revealed that BUS1 had published their company profile, contact details, a link to the corporate website, tour packages such as custom tours to all parks and accommodations, and price ranges of various services. The walkthrough further revealed that there was evidence of client reviews regarding their experiences with services offered by BUS1.

The analysis of companies` documents such as strategy presentations, products and services offerings published on the websites, and company profiles, corroborated participants` responses related to differentiation strategies. The company profile published on the website of BUS6 suggests that they “provide a full range of travel management services to a diverse client portfolio.” According to BUS6, their client portfolio comprises local and international corporate organizations, non-governmental organizations, international travel agents and tour operators, and individuals. The finding that focusing on sustainable travel and tourism can be a differential strategy that is consistent with the assertion that once a competitive advantage is established, destination management and sustainability become important factors in maintaining competitiveness (see Manrai et al., 2018).

Niche strategy. All of the participants stated that they had focused on effectively serving the corporate travel segment. Five out of six participants in the current study indicated that they were primarily focused on corporate travel segment. BUS3 stated that

> Because of such value-added services, customers would traditionally still want to use a travel agent, especially corporate organizations. A corporate organization may have ten employees traveling at the same time. You cannot tell all of them to do individual bookings. you still need the services of a travel agent.

The perceptions of BUS3 were also affirmed by the views of BUS5 regarding the reasons why corporate business leaders preferred working with traditional travel agencies. BUS5 noted that

> Just like corporates outsource other services, they would outsource travel services because they want reliability and dependability. As travel agents, we must create that atmosphere of reliability and dependability. The disruptors did not have a mindset of managing corporate travel. They could only succeed in disrupting the mass market segment and not the corporate travel segment.

The views of BUS5 confirmed the finding by Christensen et al. (2015), that disruptive innovation does not always imply that emerging businesses will replace incumbents or that disruptors are necessarily start-ups. Business leaders in the incumbent firms with existing high-end technologies can survive by concentrating on how to satisfy their most demanding but least-price-sensitive customers (see Rasool et al., 2018). These leaders can still maintain a profitable niche market at the very high end without total displacement by disruptive innovation. Rasool et al. (2018) indicated that a disruptive innovation ultimately could have a major impact on an existing market without totally displacing it.

BUS2 emphasized the need to develop the product lines that would meet the needs of all customer segments. Whereas BUS2 and BUS 5 were keen not to lose business to OTAs, BUS1, BUS3, and BUS4, and BUS6 focused on effectively serving the corporate travel segment. BUS6 noted that, “our corporate travel segment account for 99% of our business. We consider the mass market segment risky.” BUS2 noted that they developed tools that the mass market segment can leverage to access travel services. According to BUS2, countering disruption requires business managers to understand the needs of their noncustomers and to respond by developing appropriate products. BUS 2 also developed a B2C product line to target the mass-market customers who prefer booking online. Such investments have differentiated BUS2 as a player who serves all the market segments.

The participants’ views aligned with research finding disruptive innovations do not always start in the low-end market; they can also start market penetration by offering high-quality products with different features and functionalities (see Christensen et al., 2015). However, business leaders need to segment customers to fulfill customer needs according to the end they are trying to achieve with the product (see Christensen & Raynor, 2003). Rasool et al. (2018) emphasized the need to understand that a large percentage of the customers are outside the continuum of the existing customer base. Business leaders need to understand the needs and demands of customers and noncustomers to cater their needs adequately (see Christensen & Raynor, 2003).

Strategic partnerships and alliances. Strategic partnerships and alliances allow for the development of capabilities to detect new opportunities and can become a source of increasing competitive advantage and profitability. All of the participants mentioned that they leveraged strategic alliances as a means to co-create value, to increase competitiveness, or to grow market share. A strategic alliance is a flexible vehicle of learning, a way to transfer useful knowledge in partner firms and to generate combinations of resources, and a superior means of access to technological capabilities and other complex capabilities (see Mamedio, Rocha, Szczepanik, & Kato, 2019). All the participants mentioned that they had partnered with GDS providers such as Amedeus and Travel port. BUS5 stated that

> In my travel agency, we have worked with Amadeus for 6 years, and now we are migrating to Travel port because at the end of 6 years I believe that a change is necessary. All that our customers need is reliability when they make a booking, and they may not care much about the technology partner we are working with. However, some technology partners may provide us with superior capabilities to offer differentiated experiences to our clients.

