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Mitigating Loss of Cash Flow From Disruptive Technologies

Shenita Boudreaux Martin
Walden University

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Walden University

College of Management and Technology

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Shenita Boudreaux Martin

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Review Committee

Dr. Craig Martin, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Kevin Davies, Committee Member, Doctor of Business Administration Faculty

Dr. Kim Critchlow, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2022

Abstract

Mitigating Loss of Cash Flow From Disruptive Technologies

by

Shenita Boudreaux Martin

MS, Grantham University, 2012

BS, Grantham University, 2011

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

July 2022

Abstract

New technologies continually disrupt the financial service sector by providing products and services faster than traditional financial service institutions. Financial service leaders are concerned with losing market share to disruptive technologies. Grounded in disruptive innovation theory, the purpose of this qualitative, single holistic case study was to explore the strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. The participants were eight financial service leaders who helped develop competitive strategies to mitigate the loss of cash flow introduced by disruptive technologies. Data were collected using semistructured interviews and a review of archival records and other documentation. Through methodological triangulation and thematic analysis, three themes were identified: (a) senior leadership support as a strategy, (b) adapting technology from fintech companies, and (c) creating the company's own technologies to mitigate the loss of cash flow. Key recommendations are for financial service leaders to (a) monitor market share and competitive position to be aware of significant changes, (b) comprehend how consumers are reacting as new products and services emerge, and (c) recognize how disruptions are affecting their business models and execute adjustments as necessary. The implications for positive social change include the potential to provide consumers choices for financial service products, opportunities to make better financial decisions, access to resources to improve their financial literacy, and knowledge and products to promote economic growth and stabilization within their communities.

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Dedication

First and foremost, I dedicate this doctoral study to my husband, Stan Martin, Jr.; you were my rock and saving grace throughout this process. Your interest in my academic pursuits spurred and sustained my purpose and inspiration. Your constant encouragement to work hard each day has been influential in my fulfillment of the requirements for the degree of Doctor of Business Administration. Second, I dedicate this work to my sons: Brandon, Damon, and Devin. I hope to be an example to you that hard work and commitment can rocket you to the stars. I also dedicate this study to my family, friends, and colleagues who supported me along the way. Without your support and understanding I would have often been lost. I love you all, Semper Fidelis.

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Completion of my study would not have been possible without the support and unselfish commitment of my doctoral committee. I wish to express my sincerest gratitude to my committee chair, Dr. Craig Martin, for his patience, wisdom, guidance, and encouragement throughout this journey. You have always been just a phone call away and always had incredible insight and direction to give. I wish to acknowledge Dr. Kevin Davies for his patience and constructive feedback. It is because of your guidance that I have been able to see this project come to fruition. A special thanks to R. Sean Snipes, your leadership and guidance helped me to envision this study and guided me on the fintech path.

I would like to acknowledge my husband, Stan Martin, Jr., who stood by me throughout this long journey and assisted me in ensuring our responsibilities were not neglected. I would like to also acknowledge my mother, Norma Boudreaux-Jackson, you were always there when I needed a break and you ensured I stayed on task.

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Section 1: Foundation of the Study

Financial technology (fintech) is an industry composed of companies that use technology to make financial services more efficient for customers. Fintech is supplementing and transforming the financial sector by replacing traditional services, business models, and providers (Medeiros & Chau, 2016). Through this doctoral study, I sought to add to the existing body of knowledge regarding strategy and innovation in the financial sector. A qualitative analysis was used to explore strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies.

Background of the Problem

Since the global financial crisis of 2008, fintech start-ups have been on the rise, with 57.8% of fintech corporate filings from technology firms outside of the financial industry in 2018 (Chen et al., 2019). A significant number of financial service institutions are losing market share to disruptive technologies (Stulz, 2019; Thakor, 2019). With the emergence of fintech companies and the continued expansion into online payments, money transfers, e-commerce, and lending, competition within traditional financial service institutions is increasing (Saksonova & Kuzmina-Merlino, 2017; Zveryakov et al., 2019). As traditional financial service companies struggle, fintech companies are openly challenging the market and are continually growing significantly due to their technological advantage (Boratynska, 2019; Chen et al., 2019; Kotarba, 2016).

Problem Statement

Financial service institutions have identified that fintech companies are continually disrupting the sector and providing new products and services faster than traditional financial service institutions (Gomber et al., 2018). As the competition among fintech companies and financial service institutions increased between 2007 and 2015, banks lost roughly 9% of market share to fintech companies in technology (Buchak et al., 2018). The general problem was that disruptive technologies associated with fintech developments are challenging the business strategies of many leaders in the financial service industry. The specific business problem was that some financial service leaders lack strategies to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies.

Purpose Statement

The purpose of this qualitative single holistic case study aimed to explore the strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. The targeted population was 10 financial service leaders from one traditional financial service institution located in the Southeast United States who have developed competitive strategies to mitigate the loss of cash flow introduced by disruptive technologies.

The implications of this study for positive social change include the potential to provide consumers: (a) choices for financial service products, (b) opportunities to make better financial decisions, (c) access to resources to improve their financial literacy, and

(d) knowledge and products to promote economic growth and stabilization within their communities.

Nature of the Study

Creswell and Creswell (2018) identified three overarching research methods: qualitative, quantitative, and mixed. All methods enable researchers to deduce information, answer research questions, relate data analysis with relevant literature, and explore variations (Saunders et al., 2015). The qualitative method was an appropriate choice to explore strategies to mitigate disruptive technologies introduced by fintech companies. The qualitative research method is helpful for understanding the meanings people attribute to their experiences (Christensen et al., 2014; Creswell & Creswell, 2018). Quantitative researchers use objective measurements and detailed statistical methodologies and formulas to analyze data and refute or confirm hypotheses about variables' characteristics and relationships (Saunders et al., 2015). Researchers use the quantitative method to test theories by examining relationships among and between dependent and independent variables. The mixed method uses a combination of quantitative and qualitative data collection techniques and analysis. The techniques and analysis can occur concurrently or sequentially. My research did not entail testing a hypothesis; therefore, a quantitative or a mixed method study was not the appropriate methodologies to conduct this research.

I used a case study design for my research. A case study is appropriate when the purpose is to develop an understanding and real-world perspective of a complex social phenomenon such as organizational and managerial processes (Harrison et al., 2017;

Rashid et al., 2019; Yin, 2018). I considered three qualitative research designs: (a) phenomenology, (b) ethnography, and (c) case study. A phenomenological study is an appropriate design for understanding the participant's lived experiences, meanings, and implications (Wilson, 2015). An ethnographic study is appropriate for gaining a deeper understanding of the social interactions of people within the context of their cultural practices and traditions (Denscombe, 2017). The purpose of this study was not to understand the personal meanings of the lived experiences of study participants or study organizational culture. Therefore, a case study design was more appropriate than phenomenology or ethnography designs.

According to Yin (2018), there are four basic designs for case studies: single holistic, single embedded, multiple holistic, and multiple embedded. Single holistic is used when there is only one unit of analysis. Single embedded is used when there are several cases, each with one unit of analysis. Multiple holistic is used when there is one case with several units of analysis. Multiple embedded is used when there are several cases, each with several units of analysis. For the exploration of the research question and understanding of strategies used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies within one organization of particular interest, I used a single holistic case study design for this study.

Research Question

What strategies do some financial service leaders use to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies?

Interview Questions

1. What were some strategies you used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies?
2. What strategies did you find worked best to mitigate the effects of competition from fintech companies?
3. How did you assess the overall effectiveness of the strategies used to mitigate the effects of competition from fintech companies?
4. What were the critical barriers encountered in implementing strategies to mitigate the effects of competition from fintech companies?
5. How did you address the key barriers you encountered when implementing strategies to mitigate the effects of competition from fintech companies?
6. What strategies were unsuccessful in your pursuit to mitigate the effects of competition from fintech companies? Why?
7. What additional information or examples would you like to contribute to this subject on assessing and mitigating the loss of market share to disruptive technologies?

Conceptual Framework

The conceptual framework guiding this study was the disruptive innovation theory, created by Bower and Christensen (1995). According to Bower and Christensen (1995), companies often fail to remain at the top of their industry when technologies or markets change. These companies invest in technologies that retain their current customers but fail to make investments in the technologies that future customers will

demand. The authors explained that technology changes have two characteristics: first, the technology change typically presents a different package of performance attributes not valued by existing customers, and second, the performance attributes existing customers appreciate improve so rapidly that the innovative technology invades the established markets. Technology changes are not usually radically new or different. Mainstream customers usually are not interested in the new technology, but when mainstream customers want the technology, established companies are often late in providing the technology and, further, fintech companies are already dominating the market (Bower & Christensen, 1995). I chose the disruptive innovation theory to understand the findings from my study because fintech companies are moving into the financial service industry and are disrupting how traditional financial service institutions are conducting business (Cocheo, 2019). Figure 1 provides an overview of the research.

Figure 1*A General Overview of Research*

Key Theory/ Concepts	<ul style="list-style-type: none">• Disruptive innovation
Context	<ul style="list-style-type: none">• Financial service industry
Methodology	<ul style="list-style-type: none">• Qualitative research
Research Design	<ul style="list-style-type: none">• Single holistic case study design
Method	<ul style="list-style-type: none">• Data collection method
Industry	<ul style="list-style-type: none">• Financial service• Banking
Company	<ul style="list-style-type: none">• Financial institution in the Southeast United States
Population	<ul style="list-style-type: none">• Executives/decision makers for a specific line of business within the organization

Operational Definitions

Disruptive Innovative Theory: a process where a product or service initially takes root at the bottom of a market then relentlessly moves upmarket and creates a new market or value network that eventually disrupts an existing market and value network, displacing established market-leading firms, products, and alliances (Christensen, 1997; Christensen Institute, 2017; Christensen et al., 2015).