The strategic alliance between large and small companies can benefit both parties. Emphasizing the importance of strategic alliances, BUS1, BUS2, BUS5, and BUS6 mentioned that they considered engaging in partnerships with global travel agencies. Such partnerships enabled them to provide corporate travel services, to increase their bargaining power with airlines and the GDS providers, and to benchmark against successful companies in other markets. BUS5 further noted that

> We found one global company that was willing to have many affiliates as long they did not have a problem competing amongst themselves. We have been members of this global company for 14 years now. I would say that joining the global company as an affiliate was the best thing that I did, because as a small entrepreneur I was on my own when it came to training, benchmarking, and understanding what is new in our industry. This global partner has systems for corporate travel which aligned with what we were looking for. I had to become an affiliate to undergo the necessary training and get the systems that would strategically position our company as a corporate travel service provider.

Similarly, BUS2 stated that

> Because we are in the marketplace and we work with technology partners, we get a chance to participate in global conventions regarding the industry. We are also an affiliate of a global travel agency with a presence in more than 90 countries. By associating with these partners, we get to know about technologies that are in use in America and Europe before they are even acquired locally. We also get to know about products being rolled out around the world and move first and implement them even before they are adopted locally.

Findings from research regarding partnerships and alliances (see Freytag, 2019; Mamedio et al., 2019), were supportive of the strategic partnerships and alliances subtheme that emerged from the study. Countering disruptive innovation requires managers to compute the value of winning, find ways of leveraging present capabilities, and collaborate with other companies (see King & Baatartogtokh, 2015). The use of strategic partnerships and alliances for collaborative knowledge helps business leaders to manage disruption (see Alberti-Alhtaybat, Al-Htaybat, & Hutaibat, 2019). Business leaders who take advantage of the variety of inter-organizational relationships to achieve knowledge exploration develop more radical innovations, and therefore, leaders of clustered firms should build their network with a great diversity of relationships to obtain knowledge exploration since it is critical for developing radical innovation (see Martinez-Perez, Elche, & Garcia-Villaverde, 2019).

Distinctive customer experience strategy. Findings in the current study revealed that, in a dynamic and competitive business environment, positive customer experience could trigger customers' long-lasting emotional attachment to a company. All of the participants noted that commitment to the distinctive customer experience was a distinguishing feature in their drive to attain more market share and to defend their existing market share. Research findings have revealed that the perceived emotional value acts as a competitive mediator and impact on customers' affective commitment toward their service providers (see Poushneh & Vasquez-Parraga, 2019).

One path to remaining competitive in the wake of disruption is through distinctive customer experience. BUS1 stated that "we look at our sales and our revenue regularly. Of course, from assessing the gross revenue and costs, we try to remain competitive. There is no better direct measurement than hearing our customers describe how they experience our services." BUS2 noted that changes in technology and technological advancements such as virtual reality had enabled service providers in the retail travel industry to focus on delivering customer experience. BUS2 stated that "we can book for you a hotel in Casablanca, and using virtual reality technology we can enable you to experience how the actual hotel room is like." BUS2 also stated that "technology has enhanced the way we do business by powering the visualization of the customer experience." The majority of customer experience lies in delivering a customized approach to satisfying the needs of customers (see Valtakoski & Witell, 2018).

Understanding customers' pain points and wants, and then focusing on delivering solutions that are relevant to customers can lead to increased competitiveness. BUS2 noted that "we can get real-time feedback through various touchpoints using technological tools. Customers can chat with us every step of the way, and we can rely on their real-time feedback to improve our service delivery." According to BUS5, in an industry where the product offering is similar, only distinctive customer experience can differentiate a service provider from the competitors. Resolving customer issues that enhances customer value proposition may lead to product market success (see Sokolinskiy, Sopranzetti, Rogers, & Leuschner, 2019). Delivering superior customer experience requires managing customers' journeys by prioritizing actions to improve customer experience through understanding customer perspectives and capturing customers' emotional and cognitive responses (see McColl-Kennedy, Zaki, Urmetzer, Neely, & Lemon, 2019). BUS5 noted that

> In a market, there must be something that differentiates us from the rest. This is what would make customers choose us over our competitors. I would say, yes, technology is evolving, but we are also changing in our approach. We must learn

> to listen to our clients, and we must appreciate that the client's needs are also evolving.

While emphasizing why corporate clients still prefer services of a travel agent, BUS5 stated that "although technology is useful, we must understand that our business touches on all areas of the individual. How we deliver the service can impact the emotional well-being of the individuals as well as performance in their work."

Distinctive customer experience is relational, instead of functional, and it is more complicated than simply customer service and customer satisfaction. All of the participants emphasized the value of understanding their customers and the importance of collecting customer feedback. Business leaders need to practice a formal process of analyzing customer experience feedback to get a more comprehensive view of the dimensions and factors of customer experience (see Havir, 2017). BUS1 noted that "we do regular visits to corporate clients and conduct written surveys toward the end of each year to obtain their feedback on our services. We also evaluate sales per corporate monthly and continuously engage our corporate customers."

Delivering superior customer experience requires managing customers' journeys by prioritizing actions to improve customer experience through understanding customer perspectives, capturing customers' emotional and cognitive responses, identifying at-risk segments of customer satisfaction and solving root causes, and identifying and preventing decreasing sales (see McColl-Kennedy et al., 2019). The use of customer feedback was significant in determining the strategies the participants used to remain competitive in the wake of disruptive changes in technology.

Findings in the current study revealed that customer experience and service differentiation are key in responding to disruptive changes in technology. All of the participants indicated that they focused on offering a differentiated experience to ensure customer value proposition and retain customers. Evidence from the literature, which discussed service model innovation as an avenue for attaining competitive advantage, was supportive of the distinctive customer experience subtheme. Business leaders rely on the formulation of a distinctive customer experience strategy as an avenue to differentiate their products and gain a competitive advantage (see Tivasuradej & Pham, 2019), because customers who frequently have good experiences with a brand tend to be the most loyal (see Moretta Tartaglione, Cavacece, Russo, & Granata, 2019).

Theme 3: Adapt to Changes in Technology and Business Environment

Another theme that emerged from the interviews was the need to adapt to changes in technology and the business environment. The ability of business leaders to adapt to changing environments is related to their ability to exploit existing competencies and to build new capabilities (see Schmitt et al., 2016). All of the participants noted that the ability to adapt to the increasing changes in technology and changes in the business environment was the key to sustaining their operations amidst disruptive innovations such as the emergence of OTAs and the direct booking portals. The participants' views affirm the assertion that response to disruptive innovations is viewed in the context of a dynamic environment where there is a need to constantly adapt, reconfigure, and renew resources and capabilities to address changes in the business environment (see Day & Schoemaker, 2016). BUS5 emphasized the need to adapt to changes that would make their business fit for survival. According to BUS5, when there are disruptions, there arises the need to devise a survival strategy. BUS2 noted some cases in which some business leaders in the retail travel industry resisted change and lost market share to the emerging OTAs. The philosophy that inspires BUS2 is that change is constant; thus, survival in the dynamic business environment depends on their response to change.

All of the participants emphasized the need to partner with GDS providers and the need to train staff on new technologies. BUS2 stated that “these changes impact people because technology is supposed to be adopted and used by people, and that is why we train and encourage our people to embrace change.” All of the participants indicated that working with technology partners such as the GDS providers helped to improve the efficiency of their operations. BUS3 reckoned that “if you insist on issuing manual tickets in the era of electronic ticketing, chances are you will go out of business.”