Financial Services: provides financial planning, investment strategies, tax preparation, and credit consultation services to businesses and individuals (Lewis, 2019). Includes the selling and trading of stocks, bonds, securities, annuities, and other financial products, and consultations on issues such as portfolio management and retirement planning (Lewis, 2019).

Fintech: an industry composed of companies that use technology and innovation to compete in the marketplace of traditional financial institutions and intermediaries (Das, 2019).

Assumptions, Limitations, and Delimitations

Assumptions

Per Shim and Shin (2016), financial services institutions are concerned that fintech companies are disrupting their traditional business territory and leading to a loss of market share. Therefore, financial services institutions must decide the next course of action when making decisions on their business strategy. An assumption consists of facts that a researcher assumes to be accurate but cannot verify (Schoenung & Dikova, 2016). The first assumption was that a qualitative method was an appropriate choice to use to

explore strategies to mitigate disruptive technologies introduced by fintech companies. The second assumption was that the information provided by the participants would be truthful, accurate, transparent, and relevant to answering the research question. Finally, I assumed the sample selection was adequate for obtaining the necessary data to answer the research question. The outcomes of this study supported these assumptions.

Limitations

Theofanidis and Fountouki (2018) and Yin (2018) indicated that limitations are potential weaknesses out of the researcher's control. These limitations were chosen from different aspects of the research; therefore, the limitations-imposed restrictions that were out of the researcher's control. The first limitation of this study was the transferability of the study findings to other settings outside of the study population. The second limitation was that the sample size consisted of approximately 10 professionals, which is a small sample size, and the findings are not generalizable, therefore, the results do not represent the entire population. A third limitation was potential bias. As the primary instrument in this research, I remained aware of biases when collecting data. Therefore, I used data collection techniques, such as an interview guide, to help with awareness of my role as the researcher to reduce the chance of bias in the study by refraining from judgment or expression of opinion.

Delimitations

Delimitations are what the researcher decides to set as boundaries or limits of the work so that the study's aims and objectives do not become impossible to achieve (Marshall & Rossman, 2016; Theofanidis & Fountouki, 2018). Delimitations can include

the study's theoretical background, objectives, research questions, and study sample (Theofanidis & Fountouki, 2018). Geographic location, participants, and job function were the delimitations in this study. First, choosing financial service institutions in the Southeast region of the United States excluded financial service institutions in other locations of the United States. Second, financial service leaders were the identified participants, so all employees were not included. Third, the leaders were limited to leaders who have developed competitive strategies to mitigate the loss of cash flow introduced by disruptive technologies, excluding other leaders within the organization.

Significance of the Study

A significant impact has affected the traditional financial sector as internet-based services continue to grow and take market share from traditional financial institutions. In addition, as disruptive technologies introduced by fintech companies continue to enter the financial service industry, many traditional financial service institutions have decreased cash flow. This study's findings provide additional knowledge regarding the financial service industry strategies to enable traditional finance companies' leaders to maintain or increase revenues for potentially benefitting communities through tax revenues.

Contribution to Business Practice

The study results could provide insights into some strategies traditional financial service leaders could use to mitigate the loss of cash flow introduced by disruptive technologies. The strategies implemented to mitigate the disruptive technologies promote: (a) a concentrated focus on the current business models of an organization, (b) the strategies could provide specific courses of action financial service leaders can utilize

to recapture cash flow, and (c) the strategies could create financial opportunities for future endeavors of the company.

Implications for Social Change

Financial innovations are not only crucial to the financial sector, but financial innovations also help to generate economic growth (Frame et al., 2018). Improving financial sectors encourages more savings and investment decisions and improved consumer involvement can boost local economies. The implications included the potential to provide consumers: (a) choices for financial service products, (b) opportunities to make better financial decisions, (c) access to resources to improve their financial literacy, and (d) knowledge and products to promote economic growth and stabilization within their communities.

A Review of the Professional and Academic Literature

The purpose of this qualitative single holistic case study was to explore the strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. Traditional financial service institutions must understand their relationships with fintech companies and the impact of such relationships, if any, as the financial service institution seeks to grow and identify the evolution of their business due to technology innovations. The objective was to answer the study's central research question: What strategies do some financial service leaders use to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies? The review of professional and academic literature related to the subject provided a foundation for this study involving strategies to assess

and mitigate fintech disruptions. I thoroughly examined the disruptive innovation theory and business model transformation theory as a possible conceptual framework. Of the two, I decided to use the disruptive innovation theory as the conceptual framework for this study. For the literature review, the disruptive innovation theory and fintech were reviewed.

The review was intended to give added support to the research question. Taking into consideration the problem statement and the purpose statement, the literature review conducted for this study included internet searches, books, dissertations, journals, and peer-reviewed articles. To improve my understanding of disruptive innovation and the impact of fintech in the financial service industry, I used keywords to search for peer-reviewed articles. The keywords researched included *disruptive innovation*, *theory of disruptive innovation*, *financial technology*, and *fintech*. The following Walden University databases were searched to obtain scholarly peer-reviewed articles: (a) Business Source Complete, (b) ProQuest, and (c) Sage Journals Online. Pertinent dissertations and theses at Walden University were researched to get a clear, broader understanding of the research topic. Additional searches were made using Google and Google Scholar. I filtered the searches by selecting peer-reviewed articles published from 2017 to 2021 using the Walden University Library databases and Google Scholar. The literature review included 122 references, 87% of which are peer-reviewed journal references and 66% published between 2017 and 2021.

I organized the literature review, critical analysis, and synthesis by (a) disruptive innovation theory, (b) alternate theory considered, (c) history of disruptive innovations, (d) history of fintech, (e) fintech disruptions, and (f) mitigating disruptive technologies.

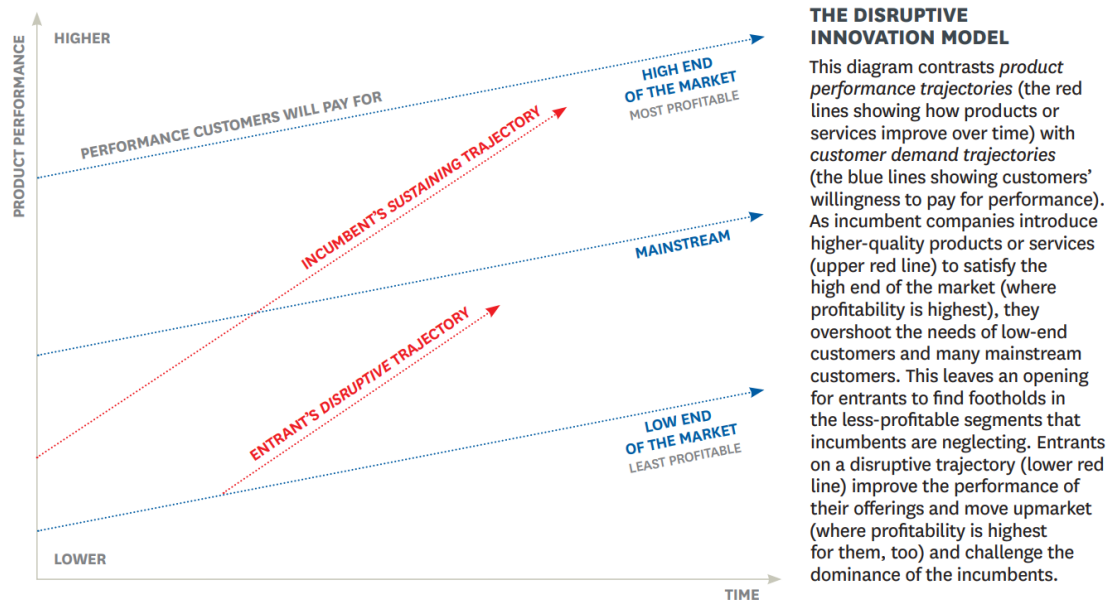
Disruptive Innovation Theory

As technologies and markets change, many companies do not remain at the top of their industry (Bower & Christensen, 1995; Christensen, 1997). Companies often invest in technologies that will retain their current customers but fail to make technological investments that will attract new customers (Bower & Christensen, 1995). The technology changes are not usually radically new or different; however, the changes do have two characteristics: First, the technology change typically presents a different package of performance attributes, not valued by existing customers; and second, the performance attributes existing customers appreciate improve so rapidly that the innovative technology invades the established markets (Bower & Christensen, 1995; Christensen, 1997). As a result, mainstream customers usually are not interested in the new technology and when the mainstream customers want the technology, established companies are often late in providing the technology and fintech companies are already dominating the market.

The disruptive innovation theory asserts that a smaller company with fewer resources successfully challenges incumbent businesses (Christensen et al., 2015). As the incumbent company focuses on improving current products and services for its high-demanding customers and ignoring other segments of their business, entrants target the overlooked segments and gain a foothold by delivering products and services that are

suitable and often at a lower price. As more customers adopt the entrant's offerings in volume, disruption has occurred. Disruptive innovations are not breakthrough technologies that make good products better; instead, they are changes that make goods and services more accessible and affordable, thereby making them available to a broader population (Christensen Institute, 2017).