The findings were consistent with the existing body of knowledge. Disruptive changes in technology and the presence of an ever-changing competitive market structure requires the leaders and managers in the incumbent retail industries to adapt their practices accordingly (see Kumar et al., 2017).

Theme 4: Optimize Dynamic Capabilities

The participants’ responses revealed the importance of optimizing the firm’s dynamic capabilities. All of the participants argued that survival in the disruptive business environment required the optimization of dynamic capabilities. Dynamic capabilities enable firms to sense opportunities sooner than rivals, seize them more effectively, and support the organizational transformation needed to sustain market leadership (see Day & Schoemaker, 2016). These capabilities vary across firms because some firms are adept at anticipating and exploiting the opportunities created by technological advances and rapid changes in their markets, while others struggle or go out of business (see Day & Schoemaker, 2016). Strategic leaders can make judicious choices about which capabilities to develop depending on the situation (see Day & Schoemaker, 2016). Danneels (2004) confirmed that firm-level capabilities are essential for surviving disruptive changes. The knowledge of how corporate entrepreneurship influences adoption of disruptive business models is essential in developing a strategy for survival and in making and executing management decisions to respond to disruption (see Karimi & Walter, 2016).

Business leaders can adapt to the changing environment by exploiting their existing competencies and building new capabilities. Strategy theorists have described this adaptive process as *strategic renewal*, which refers to a firm's ability to disrupt inertia by modifying or replacing its core competencies to ensure long-term performance (see Schmitt et al., 2016). Strategic renewal is a key consideration in understanding a firm's long-term survival and prosperity, especially in times when the firm requires constant transformation (see Schmitt et al., 2018). Al Humaidan and Sabatier (2017) posited that to thrive and survive in the long run, business leaders should align their internal actions with conditions in the external environment.

All of the participants emphasized the need to align their internal actions with the conditions in the business environment. BUS4 stated that, "think about the dynamic and competitive nature of our industry. We have to scan the business environments and align our strategies continuously and appropriately." BUS2 noted that they responded to the changing competitive dynamics in the marketplace by investing in a B2C solution that enabled an extension of booking capability through third-party mobile apps.

The participants indicated that the response strategies they deployed were working. For instance, BUS5 stated that

> Before the year 2015, travel agents looked like they were on their way out. We had lost about 40% of the business to online booking engines. However, this has since changed, now we have re-gained almost 25% of the business back. I would say as long as we keep focusing on the needs of our customers, the travel agency business is back to stay.

All of the participants indicated that they worked with partners who had superior technology capabilities and invested in a skilled and competent workforce to adapt to disruptive changes. BUS2 indicated that they had started a separate autonomous firm that focused on developing products to address the changing needs of the mass market segment while their core-firm focused on serving the corporate segment. These findings are consistent with other findings in the exiting body of knowledge that disruptive innovation creates capability gaps (see Karimi & Walter, 2015). These gaps require leaders of incumbent firms to adopt and assimilate disruptive innovations that modify the traditional business model to attract new markets and value networks (see Karimi & Walter, 2016; Lui et al., 2016). Dynamic capabilities are essential to respond to disruptive innovation and closing these gaps.

All of the participants noted that they worked with partners who referred clients from other countries. The participants also emphasized the need to bundle several products and services as a means of boosting their competitiveness. This finding confirmed that to remain competitive in the advent of the digital age, traditional travel agencies must reconfigure their businesses. The participants' views aligned with findings from previous studies that dynamic capabilities unfolding from shifting the business processes from the outgoing to the incoming market segment, and from retailing to bundling tourism products, can boost the competitiveness of brick-and-mortar travel agencies (see Abrate, Bruno, Erbetta, & Fraquelli, 2019).

Theme 5: Adapt the Business Model

The effects of technology shifts are not purely a problem of technological innovation but are also closely related to the inertia of business models and business model innovation (see Tongur & Engwall, 2014). Companies utilizing a disruptive low-cost business model to establish themselves and later grow their business could generate substantial profits (see Christensen & Raynor, 2003). Established high-cost companies attempting to start low-cost businesses regularly experience financial losses as they continue to base overheads on their core business model (see Christensen & Raynor, 2003).