The concept of performance trajectories is presented to explain the differences in the impact of innovation in technology. This concept can apply to most industries. Performance trajectories are the rate at which the performance of a product has improved and is expected to grow over time (Bower & Christensen, 1995). The type of innovation affects the performance trajectories within specific industries. Sustaining technologies maintain a rate of improvement by giving customers the attributes they already value, providing more of what the customer value, or providing a better version of the same attributes. Disruptive technologies offer different attributes from what the mainstream customers historically appreciate (Bower & Christensen, 1995; Christensen, 1997). As a result, the disruptive technology often performs worse or does not meet the standards of the mainstream customers. Figure 2 emphasizes the trajectory of product performance. Entrants leave the low-end market available and take advantage of opportunities, gain customers on the lower end, and eventually challenge the incumbents.

Figure 2*The Disruptive Innovation Model*

Note. From “What Is Disruptive Innovation?” by C. M. Christensen, M. Raynor, and R. McDonald, 2015, *Harvard Business Review*, 93(12), p. 49 (<https://hbr.org/2015/12/what-is-disruptive-innovation>). Copyright 2015 by the American Psychological Association.

As the theory evolved, the definition of disruptive innovation remained unclear. Many researchers have provided definitions of disruptive innovations; however, none provide a definitive definition. Bower and Christensen (1995) and Christensen (1997) provide a foundation that technology changes are not radically new or difficult. Disruptive technologies are inferior to the original product and are usually cheaper, simpler; however, the innovation is more convenient for the consumer (Christensen, 1997). There are two types of innovations present in the marketplace; sustaining and disruptive innovations cause a variation in definitions by researchers. Researchers have

indicated that the term disruptive innovation is often used in more than one way and has varied meanings depending on the usage (Nagy et al., 2016). Two definitions of disruptive innovation are proposed (Adner, 2002; Danneels, 2004; Schmidt & Druehl, 2008; Thomond & Lettice, 2002). First, disruptive innovation is an innovation with “good enough” functionality that has a lower cost (Bower & Christensen, 1995; Christensen et al., 2006; Christensen et al., 2000; Paap & Katz, 2004; Thomond & Lettice, 2002). The second definition defines disruptive innovation as an innovation that changes consumer expectations and performance metrics (Danneels, 2004; Markides, 2006; Tellis, 2006).

Per Christensen Institute (2017), successful disruptive innovations require three components. The first is enabling technology. An enabling technology is an invention or innovation that makes a product more affordable and accessible to a broader population. The second is an innovative business model. An innovative business model is a business model that targets consumers that did not buy goods or services in a specific market or low-end customers. Lastly, successful disruptive innovation has a coherent value network. A cohesive value network is a value network in which upstream and downstream suppliers, partners, distributors, and customers are better off when the disruptive technology prospers.

Christensen et al. (2018) provide a discussion of the evolution of disruptive innovation and how the core principles are often misunderstood. The theory has provided a debate among scholars and practitioners due to how the core principles have changed and progressed from descriptive to an explanatory theory of innovation and competitive

lens. The article sets a stage for future research topics within management, response strategies, performance trajectories, and innovation metrics.

Khanagha et al. (2018) studied challenges in responding to disruptive innovations, specifically, emergences of cloud computing and digital platform technology by Ericsson across their operations in more than 170 countries. Khanagha et al. (2018) noted that the response to disruptive innovations depends on the flexibility of the incumbent's ability to manage changes in the organizational strategies and structure associated with the innovation processes. Additionally, in a changing environment, broadening the scope of experimentation may be beneficial to managers, but strategic unity within the organization may work against the organization's plan to expand and maintain strategic relationships with customers.

According to Kammerlander et al. (2018), the emergence of disruptive innovations causes a conflict between organizational role identity and organizational domain identity. The researchers studied a German publishing company and its response to the emergence of digitalization. The researchers found that role and domain identity can determine if an incumbent adopts the disruptive innovation and how rapidly they respond to it. The study also shows that incumbents may experience identity struggles when disruptive innovations challenge either role identity or domain identity facets while the other is enhanced, which is in contrast to previous studies. The study concluded that first, there might be different opinions among employees that both facets of organizational identity as being either challenged or enhanced by the adoption of disruptive innovation; second, counter to prior research, identity-related struggles tend to be present when there is

no harmony in the identity-driven interpretations when one of the two identity facets is enhanced and the other is challenged; third, as the perception of the firm attempts to align adaptation of organizational identity, the perceptions cause different types of responses to the disruption innovation.

Cozzolino et al. (2018) studied how an Italian news media publisher adapted its business model after disruptive innovations entered the industry over a 2-decade period (1995-2017). The researchers conducted research with disruptions from the invention of the internet. The researchers examined how the publisher responded to the disruption by forming alliances and then adopting a new business model by combining knowledge and resources both internally and externally. The study indicated that entrants into the industry represented a threat and caused the incumbents to respond defensively and reconfigure their business models. Cozzolino et al. (2018) concluded that, first, disruptive technologies do not constitute an inertial force but create opportunities and incentive to adopt technologies; second, the emergence of disruptive technologies diminishes incumbent specific advantages and forces the adoption of the external technologies; third, disruptive technologies permit incumbents to deploy core knowledge through new assets which is another reason to adopt and invest early.

Alternate Theory Considered

Before 2010, the concept of a business model lacked theoretical grounding in business studies (Teece, 2010). Without any clear definitions of business models, researchers provided different meanings. A business model is an organization's rationale to create, deliver, and gain value (Biloslavo et al., 2020; Osterwalder & Pigneur, 2010).

Teece (2010) explained that a business model articulates the logic and provides data and other evidence demonstrating how a business creates and delivers value to customers.

Table 1 provides definitions of the business model. Teece (2010) provides the basic design of a business model that companies often use with many definitions of business model.

Table 1*Business Model Definitions*

Authors	Definition	Focus of analysis includes	Notion of model	Examples include
Teece	How a firm delivers value to customers and converts payment into profits	Situates the business model concept. Relates business model innovation to technical innovation.	Kinds and Types: Role Models	Swift meat packers, Sea Land containers, Netflix, online DVD rental
Zott & Amit	A system of interdependent activities that transcends the focal firm and spans its boundaries	Emphasizes interdependencies beyond firm boundaries. Good design requires: Content (what), Structure (links) and Governance (who does what).	Kinds and Types	eBay, Inditex (Zara), First Data corp, FriSCo (startup in lubrication)
Williamson	Cost innovation business model offers advantages in radically new ways meaning more for less	How low-cost business models from China (and India) work.	Role Models to follow	Shanghai Zhenhua Port Machinery, Haier refrigeration, Nano car-Tata
Gambardella & McGahan	Business model is a mechanism for turning ideas into revenue at reasonable cost	Business model innovation in high technology sectors that allows small firms to capitalize on their ideas.	Scale Models or short-hand descriptions	Many references including Google, Apple, Ideo, Yogitech+ biotech start-ups
Itami & Noshino	Business model is a profit model, a business delivery system and a learning system	Puts learning centre state, classification by firm systems	Role Models and Model Organisms	Toyota and Google
Yunus, Moingeon & Lehmann-Ortega	A value system plus a value constellation	A social business model that lies between for profit and charity	Role Models	Grameen Bank + Telenor, Veoila and Danone collaborations
Casadesus & Ricard	The logic of the firm, the way it operates and how it creates value for its stakeholder	Interfaces between business model, strategy and tactics	Models capable of manipulation	Ryan Air Telmore/TDC
Demil & Lecoq	The way activities and resources are used to ensure sustainability and growth	Dynamics of business model changeover time	Model Organisms	Arsenal FC
Sabatier, Rousselle & Mangematin	Crossroads of competence and consumer needs	Portfolios of business models	Recipes	French biotech firms

Note. Adapted from “Business Models as Models” by C. Baden-Fuller & M. S. Morgan, 2010, *Long Range Planning*, 43(2), p. 158 (<https://doi.org/10.1016/j.lrp.2010.02.005>).

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Companies must adapt to these changes as industries change to remain competitive (Biloslavo et al., 2020; Holtström, 2021). Business model transformation is a structured approach that allows a company to create and sustain business value. Teece (2010) discusses how a differentiated, but at the same time practical and efficient business model is essential to the establishment of competitive advantage. Companies with this type of business model are hard to replicate. As innovations within a company occur, the company may have to adapt. Innovating business models does not build a competitive advantage; however, new business models or refinements to existing ones can lead to a competitive edge if the model is sufficiently differentiated, hard to replicate, and lower costs or increased value (Bouwman et al., 2019; Teece, 2010). According to Teece (2010), deciding how to capture value from innovation is a fundamental element of business model design. Business model transformation and implementation, and careful strategic analysis, are necessary for technological innovations to succeed commercially (Teece, 2010). Determining how to deliver value to customers and capture value while doing so are critical issues in designing and redesigning business models; doing one without the other is usually not successful (Aspara et al., 2013; Geissdoerfer et al., 2018).

According to Doz and Kosonen (2010), business models stand as cognitive structures providing a theory of setting boundaries, creating value, and organizing internal structure and governance. The strategic agility framework evolved from research on companies in the information technology industry that were re-conceiving their business models. The framework consists of three “meta-capabilities”: (a) strategic sensitivity – the sharpness of perception of and the intensity of awareness and attention to

strategic developments, (b) leadership unity – the ability of management to make bold, fast decisions, without being delayed in company politics, and (c) resource fluidity – internal capability to reconfigure abilities and redeploy resources rapidly. By using the capabilities, companies were successful in business model renewal and transformation. Strategic sensitivity allowed companies to identify opportunities for new business models and be time-sensitive to the need for transformation. Business model changes caused immediate tough decisions by executives creating collective commitments, and resource fluidity allowed companies to redeploy and reallocate resources to new opportunities or new activities in a transformed operation system.

Business model innovation is a rapidly evolving field (Geissdoerfer et al., 2018; Osterwalder & Pigneur, 2012). A Dominant business model tends to emerge over time, and most attempts to introduce a new business model fail (Kavadias et al., 2016; Mahmood et al., 2019). Occasionally, when leveraging innovative technology, one may overturn a dominant business model (Kavadias et al., 2016). As businesses experience disruptive innovations, companies often can analyze their business model. The emergence of new technology makes it necessary for established companies to carefully examine their commercial potential and transform their business model accordingly (Cavalcante, 2014). The pre-stage is a new construct that suggests there might be an intermediary step before a business model is transformed (Cavalcante, 2014). Managers often focus on developing innovative products and services but forget that innovations include the business model.

History of Disruptive Innovations

Scholars and managers began to notice when new entrants began to displace industries. Both could identify the possibility that technologies with inferior performance were able to disrupt incumbent companies (Adner, 2002; Christensen et al., 2018; Vecchiato, 2017; Wilson & Tyfield, 2018). Although disruptive technologies are documented, the drivers of the phenomenon are not. Determining the conditions that give rise to the disruptions will enable incumbent companies to respond strategically to disruptive threats (Adner, 2002; Christensen et al., 2018; Vecchiato, 2017). By identifying the conditions that will allow disruptive dynamics, Adner (2002) could understand how consumers evaluate technology and how this evaluation changes as the product or service improves.

Gobble (2016) asserted that Christensen had modified the terminology. As a follow up to Christensen and Raynor (2003), Christensen stated that technology is not inherently disruptive. The disruption is how and to whom value is delivered in the marketplace (Christensen, 1997; Gobble, 2016). The business model makes an innovation disruptive (Gobble, 2016). Disruptive innovation has created a “mini-industry” that has evolved around it. The application of disruptive innovations is not only in technology but in other areas, including health care, education, and high learning.

Schmidt and Druehl (2008) explained that incumbent firms often fail to recognize threats from disruptive innovations. It is critical that managers can recognize a disruptive innovation when they see one. Firms must be able to delineate between disruptive innovation and sustaining innovation. Identifying the difference builds on the points

previously presented by Bower and Christensen (1995). There are terms in the literature on innovation that require more understanding of the term "disruptive innovation."

Schmidt and Druehl (2008) presented Table 2, which provides meanings and examples of each.

Table 2

Types of Innovation to the Kind of Diffusion

Type of innovation	Type of diffusion to which it maps	Description	Example
Sustaining Innovation	High-end encroachment	The new product first encroaches on the high end of the existing market and then diffuses downward.	Pentium IV relative to Pentium III
Disruptive Innovation	Low-end encroachment	The new product first encroaches on the low end of the existing market and then diffuses upward.	5.25-inch disk drive relative to 8-inch drive
New-Market Disruption	Fringe-market low-end encroachment	Before encroachment begins, the new product opens up a fringe market (where customers' needs are incrementally different from those of current low-end customers).	Cell phone relative to land line
	Detached-market low-end encroachment	Before encroachment begins, the new product opens up a detached market (where customer needs are dramatically different from those of current low-end customers).	
Low-End Disruption	Immediate low-end encroachment	Low-end encroachment begins immediately upon introduction of the new product.	Discount relative to department stores

Note. From "When is a Disruptive Innovation Disruptive?" by G. M. Schmidt and C. T.

Druehl, 2008, *Journal of Product Innovation Management*, 25(4), p. 348 (<https://doi.org/10.1111/j.1540-5885.2008.00306.x>).

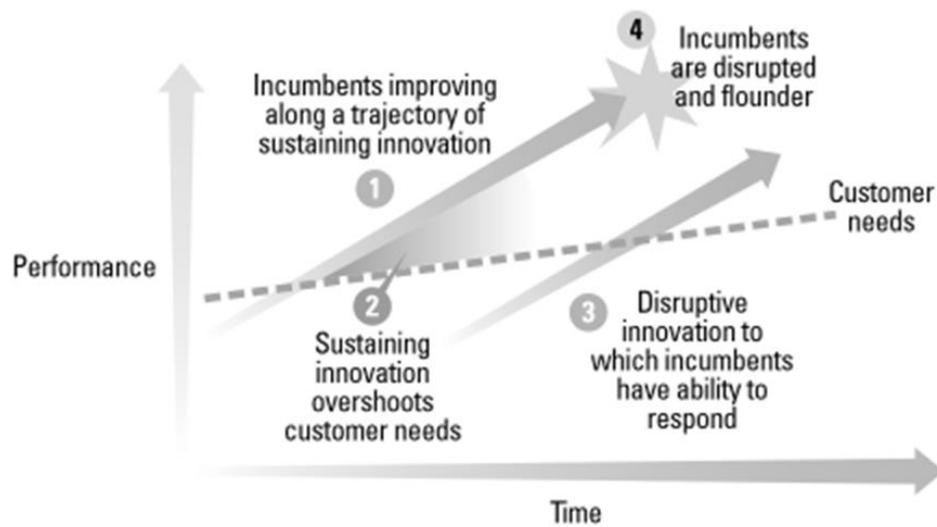
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King and Baatartogtokh (2015) explained that disruptive innovations have seldom been tested in academic literature. Therefore, the published tests did not produce confirmatory evidence for the theory. As depicted in Figure 3, King and Baatartogtokh (2015) observed that many cases did not fit four critical conditions of disruptive innovation theory. The critical conditions are: (a) incumbents in a market are improving

along a trajectory of sustaining innovation, (b) they overshoot customer needs, (c) they possess the capability to respond to disruptive threats, and (d) incumbents end up floundering because of the disruption.

Figure 3

Elements of the Theory of Disruptive Innovation



Note. From “How Useful Is the Theory of Disruptive Innovation?” by A. A. King and B. Baatartogtokh, 2015, *MIT Sloan Management Review*, 57(1), p. 80. Copyright 2015 by the American Psychological Association.

Disruptive Innovation Examples

There have been many disruptive innovations, not only in business but also in other industries (see Table 3). However, there are characteristics of a disruptive business that Christensen (2017) describes, in the initial stages, as lower gross margins, smaller target markets, and more specific products and services, which of all may not be attractive to current customers. For companies already in a market and are established,

disruptive innovations are unattractive due to the lower gross margins, thus leaving the lower end of the market open for new disruptive competitors to emerge.

Table 3

Examples of Disruptive Innovations

Field	Disruptive innovation	Market disrupted by innovation
Academia	Wikipedia	Traditional encyclopedias
	University of Phoenix	Traditional 4-yr colleges
Communication	Cellular phones	Fixed line telephony
Computing hardware	Minicomputers	Mainframes
	Personal computers	Minicomputers, word processors
	Pocket calculator	3.5 standard calculator
	Smartphones	Personal computers, laptops, PDAs
Data storage	8-inch floppy disk drive	14-inch hard disk drive
	5.25-inch floppy disk drive	8-inch floppy disk drive
	3.5-inch floppy disk drive	5.25-inch floppy disk drive
Manufacturing	Hydraulic excavators	Cable-operated excavators
Medical	Ultrasound	Radiography (X-ray imaging)
Music and videos	Downloadable digital media	CDs, DVDs
	Streaming video	Video rental
Technology for financials	Financial technology (Fintech)	Traditional banking institutions

Academia. Wikipedia, an online encyclopedia that is written and edited by volunteer editors, displaced traditional encyclopedias with articles written by paid experts (Crowe et al., 2021). Encyclopedia Britannica ended its print production in 2012 after 244 years of production (Bosman, 2012). The price for an encyclopedia was over \$1000, and the hardbound volumes weighed over 100 pounds. The update cycle of the encyclopedia was a year or more. Wikipedia provides free, online access to over 5 million articles that are updated daily. Wikipedia also disrupted digital encyclopedias.

Being discontinued in 2009, Microsoft's Encarta was a significant rival to Britannica (Tartakoff, 2009).

The University of Phoenix disrupted 4-year colleges and some professional graduate programs (Christensen & Raynor, 2003). Their program expanded into various open-enrollment, degree-granting programs. As described in Christensen and Raynor (2003), the University of Phoenix was one of the largest educational institutions in the United States and was a leading provider of online education.

Communication. As discussed in Christensen and Raynor (2003), cellular and digital wireless phones have disrupted wire-lined phones for 25 years. In 2003, nearly one-fifth of mobile telephones users did not have a “wired” telephone. At the end of 2013, approximately 41% of U. S. households did not have a landline (Luckerson, 2014).

Computing Hardware. Originally presented as an inexpensive alternative to mainframes, minicomputers were not considered a severe threat in their market. The market for minicomputers became significant. Personal computers disrupted the minicomputer market and displaced the market for minicomputers and word processors. As explained by Christensen Institute (2017), in the 1980s, “minicomputers” ruled the computing industry. These computers were expensive, complicated, stood six feet tall, and weighed 1500 pounds. The makers of minicomputers held market dominance; an unknown company named Apple Inc. began selling rudimentary computers as children's toys. Their product was inferior to the existing computing options, but to people who could not afford or operate a minicomputer, it was better than the alternative: nothing at all. Within a few years, the toy became good enough to compete with industry leaders but

as a smaller, more affordable personal computer. The product created an entirely new market, ultimately disrupting the existing industry.