All of the participants' responses indicated that the increased adoption of Internet-based business models had shifted the competitive landscape in the retail travel industry. Christensen and Raynor (2003) confirmed that the rise of OTAs, such as Expedia, Travelocity, and Orbitz illustrates the ongoing disruption of traditional brick-and-mortar travel agencies in the tourism sector. In the travel sector, the ongoing disruption has affected relationships between stakeholders, resulting in changes to market structures (see Buhalis et al., 2019).

BUS 2 noted that “although in Africa, the adoption rate of OTAs is around 25%, it is increasing rapidly, implying an increase in consumer bargaining power.” According to BUS2, although the increased competition had led to a significant reduction in their margins, their competitive advantage was their ability to serve customers from anywhere across the world. BUS5 stated, “think about the millennials who are tech-savvy and highly connected. These customers want to do everything on the go.” BUS5 further stated “if these millennials need to travel on a Sunday, they do not imagine that the travel agents are supposed to be closed. They expect us to be available, and of course, we say we are available 24/7.” According to BUS5, these changes in the business environment and in customer preferences have put pressure on travel agents to develop products that appeal to specific customer demographics.

Technological innovation by itself does not guarantee performance, but business models must be used to facilitate the success of technological advances (see Hu & Chen, 2016). Evidence from the analysis of industries facing disruption suggested that the fundamental challenge of disruptive technologies is a business model problem, rather than a technology problem requiring a change in the firm’s value proposition (see Karimi & Walter, 2016). There was a consensus among the participant responses that survival in the disruptive business environment requires new ways of capturing and delivering value to customers.

All of the participants noted that they had packaged other products and services to differentiate their offerings from those of OTAs. BUS5 regretted that "the airlines are now packaging and selling these products and services directly to customers, implying a new wave of disruption." BUS5 further stated that

> Our strategy has been to get the ticket from the airline then bundle it together with these other value-added products and services but now the airlines want to sell those products. The airlines have the power of numbers so they can negotiate reasonable rates. As you book online, they would ask if you want a hotel, or whether you need airport transfer services. They also sell travel insurance. This is already direct competition with us because we differentiate ourselves by selling these value-added services.

BUS1 and BUS6 also affirmed the perceptions of BUS5. These participants noted that the prices published by OTAs could be up to $ 50 cheaper for a basic air ticket booking. According to BUS5, the price difference between the traditional agencies and OTAs could be attributed to the additional costs that traditional agents levy as a service fee. The participants, however, cautioned that the prices displayed by OTAs keep fluctuating and may change even on an hourly basis. Data from a strategy presentation provided by BUS1 suggested that travelers had become more price sensitive and were looking for high-quality products and services at lower prices. BUS1 further noted that more travelers, especially millennials who can compare options, pricing, and reviews in one place, are now booking online using OTAs.

BUS 6 stated that “in any business, remaining competitive requires the business leader to focus on the value proposition. In our case, we consider the value that we deliver to our clients because that is what customers essentially pay for.” BUS6 further highlighted the emphasis on turn-around time of services, focus on differentiated travel experience with a human touch, accuracy in reporting and financial flow, empowering corporate clients with reports, and leveraging negotiation power and economies of scale as among the specific value that they delivered to their clients.

A review of the company profile published on the corporate website of BUS6 revealed that the participant employed niche strategy and focused on corporate travel services. According to the company profile of BUS6, the company’s vision is to simplify the complexity of travel for their corporate clients operating under the following guiding principles: (a) be proactive, preemptive, and agile, (b) user personalization to tailor the experience, and (c) increase simplicity and efficiency.

All of the participants indicated that new technological innovations had helped them to perfect their efficiency in service delivery. BUS2 stated that

> Last year we posted Kes. 2.9 billion, so we are seeing that the focus on adopting the use of technology is pushing us toward achieving our desired goals. Our main focus is to be the market leader in about five years, commanding about 10% of the market share.