Pocket calculators and 3.5 stand calculators were equivalent in computing performance, but the pocket calculator was a portable device (Christensen, 1997). Smartphones are a mobile option for computers and laptops, making them a better choice for consumers who want portability in the marketplace.

Data Storage. The floppy disk drive market has had many changes in market share over the past fifty years (Christensen, 1997). In 1981, the 8-inch floppy disk drives (used in minicomputers) were "vastly superior" to the new 5.25-inch floppy disk drives (used in desktop computers). The 8-inch floppy drives were not affordable; however, the 5.25-inch floppy drive, assembled from technologically inferior "off-the-shelf" components, was an "innovation" only in the sense that it was new. Christensen (1997) explained that as the market grew and the floppy drives improved, the companies that manufactured them eventually triumphed while many existing manufacturers of 8-inch floppy drives fell behind.

Manufacturing. Hydraulic excavators, developed in 1947, were a disruptive innovation. The leading manufacturer of cable-actuated excavators had profits until 1966 (Christensen, 1997). By then, the hydraulic excavator technology met customers' needs in the sewer and piping segment. As the mainstream companies maintained steady, hydraulic technology eased in the mainstream market.

Medical. Ultrasound technology is disruptive to X-ray imaging (Christensen & Raynor, 2003). As a new-market disruption, ultrasound became a multibillion-dollar

industry for imaging soft tissues. X-ray companies were not involved in ultrasound until they acquired their own ultrasound equipment companies.

Music and Videos. The low-end disruption of iTunes and Amazon selling downloadable digital media undermined the sales of physical, high-cost recordings such as records, tapes, and CDs (Knopper, 2009). This disruption occurred when vinyl record singles were phased out in the 1990s, leaving a gap where consumers could not purchase songs.

The Netflix co-founders approached rental chain Blockbuster, LLC in 2000, trying to sell their company, and Blockbuster refused (Spector, 2010). Licensing deals between film studios and streaming providers have become standard; therefore, consumers do not have to go to a store to rent movies. Netflix is a dominant company in the internet streaming market and was a significant threat to video stores when it first expanded beyond DVD by mail offerings. Blockbuster, having declined the offer to purchase Netflix, ultimately ceased operations in 2010.

Technology (Financial). Fintech is supplementing and transforming the financial sector by replacing traditional services, business models, and providers (Medeiros & Chau, 2016). Traditional financial services institutions are worried that fintech companies are disrupting their traditional business territory (Shim & Shin, 2016). The finance industry is made up of information. Therefore, it is vulnerable to disruption. Regulations have shielded finance, but a new wave of startups are increasingly disaggregating global banks. However, the enforcement of the Bank Secrecy Act and money transmission regulations represents an ongoing threat to fintech companies (Cortez, 2014).

Barriers to Disruptive Innovations

Wessel and Christensen (2012) proposed a way to respond to disruption. For a company to prepare for an innovation disruption, it should: (a) identify the strengths of the disrupter's business model, (b) determine the company's relative advantages, and (c) evaluate the condition that would help or hinder the disrupter from co-opting the current positions in the future.

The concept of the extendable core was introduced to help a company determine a disrupter's strengths. The business model is the extendable core that allows the disrupter to search for more customers as it moves upmarket (Wessel & Christensen, 2012). Identifying the extendable core of a disrupter will help a business understand what type of jobs customers want a company to do for them and what jobs a disrupter can do better. Wessel and Christensen (2012) explain that this approach will allow a company to understand what parts of their business are vulnerable to disruption and what parts are not. Also, identifying the extendable core will help a company determine what kinds of customers the disrupter may attract and what customers it will not.

Wessel and Christensen (2012) explained that if a disrupter can do the same job as an incumbent company, the disrupter is at an advantage, but a disadvantage would be present if the disrupter cannot. Disadvantages will cause disruptions to be slower and incomplete. Therefore, a business must determine how quickly a disrupter could overcome its disadvantages in the future. A systematic assessment was proposed by Wessel and Christensen (2012) of five kinds of barriers to disruption. These barriers include: (a) momentum barrier – customers are used to the status quo, (b) tech-

implementation barrier – overcome using existing technology, (c) ecosystem barrier – requires a change in the business environment to overcome, (d) new-technologies barrier – technology needed to change the competitive landscape does not yet exist, and (e) business model barrier – disruptor would have to adapt the cost structure. The list of barriers is presented as easiest to hardest. Therefore, the more complex the barrier or the more barriers present, the more likely the company will fend off the disruption, and the customers will remain with the incumbent company.

Barriers to disruptive innovation example. Wessel and Christensen (2012) provided an example of the disruption of retail grocery stores. At the time of the article, 1% of all groceries in the United States are bought from online retailers. The online grocer's advantage included price discounts passed along from cost savings. The authors noted the savings was the same for books, foods, or anything sold online. A disadvantage includes the online grocer shipping products directly to individual homes.

To identify the jobs brick and mortar grocery stores provide, Wessel and Christensen (2012) suggested conducting surveys, interviews, focus groups, and in-person observations. Once completed and identified, the incumbent must evaluate how significant the advantages and disadvantages of a disrupter's extendable core are to the company. For example, emergency items and same-day dinner shopping jobs were a disadvantage to online retailers. For online grocers to overcome the disadvantages of the emergency item and same day dinner shopping jobs, they would have to adjust their infrastructure by building their stores and adopt cost structures are traditional grocers or send delivery trucks out without being at capacity, which is not cost-effective. The

advantage is a business model barrier. On the other hand, the changes required to complete the job are a significant disadvantage and would be difficult to overcome. Therefore, a traditional grocer could disrupt a disrupter.

History of Fintech

In late 2017, 1,537 companies in 64 countries received \$80.4 billion in venture capital funding for fintech start-ups (Gomber et al., 2018). The start-ups have developed new technologies and services for the financial services industry (Gomber et al., 2018; Mackenzie, 2015). Start-up companies are making payment processes in the banking industry cheaper and faster (Mackenzie, 2015). The rapid growth of fintech companies and the innovations that have been developed has caused a fintech revolution globally. Research conducted by UBS Evidence Lab (2016) indicated that the fintech industry is growing exponentially in financial innovation and digitalization. A survey that consisted of 27,914 consumers, more than 210 banks in 24 countries indicated that the use of financial services from non-traditional providers will rise sharply. The findings indicated that with the increase of fintech companies, there may be opportunities for financial institutions to improve revenues and efficiency while mitigating disruptive pressures.

Liu et al. (2020) analyzed 629 fintech business model papers in the Web of Science database for overall growth trends, research area, research institutions, and core authors. The researchers summarized mobile payment, microfinance, peer-to-peer lending platform, and crowdfunding. The research indicated that since 2007, there had been a surge in fintech business model publications which is consistent with fintech innovations research. The increase in fintech publications also indicates that fintech has

become a topic of interest in the academic community. The author concluded that there had been rapid growth in fintech business model research and the topics of mobile payment, micro-finance, P2P lending, and crowdfunding are the most prominent focus.

As traditional financial service institutions struggle, fintech companies are openly challenging the market and are growing significantly due to their technological advantage, and the absence of legacy business, both tech and organizational, is plaguing traditional financial services. Through a study of fintech within the fintech community, Mackenzie (2015) found that fintech companies are entering the financial industry sector at an alarming speed. The fintech industry challenges the traditional financial industry sector (Kotarba, 2016). Gomber et al. (2018) found that the different processes of fintech innovations entering the market have changed how traditional financial service institutions operate. The studies together provide evidence that fintech innovations are disrupting the financial service sector by providing readily available platforms and connecting consumers to products they desire.

Fintech's goal is to make finance and its systems more cost-efficient, consumer-friendly, and transparent. Mackenzie (2016) provides evidence that fintech organizations are threatening to move into many areas financial service institutions have always found profitable. Shim and Shin (2016) explained that China has many influences on the fintech industry. The authors posited that it is practical to conclude that the fintech industry is changing industries globally. Although the financial industry throughout the world is traditionally stable, fintech companies continue to impact the industry, as countries address the phenomenon. With the phenomenon disrupting the market, traditional

financial service institutions are battling their core stability issues, fintech companies are entering the market and growing significantly because of their technological advantages (Kotarba, 2016). The fintech companies are challenging traditional financial service institutions in that they are making financial transactions more accessible, faster, and safer than the traditional financial institutions.

Pollari (2016) provides an understanding of fintech and how fintech activities are impacting the markets in Australia, and the impact of fintech funding is growing globally. The study is relevant in current markets because fintech is a global phenomenon changing the entire industry. Fintech is emerging in many international cities in developed and developing markets. As Fintech continues to emerge, companies are finding that digitization is impacting many industries. Therefore, companies are finding that there is a need to reposition themselves and adjust their business models (Medeiros & Chau, 2016).

Competition among fintech companies and financial service institutions will continue to escalate as more developments occur with technology innovations, and consumers continue to want options to compare different services offered (Leith & Jordaan, 2016). Financial service institutions are adjusting their strategies to identify ways to evolve in evolution of advances in technologies. Financial service institutions must determine if they should invest in fintech companies, buy Fintech companies, partner with fintech companies or have some other type of relationship (Booth, 2016). As more fintech companies become disruptive innovators in financial services, traditional financial service institutions (banks and credit unions) must continue to find ways to

remain relevant and competitive. The strategies of an organization must adjust to the market demand, and existing institutions must address the potential impact of fintech companies.