The participants' views were consistent with the assertion that business model innovation forces incumbent firms to respond to the emergence of new ecosystems that make traditional ways of competing unviable (see Snihur, 2018). The concept of business models thus relates to the firm's strategy to gain and sustain competitive advantages (see Bertels et al., 2015; Gamble et al., 2017). Crittenden et al. (2019) confirmed that changes affecting incumbent firms require new ways of thinking, and managers of these firms must create dynamic business models that trigger self-reinforcing cycles of growth.

All of the participants, except BUS2, indicated that they adapted their business models in response to emerging threats in the business environment. BUS2 noted that they adapted their products and services offerings to address the threats in business environment and to leverage opportunities emerging from disruption. Saebi et al. (2017) confirmed that an external threat in the business environment is a strong predictor of business model adaptation, implying that business leaders are more likely to adapt their business model under conditions of perceived threats than opportunities. The past strategic orientation of a firm creates path dependencies that influence the propensity of the firm to adapt its business model (see Saebi et al., 2017). Strategic orientation geared toward market development is more conducive to business model adaptation than an orientation geared toward defending an existing market position (see Saebi et al., 2017). Saebi et al. (2017) posited that business managers could improve their understanding of business model dynamics and consider effective strategic practices for adapting business models in the face of threats and opportunities.

Application to Professional Practice

Businesses in the retail travel industry face sustainability challenges because of disruptive changes in technology. Business leaders in this industry seek to understand and implement effective strategies to remain competitive and sustainable in a dynamic and changing business environment. The findings of the current study could contribute to knowledge regarding effective business practices for coping with challenges caused by disruptive changes in technology. The understanding of opportunities and threats that disruptive changes in technology pose to businesses and the cautious application of effective competitive strategies have direct applications to professional practice.

The themes I identified in the current study aligned with the tenets of the body of knowledge, including the concepts of disruptive innovation, business model innovation, and dynamic capabilities. According to the theory of disruptive innovation, when facing disruption, leaders of incumbent firms continue to invest in established businesses or sustaining innovations where they perceive a competitive advantage (see Christensen et al., 2015). Successful retail business owners in the Kenyan retail travel industry have reacted this way and focused on sustaining their established businesses: corporate travel services. Successful owners of travel agencies have adopted new technological innovations to enhance efficiency in their operations, to increase customer engagement, and to target new market segments.

Consistent with the literature regarding business model innovation and dynamic capabilities, successful owners of travel agencies know how to identify business opportunities. Business owners should not only seize opportunities but also optimize their existing capabilities, re-allocate resources, and adjust their business models to adapt to changes in the environment. To optimize their existing capabilities, successful owners of travel agencies have leveraged strategic partnerships and alliances. The strategic alliance can be a flexible vehicle of learning, a way to transfer useful knowledge in partner firms and to generate combinations of resources, and a superior means of access to technological capabilities and other complex capabilities (see Mamedio et al., 2019). Other retail business owners might be able to use these results and the recommendations in the current study to ensure survival and competitiveness in the face of disruption. Successful adoption of these strategies could enable retail business owners to enhance their competitive capabilities leading to longevity and sustainability of businesses.

Implications for Social Change

The implications for positive social change include the potential to encourage retail business leaders to focus on sustainable business practices. Such practices foster respect toward the environment, creates socio-economic benefits for local communities, and emphasize respect for local and indigenous cultures, traditions, and values. Retail business leaders who adopt sustainable tourism practices could offer experiences that enable their clients to discover natural areas while preserving their integrity, and to understand, through interpretation and education, the natural and cultural sense of place. Embracing sustainable business practices could also lead to increased longevity and sustainability of retail travel businesses, which may lead to increased meaningful employment for unemployed individuals to enhance their quality of life.