Fintech Disruptions

There is a digital revolution in the banking industry, and the impact on traditional financial service institutions is not defined. As a result, fintech companies have become a topic of discussion (Chen et al., 2019; Chiu, 2017; UBS Evidence Lab, 2016). As the impact of fintech companies continues to grow, the banking industry must determine what changes are required to remain competitive. What type of interactions will traditional financial institutions have with fintech companies, and how will the strategies of the company adjust to changing environments are major topics (Omarova, 2020; Wilamowicz, 2019). Fintech disruptions are presenting threats and opportunities for the banking industry. Fintech companies can operate at lower costs and gradually take consumers from banks (Temelkov, 2018). Therefore, fintech companies can be an opportunity or a threat. Traditional financial service institutions can continue to operate in their current state, ignore the fintech threat, or partner with fintech companies (Frame et al., 2018; Temelkov, 2018).

Fintech disruptions significantly impact the financial service industry (Das, 2019; Jagtiani & Lemieux, 2018; Zavolokina et al., 2016). Das (2019), Hua et al. (2019), and Goldstein et al. (2019) argued that fintech is changing the global payment system. The changes are not just faster methods or new currencies, but entire ecosystems of the financial service industry are changing. Changing consumer behaviors are causing

financial service institutions to reorganize in a more of a hybrid service provider (Lee & Shin, 2018; Puschmann, 2017). As changes occur in the financial service industry, more financial service institutions are also looking to adjust internal operations (Goldstein et al., 2019; Frame et al., 2018). Financial service institutions are making strategic moves to ensure changing customer behaviors are met. Fintech companies focus on consumers by making payments faster, convenient, efficient, and accessible (Lee & Shin, 2018; Puschmann, 2017).

With increased costs, evolving regulations, and compliance issues, traditional financial service institutions are operating at higher costs (Stulz, 2019; Temelkov, 2018). Fintech companies operate in an environment with loosened regulations allowing the companies to have an additional cost advantage over traditional financial service institutions. In addition, due to the regulations, potential clients in some segments of the banking industry are underserved. Fintech companies can serve these clients, putting them in direct competition with traditional financial service institutions.

As a disruptive innovation, fintech companies provide services that many financial service institutions cannot or will not. The time it takes for fintech companies to bring products and services to market is much faster than what traditional financial institutions can accomplish. Fintech has transformed financial transactions and how individuals manage personal finances. Mbama et al. (2018) and Das (2019) discussed the shift from traditional to digital banking. Consumers are changing how their finances are monitored and are taking a hands-on approach. As discussed in Mackenzie (2015) and Hua et al. (2019), fintech companies are changing how banks are used by consumers and

are giving consumers more options for their financial service needs. Bunnell et al. (2021) and Gejke (2018) agreed that the behaviors of consumers have changed. Although products have mostly stayed the same, the digital world's impact has modified how consumers gain access to the services and products that appeal to them. Consumers are aware of the choices available and are becoming accustomed to conducting business on smartphones and through apps. Therefore, banks are being challenged by the new services and products available (Hua et al., 2019). Many financial service institutions are slow to transform their strategies and business models at speed the environment demands. Therefore, allowing fintech companies to disrupt the banking industry with their fast-to-market approach (Bunnell et al.; Hua et al., 2019; Mbama et al., 2018; Mackenzie, 2015). To address the disruptive behaviors of fintech companies, financial service institutions must understand how the interactions between competitors impact the products and services presented and how the products and services are adopted into the market (Nair & Menon, 2017).

Mascarenhas et al. (2021) and Singh et al. (2020) argued that there had been an increase in fintech activity. Although the delivery methods and technology have changed, banks' legal issues partnering with non-bank vendors remain the same (Stulz, 2019; Temelkov, 2018). Therefore, traditional financial service institutions should determine if the risks are worth it. Some states and federal agencies present guidance on financial service institutions partnering with non-banking vendors. However, the stakes are high, and the rules continue to play a role in how traditional financial service institutions move forward. Although there has been much literature on fintech and banking within the last

five years, there is no clear understanding of how traditional financial service institutions should respond to the disruptive nature of fintech companies in the banking industry. The uncertainty within the market relates directly to the research question, and sub-questions presented. The Researcher agrees that fintech technology is making a significant impact in the banking industry.

Mitigating Disruptive Technologies

The emergence of disruptive technologies poses many challenges in the financial service industry. As different platforms emerge, financial service institutions must be aware that their traditional competitive advantage is often vulnerable to fintech developments (Jaksic & Marinc, 2019; Stulz, 2019; Zhao et al., 2019). As discussed in World Fintech Report 2017, the fintech increase has been assisted by a perfect storm formed by raising customers' expectations, expanding of ventures for capital funding, decreasing barriers to entry and increasing technological evolution pace.

After the financial crisis of 2007-2009, the banking industry has faced low-interest rates, deleveraging, and low credit growth, expanded regulatory standards and compliance provisions, and a weakened profile (Liu et al., 2020). Along with the appearance of these challenges, significant shifts have arisen in the financial industry in recent years. Ten global asset banks were in Europe and the United States, while six Asian-based banks currently dominate the top 10 (Singh et al., 2020). This change can be attributed not only to Asia's crisis and rise but also to the danger posed by the fintech companies. As a result, the profitability of the sector has been undermined, and European

and Japanese banks have hardly funded its capital costs. A valid concern is what will be the top 10 rankings in a decade.

In addition, financial service institutions became more competitive in their core industries, payment, and consulting services (Varga, 2018). With the growth within the fintech industry, which can be understood as creative information and automation technology in financial services, technology usage has evolved to develop new platforms and business models (Kerényi & Molnár, 2017; Singh et al., 2020; Varga, 2018). The speed of embracing and attracting related users of the various emerging digital technologies has increased considerably (Kerényi & Molnár, 2017; Philippon, 2019; Verhoef et al., 2021). The most immense transition is currently the technical revolution of the industry, leaving incumbents with potentially out-of-date systems to compete with the service expectations provided by emerging rivals. In terms of interface reliability and transparency, consumers have different service standards. Technological leapfrogging in Asia and Africa has expanded financial services to previously unbanked sectors of the population.

The improved sustainability and objectivity of the banking markets will significantly affect emerging technologies (di Castri & Plaitakis, 2018; Imerman & Fabozzi, 2020). Banking has shifted to a customer-focused network model, and traditional financial service companies must restructure (Alwi et al., 2019; Leong & Sung, 2018). This digital revolution allows maximizing innovation productivity, improve supplier diversity, and create a more efficient finance environment, which will increase financial inclusion (Boratyńska, 2019; Tembelo, 2020). This disturbance will pressure the

incumbent's margins, lead to more risk-taking, and initiate competition to catch the market's rentals. Licensees must simultaneously restructure to enter new competitors to achieve better efficiency, and new dominant positions cannot be consolidated. New competitors, fintech and bigtech, can capture market share due to productivity improvements rather than circumvent control or monopolize the interface with clients. In addition, regulators must continue to recognize emerging challenges to financial stability resulting from new sources of structural risk (Hollanders, 2020; Suryono et al., 2020). Due to having different models, fintech companies are different from traditional financial institutions. Entities of deposits do not regulate fintech companies as they have traditional financial service companies and do not view money as an asset (Coloma, 2020; Luther, 2020). As a result, fintech companies do not need capital supervisory like traditional financial service institutions.

Banks perform a variety of essential economic roles. The critical factor is maturity transition and liquidity provision: short-term deposits and long-term loans. The regulation of opaque loans follows this role. Payment and transaction services are the second attributes (Kerényi & Molnár, 2017; Mohammed, 2020). Both functions rely on knowledge processing, verifiable and codifiable, and soft information, focusing on relationship banking. The digital revolution has significantly expanded the weight and instruments of information codification, machine learning (ML), and artificial intelligence (AI) using massive data volumes.

Fintech Innovations: P2P Lending and Robo-Advising

Gosh and Asnani (2018), Qian and Lin (2020), and Hua et al. (2019) reported that through P2P lending channels, in which companies and individuals invest in small businesses, credit is available without traditional financial service institution intermediation. P2P lenders specifically merge borrowers and lenders: some encourage lenders to choose borrowers, while others establish packets of loans and are mainly used for online auctions. These sites also provide creditors with a market risk score, achieved using big data algorithms. P2P lending in China is widespread and is rising increasingly in the USA and the UK (Gosh & Asnani, 2018; Yang et al., 2020). Germany, France, and Finland are other European countries where P2P consumer lending is growing. In the EU, France, Italy, Germany, and the Netherlands, the number of crowdfunding sites, the P2P financing variant that encourages undertakings to raise money from a vital investment pool via an online network, has increased dramatically, taking the lead. The position of P2P lending in the EU is, however, tiny.

According to Ng and Kwok (2017) and Glushchenko et al. (2019), robo-consultants are another example of the fintech breakthrough, computer programs that produce consumer investment advice. Using ML software, robo-consultants are a cheap alternative to advisors on human wealth. If correctly configured, they will help mitigate the usual conflicts of interest in the banking industry. However, robo-consultancy is still a young technology and constitutes just a fraction of total financial advisory, especially in Europe, where robotic reserves are much fewer than those in the US.

FinTech and Efficiency

The use of digital technologies has significant repercussions for industry actors' well-being and will minimize financial intermediation expenditures for credit, payment processes, financial advising, insurance, and quality consumer goods (Románova et al., 2018; Singh et al., 2020). Via online development technologies, fintech businesses give their borrowers more convenience. In specific ways, fintech drives performance.

Gurrea-Martínez (2020) stated that fintech first screens candidate borrowers more efficiently using big data-based computational models to address asymmetries at the base of the banking market. Importantly, details can replace collateral, and therefore, fintech-based companies may provide loans to companies and households without posting collateral. In addition, fintech organizations can automatically award loans, as seen by the Ant Financial MYbank 310 loan application. Fintech borrows 20% quicker than other non-default lenders to process mortgage demands and more elastically adjusts distribution than other lenders in response to exogenous hypothec market shocks. To forecast customer default, readily available digital footprint variables (e.g., website access) are as good as or better than the credit office information contents (Kaur et al., 2018). As a result, the demand for staff and an expanded branch network is minimized.

In addition, Hendrawan et al. (2019) stated that even more targeted price discrimination is allowed. For example, fintech lenders use models of interest rate settlement for higher-performance mortgages compared to non-fintech entities, and in fintech loans, an increased difference in advance payments among lenders can often be related to interest rates. Moreover, online start-up convenience enables fintech companies

to charge higher rates, especially for borrowers with lower risk, who are less vulnerable to costs and more time sensitive. In comparison, mortgage refinancing is 7% to 10% more likely to come from fintech businesses than traditional financial service institutions.

According to Breidbach et al. (2019) and Hendrawan et al. (2019), fintech businesses will expand financial participation by opening the door to financial services for small and medium-sized businesses, especially for the least developed countries and population segments (SMEs). Many SMEs in emerging economies usually cannot satisfy the loan applications criteria. Fintech companies have no legacy innovations and are distinguished by a culture of organizational efficiency, which, combined with their sometimes smaller scale in fintech companies, enables them to be more creative than traditional financial service institutions (Gai K et al., 2018; Sangwan et al., 2019). Cloud computing is another means of productivity for potential entrants (Benlian et al., 2018; Kathuria et al., 2018). Cloud infrastructure by financial incumbents has been slower than in other markets, leading to high integration costs, security challenges, and regulatory enforcement uncertainties. For fintech companies, a benefit is achieved by building applications from scratch in the cloud instead of using legacy IT systems.

Wewege and Thomsett (2019), Boratyńska (2019), and Chen et al. (2019) claimed that fintech companies have transformed financial services structure, provision, and usage but have struggled to gain a dominant market position. For starters, in medium-sized and big enterprise lending, fintech firms have not yet made significant inroads. Despite its continued growth, fintech loans still account for a small portion of total loans, even in China, where they accounted for 3% of total loans to non-banks in 2017 (Jereczek, 2018;

Schweitzer & Barkley, 2017). Fintech loans tend to be more significant in countries with higher per capita sales and less competitive banking industries. The average per capita fintech credit is vital in the United States, South Korea, the United Kingdom, and China. Bigtech businesses have a plurality of fintech credit in South Korea and Argentina (Singh et al., 2020).

Although fintech companies initially tried to overtake traditional financial institutions as industry leaders, many fintech companies have allied with incumbents due to growing numbers and size (Chen et al., 2019; Lee & Shin, 2018). Although, many consumers' desires to migrate away from incumbents has been successfully guided, and demands have improved by faster loan awards and easier processes. The costs of switch-off and market inertias are high as the incumbents respond to fintech innovations (Alwi et al., 2019; Bu et al., 2021).

An exemption refers to regional areas where incumbent service providers are absent and consumer demands have not been addressed in markets. As a result, fresh applicants have reached a substantial level (Goldstein et al., 2019; Gomber et al., 2018). Other fintech challenges include developing modern networks and implementing new financial services ecosystems; instead, fintech companies have focused on existing ecosystems and infrastructure. Although fintech businesses have not successfully transformed the competitive environment, they have taken measures toward further disruption. The growth of innovation ensures that the business model's versatility and the potential to establish alliances rapidly, in an environment where conventional banks are vulnerable, are essential to the financial institution's future. The leading talented fintech

companies with access to funding, regulatory policies, and demand for fintech services are Singapore, the United Kingdom, the United States, Germany, Australia, Hong Kong, and China (Philippon, 2019). The influence of fintech and bigtech in China was more pronounced. Indeed, the bigtech giants of China are involved in the provision of financial services.

According to Venkatachalam (2020) and Belanche et al. (2019), fintech's real benefit is that corporations run as small businesses leveraging innovative technology without static legacy structures to adapt rapidly and flexibly to evolving customer tastes. Fintech is sufficiently scalable to work with legacy technologies. It provides good smartphone and digitally oriented consumer service with better returns on equity, including purchases, advice, and financial goods delivery. At the same time, fintech businesses have a legal edge because they are financed with far more equity than traditional financial service institutions. Fintech companies will draw young and successful people to their skills (Moro Visconti, 2019). In comparison, the lack of an installed, committed user base, restricted access to soft customer information, competitive credibility and market recognition; and the relatively high cost of capital are obstacles that fintech companies need to solve.

Bigtech systems have many fintech benefits and almost no disadvantages (Islam et al., 2018; Katz, 2020). They have a robust and dedicated client base with vast volumes of customer details, strong credibility and lobbies, strong brand names, a network influence potential, and the capacity to finance their company with low capital expense. Bigtech platforms provide access to important market data and can utilize their size to

deliver low-cost financial services at a high volume (Manning et al., 2020; Rizvi et al., 2018). Bigtech networks that rely on internet search gather consumers' knowledge from search activities; social media-focused individuals have precise personal data on users and their interactions, and e-commerce-focused people have data on sellers and shoppers and their behaviors. The complementarities between Bigtech and financial services depend on the form of data obtained. For example, data will help deliver and price financial resources for social media and research firms, while data will promote lending appraisal for e-commerce sites.

The Bigtech platforms are now a captive ecosystem with a high cost of transitioning to consumers and can take advantage of scale savings and powerful financial services technology. Bigtech firms are also more likely to disrupt the conventional banking market, which is burdened with legacy systems (Katz, 2020; Manning et al., 2020; Rizvi et al., 2018; Venkatachalam, 2020). In contrast to incumbents that face stricter regulatory limitations on activity and user data, bigtech companies can exploit the information gathered on their platforms by developing new banking services through non-financial activities. Bigtech platforms have penetrated more deprived banking markets with mutual funds and insurance offers for payment services and money market. In countries with a less competitive banking sector and less stringent regulation, bigtech platforms tend to lend more. Moreover, evidence from MercadoLibre in Argentina indicates that bigtech lenders can use big data ML and AI techniques as more predictive power than conventional loan payments through the credit office details (Gomber et al., 2018).

However, both fintech and bigtech lack deep knowledge and skills in risk management, which is one of the traditional financial institution's assets. Indeed, incumbents already provide numerous, some rather complex financial products and access to cheaper financing due to their banking charters. Also, due to their long customer ties, they have developed a reputation for protecting customer privacy.

New Entrants and Incumbents

Despite attempts to respond to the new world, fintech's rivals, bigtech, are invading the conventional banking sector. On the supply side, new entrants may use complex (codifiable) information to erode bank-customer relationships, usually built on soft information (Mitra & Karathanasopoulos, 2020; Wewege & Thomsett, 2019). Technologically competent incumbents may handle vast amounts of consumer information, while the customers use this information, if anything, through informal interaction and personal understanding. However, some new entrants have failed to apply for bank licenses to avoid enforcement expenses when aiming to divert traditional financial service institutions' lucrative market to take advantage of regulatory arbitration (Hendrawan et al., 2019). Instead, new players try to benefit from the banks' thousand-years of mistrust by providing digital platforms on the demand side (Kaur et al., 2018).

While traditional financial institutions historically concentrate on the commodity, new entrants emphasize the consumer and pressure the incumbents' conventional business model (Ng & Kwok, 2017). The entrants must rely on the consumer because consumers are the core of their business. The consumer comes from a lengthy background in customer relations and goods sold. The strategic advantage of retail banks,

which new competitors could erode, is that they have privileged access to a secure consumer base that can market various goods. In this situation, entrants will have to absorb the costs of banking adherence, which will weigh heavily on smaller companies the existence of deposit insurance in tandem with banking approvals.

Incumbents and Fintech Companies

Incumbents can tolerate entry and aim to avoid it in others in some market parts. In the face of high customer transfer costs, an incumbent bank is a fat cat to maintain its broad customer base (Kaur et al., 2018). This will allow a new entity to join and draw technologically sound customers or even unbanked consumers. Banks may opt to accommodate admission by collecting interchange charges from new service providers and reducing their incomes for each purchase to banks more than paid by the rise in the customers' aggregate transactions.

Often a person may wish to commit to staying tiny, not to get a harsh response from incumbents (Ng & Kwok, 2017). For example, P2P loans are a way to allow small-scale entries, whether they are primarily for unbanked segments of the population. Entrants and incumbents can form alliances to enable both IT expertise and regulatory arbitration to benefit from the easier regulation that new entrants face and meet their new customers. Around the same time, fintech firms will benefit from the delivery networks of existing brands, economies of scale, and incumbents, as is the case with ING and Scalable (Hsu & Li, 2019). For instance, TransferWise, a retail trading network that provides an alternative to high bank transaction fees, has recently started operations in Estonia with banks such as N26 in Germany, while LHV is expanding its customer base.

However, due to the high enforcement costs, the entry of new (licensed) banks could be less likely to be. Fixed banking can launch its own entirely online banks and contrast the future policies of incumbents and fintech businesses.

Transition

The purpose of this study was to explore the strategies some traditional financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. Financial service institutions have identified that financial technology (fintech) companies are continually disrupting the sector and providing new products and services faster than traditional financial service institutions (Gomber et al., 2018). As the competition among fintech companies and financial service institutions increases, banks lost roughly 9% of market share to fintech companies in technology (Buchak et al., 2018).