Recommendations for Action

Some owners of travel agencies located in Nairobi have implemented successful strategies to address disruptive changes in technology. When business leaders use such strategies, they help not only to cope with the effects of disruptive changes in technology but also to remain competitive and sustainable in a dynamic and changing business environment. Based on the findings of the current study, I propose several actions that the current and future retail business leaders could take to address disruptive changes in technology.

Retail business leaders should view disruption in the context of a dynamic environment where there is a need to constantly adapt, reconfigure, and renew resources and capabilities to address changes in the business environment. Owners of travel agencies could focus on strategic partnerships and alliances for sharing expertise, costs, and risks, which increases the opportunities for increasing the firm's competitiveness and gaining more market share. These business leaders could engage with global travel partners, destination management companies, tour operators, and global technology firms for possible strategic partnerships.

Working with global partners can give owners of travel agencies the ability to service the globe in terms of a footprint and to gain access to negotiated fares across the globe because of economies of scale. Retail business leaders could also collaborate with external partners for developing technology, products, and processes to increase efficiency in operations and to offer differentiated travel experiences. Business leaders who work with external partners can learn about technological innovations and travel products that have been successfully rolled out in other markets. These leaders can leverage such knowledge to gain a competitive edge. These leaders could also move fast to implement these technologies and products before they are introduced locally by their competitors.

Other examples of successful strategies included the benefits of bundling products and services to effectively serve specific customer segments such as corporate institutions. Bundling products and services could help retail business leaders to position their companies as one-stop-shop for travel products services. Business leaders could position themselves as competent corporate travel service providers if they bundle products and services such as air tickets, travel insurance, visa applications, tours, and travel logistics. Business leaders could also become more competitive in relationship management and service differentiation if they train their staff regarding customer engagement. Leaders can leverage strategic partnerships to upskill their staff, to prepare them to embrace change, and to expose them to best practices in the industry, especially with international partners who have a presence in different markets.

Business leaders can use insights from the current study to develop effective strategies for coping with disruptive changes in technology. I will provide the organizations that participated in the current study a summary of the findings. I will also partner with scholars in my learning network to convert this study into academic papers with the ultimate intent of having them published in reputable journals.

Recommendations for Further Research

I conducted a qualitative multiple case study on the strategies that retail business managers use to address disruptive changes in technology. I used a sample of six participants and used the theory of disruptive innovation to interpret the findings. The limitations of the current study included the relatively small sample size and a relatively short time timeframe to conduct the study.

Future researchers could employ a larger participant size. One of the delimitations of this study was geography; therefore, another recommendation would be that researchers conduct further studies beyond the city of Nairobi, perhaps beginning with the wider East African region. Conducting a similar study using quantitative or mixed research methods approaches could also reveal more insights. The focus of the current study was on travel agencies and the retail travel industry. Further research could focus on other retail industries that are facing disruption. Among the unexpected results were insights about tourism destination management and focus on sustainable travel and tourism as a differentiation strategy. Future researchers could explore the relationship between ecotourism and sustainability of businesses in the retail travel industry. Future researchers could also employ a quantitative approach to measure the direct effects of sustainable tourism practices on the survival of businesses in the retail travel industry. The scope of such research could be expanded to include not only travel agencies but also tour operators.

Reflections

The objective of this study was to explore strategies that retail business managers used to address disruptive changes in technology. Given my background and experience in technology and innovation management, I initially thought the process of completing the research would be very smooth. However, I experienced challenges due to competing priorities of work, family, and studies. Despite the challenges, I remained optimistic and focused on the final goal. One of the strategies I employed was to rely on a support network and to re-organize schedules to tackle competing priorities effectively. I am filled with enthusiasm and joy now that my DBA journey is nearing an end.

My most challenging experience was participant recruitment because I obtained IRB approval during peak season in the retail travel industry. It was challenging to convince participants to participate in the interviews. I was relieved when one participant shared contacts of other potential participants that I could interview in the industry. I contacted the suggested participants, and one of them confirmed an interview date. The participants were willing to share information about the industry and how they addressed disruptive changes in technology. All of the participants exuded passion and were willing to share any additional information I may have needed beyond the interviews.

The doctoral journey has also been a rewarding process. Since I enrolled in the Walden University DBA program, I have learned new skills, gained new knowledge on research methods, including knowledge on disruptive innovation theory and other related concepts. I have also gained a great deal of knowledge regarding how businesses operate in the retail travel industry. The research process transformed my view about the travel and tourism industry, and I developed an interest in extending consultancy services to struggling businesses in the industry. I had no preconceived ideas about the current study's topic and kept an unbiased view throughout my research. Instead, I relied on pre-existing research on the subject and the data that I collected. The DBA journey has been a worthwhile experience, and I look forward to sharing the results of the study with the participants and other relevant stakeholders.

Conclusion

The increased adoption of Internet-based business models has shifted the competitive landscape in the retail travel industry. The rise of OTAs, such as Expedia, Travelocity, and Orbitz illustrates the ongoing disruption of traditional brick-and-mortar travel agencies in the travel and tourism sector. The ongoing disruption has created vast opportunities for new-entrants to shake up the status quo and to transform the entire industry. Business leaders in the retail travel industry often face competitive pressures to adopt and assimilate disruptive innovations that modify the traditional business model to attract new markets and value networks. These leaders should view customer frustration associated with old operating models, coupled with firm inertia as inflection points that should be taken as opportunities rather than threats.

The changes affecting the incumbent firms in the retail travel industry require new ways of thinking, and managers of these firms could create dynamic business models that trigger self-reinforcing cycles of growth (see Crittenden et al., 2019). Some business leaders have leveraged strategic partnerships and alliances to obtain technological tools that enable them to identify and to exploit opportunities driven by customer expectations in a disruptive business environment.

Success in a disruptive environment requires business leaders to respect the core business while recognizing the need to adapt the elements of the existing business model to changing business environments and customer expectations. Some leaders in the Kenyan retail travel industry are leveraging technological innovations to identify opportunities for exploitation driven by customer expectations in a disruptive business environment. Retail business managers can leverage disruptive changes in technology to support a marketing mix that improves interactive engagement with individual prospects and enhances the personalization of services.

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Appendix: Interview Protocol

Interview Title: Exploring the Strategies Used by Retail Business Managers to Address Disruptive Changes in Technology

Protocol:

1. The interview protocol begins. This protocol works for face to face interviews. The preconditions are that the participant will have will have previously read the Consent Form and provided their consent via e-mail, agreeing to participate in this research.
2. I will arrive early enough to set up the room and to ensure the room is private enough for the interview.
3. Introductory script: *My name is Fredrick Muema. I want to thank you once again for agreeing to participate in this interview. As I mentioned before, I am conducting doctoral research, and the purpose of my study is to explore strategies that retail business managers, such as yourself use to address disruptive changes in technology. Before participating today, you consented to have the interview audio-recorded. Please confirm if you still consent to audio-recording. I will transcribe the audio-recording and provide you with the highlights of the interview that covers the aspects of discussion for you to clarify and verify. Once you agree to the transcription, I will use that information as part of the case study. I intend to keep the interview to no more than one hour.*
4. I will Discuss the informed consent form, assure privacy, voluntary participation, and confidentiality.

5. I will address any participant questions, fears, or clarifications.
6. I will then ask interview questions in the predetermined order.
7. If need be, I will ask follow-up questions.
8. After, the interview, I will thank the participant for participating in the interview.

Interview Questions:

The interview questions for this case study are:

1. What strategies did you use to address disruptive changes in technology?
2. Please describe your experiences with changes in technology in your business.
3. How did you ensure your organization remained competitive in the wake of these changes in technology?
4. How did you select and implement the strategies for addressing disruptive changes in technology?
5. Could you describe your experience while using these strategies?
6. How did you convey these strategies to gain buy-in from all stakeholders?
7. How did you assess the effectiveness of using these strategies?
8. What additional information would you like to add regarding the successful strategies your organization uses for addressing disruptive changes in technology?