The conceptual framework guiding the study was the disruptive innovation theory. Bower and Christensen (1995) created the disruptive innovation theory. According to Bower and Christensen (1995), companies often fail to remain at the top of their industry when technologies or markets change. Instead, these companies invest in technologies that retain their current customers but fail to make investments in the technologies that future customers will demand. Section 1 of this study is the study's foundation, which provides background information that leads to an identified business problem, how a researcher might study that business problem, the importance of contributing to the research, and how others have studied and viewed the business problem.

Section 2 contains the purpose statement, a description of my role in the research, and the eligibility guidelines for the participants. I discuss the research method and design, populations, and sampling, and how I maintained the ethical standards of the study. Section 3 of the research includes an overview of the study. The discussions in Section 3 include a presentation of the findings, applications to professional practice, and implications for social change. Recommendations for further study, reflections learned during the doctoral study journey, and the conclusion are also presented.

Section 2: The Project

The focus of Section 2 was to delineate the methods and procedures used throughout the study. The sections reorient readers with background information found in Section 1. The primary purpose, however, is to emphasize the methods and procedures used to conduct the qualitative research study. The section follows a logical flow through analysis of the purpose statement, the role of the researcher, participants, research method and design, population and sampling, ethical research, data collection instruments, data collection technique, data organization technique, data analysis, and reliability and validity.

The primary purpose of the research was to explore the strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. As more fintech companies become disruptive innovators in financial services, traditional financial services institutions need to continue to find ways to remain relevant and competitive. A qualitative research methodology is an approach to understanding the underlying meaning that supports a human or social problem (Creswell & Creswell, 2018). The research developed an in-depth understanding and meaning of a situation and associated phenomena (Cooper & Schindler, 2014). Qualitative research methods focus on complex procedures and phenomena and utilize evolving processes depending on the data collected related to the investigated phenomenon (Creswell & Creswell, 2018).

According to Yin (2018), applying the case study method benefits the research by exploring the how and why behind a social phenomenon. A single, holistic case method

was selected to conduct the case study using a semistructured interview technique and document review.

Purpose Statement

The purpose of this qualitative single holistic case study aimed to explore the strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. The targeted population was 10 financial service leaders from one traditional financial service institution located in the Southeast United States who have developed competitive strategies to mitigate the loss of cash flow introduced by disruptive technologies.

Role of the Researcher

The role of the researcher in qualitative case study research is to ensure adherence to research guidelines and principles of ethics, organize and interpret data collection, recognize personal biases, and reduce threats that could influence the findings of the study (Roulston & Shelton, 2015; Yin, 2018; Zhang & Liu, 2018). The researcher is the crucial instrument in the study to individually collect data through observing participant behavior, examining documentation, reviewing physical artifacts, and interviewing participants (Creswell & Creswell, 2018; Yin, 2018). It is recommended that researchers use an interview protocol when conducting qualitative case study designs to promote the reliability of the research findings (Jorgensen, 2016; Yin, 2018). I collected data by conducting semistructured interviews and reviewing company documents for this study. As a consumer and employee in a large financial services institution, the ways banking transformed for consumers interested me. For example, many consumers do not go to

their banking center very often, because they can manage all aspects of their financial obligations remotely. As an employee, I am interested in how financial service institutions respond to these changes.

The Belmont Report identifies research requirements relating to moral principles when conducting research involving human subjects (Mircle, 2016). In the Belmont Report, three ethical principles, (a) autonomy, (b) beneficence, and (c) justice, are outlined and are used as guides for the protection of research participants (Barton et al., 2018). Autonomy relates to providing participants with disclosures and the freedom to make decisions. I respected autonomy by having all participants sign an informed consent form, to obtain their permission to participate in the study. The informed consent ensured the participants were making an informed decision on whether to participate in the research study or not. Beneficence relates to the moral obligation to care for others. I respected beneficence by providing the participants with information regarding the risks and benefits associated with the research study. Finally, I respected justice by ensuring the well-being of the participants and by following an interview protocol, as outlined in Appendix A, to ensure consistency of the interview process and when determining study participants.

The researcher must be conscious of personal perspectives or biases that could unknowingly affect the study (Bero, 2017). As discussed in Yin (2018), it is imperative for a good researcher to strive for the highest level of ethical standards. As a crucial instrument, the researcher should recognize and identify biases in the research (Galdas, 2017). Although some bias may be present, the researcher must be transparent and

reflexive when conducting qualitative research, collecting data, and analyzing the data (Galdas, 2017). Reflexivity is the researcher's ability to examine the researcher's beliefs and practices during research and how they may influence the research (Palaganas et al., 2017). The ability to use reflexivity during the research process can help alleviate some biases (Merriam & Grenier, 2019; Palaganas et al., 2017).

I used semistructured interviews and a review of documents to collect data. Semistructured interviews are helpful for the exploration of the opinions of the participants and provide an avenue to collect data from the lived experiences of the participants (DeJonckheere & Vaughn, 2019; Hennink et al., 2019). Semistructured interviews can reduce researcher biases because open-ended questions are asked. Open-ended questions allow the researchers to take a holistic look at the phenomenon and allow the participants to respond using their lived experiences, and opinions and provide diversity in the responses.

To mitigate the potential for bias in qualitative research, the researcher should follow an interview protocol for all interviews, allowing participants to express their views and beliefs freely, remain conscious that personal bias exists, and use reflexivity to separate personal biases (Chamberlain, 2016; Raza, 2016). To reduce bias in my research study, I used carefully constructed interview questions by establishing an interview protocol, see Appendix A, reviewing transcripts of all interactions, journaling interactions with participants, and peer member checking to identify the participants' perspectives, experiences, and beliefs.

Participants

For this study, the participants were eight financial service leaders who have successfully mitigated the cash flow loss from disruptive technologies introduced by fintech companies. Specific parameters bound the participants that contributed to the study. For qualitative research methods, participant selection adds value to the research based on the knowledge of the issue rather than representing a target population (Etikan et al., 2016; Saunders et al., 2015). To facilitate the collection of in-depth information, researchers will choose participants who meet specific criteria (purposive sampling) (Palinkas et al., 2015).

I requested and obtained approval from the sponsoring organization to allow the research within the organization. The recruitment process consisted of the sponsoring organization providing data. The data was a list of executives in specific roles that participate in fintech discussions and are often decision makers of the organization's strategic approach. Once the list of executives was received, 10 names were randomly selected to receive an email requesting their participation in the one-on-one interviews. The email included a brief overview of the research topic, a request for participation in the study, and a time frame of when interviews will be conducted. The screening process was essential for identifying participants qualified for the research study. If an executive declined, another executive would be randomly selected to receive an email requesting their participation.

I created a pre-interview screening questionnaire that was used to select desired participants for the research study. The pre-interview screening technique confirms that

the participant possesses the skills and experiences that benefit the study. The qualifications to participate include (a) the participants can be male or female, (b) the participant must be a fintech decision maker within their line of business, (c) the participant must participate in fintech discussions within the organization, and (d) the participants must be willing to devote approximately 2 hours to the research study.

Gaining access to the research site and the participants is often challenging and requires persistence (Peticca-Harris et al., 2016). Creating a relationship with key members of the organization could assist in obtaining information and access to potential participants and relevant information for the study (Hoyland et al., 2015). Using my professional affiliation, I contacted and gained approval from the business leaders to carry out the research study by gaining access to relevant information and potential participants.

Confidentiality of the participants' responses is an essential part of a participant's right to privacy (Cooper and Schindler, 2014). The interviews were confidential, and all names of participants and sponsoring organizations are also confidential through techniques including codification and using a secured database. The confidentiality of each participant was protected in several ways including, (a) avoiding disclosing data sets, (b) restricting access to participant identification or to data instruments where the participant can be identified, (c) revealing participant information only with written consent, and (d) obtaining signed nondisclosure documentation from the participants.

Establishing a relationship of trust, respect, and honesty with leaders and potential participants by obtaining informed consent, respecting autonomy, and providing adequate

information about the risks and benefits of the research is an essential step in the research study (Hoyland et al., 2015; Yin, 2018). Before the actual interview, informed consent was provided to all participants as part of the requirements. Informed consent is when the researcher provides the details of the study to the participant, and the participant offers full consent to participate in a research study (Cooper & Schindler, 2014). The purpose is to ensure the participants' protection from any emotional, psychological, or physical harm, and to make the elements of the research transparent to the participants with total disclosure upfront. Participation was voluntary, and individuals could withdraw from the study at any time.

Research Method and Design

Research Method

A qualitative research methodology is an approach to understanding the underlying meaning that supports a human or social problem (Creswell & Creswell, 2018). The research is to develop an in-depth understanding and purpose of a situation and associated phenomena. The authors identify three overarching methods of research: qualitative, quantitative, and mixed methods. All methods aim to deduce information, answer research questions, relate data analysis with relevant literature, and are concerned with a variation. Quantitative research utilizes objective measurements and detailed statistical methodologies and formulas to analyze data and refute or confirm hypotheses. Quantitative methodologies begin with a set hypothesis, and the study aims to prove or dispute one set of data. Qualitative research methods focus on complex procedures and phenomenon and utilize evolving processes depending on the data collected related to the

phenomenon that was investigated. Qualitative research methodologies include case study, grounded theory, ethnography, and phenomenological studies of lived experiences (Bryman, 2016). Additionally, qualitative research often adds to existing concepts and theories.

Applying the case study method benefited the research by exploring the how and why behind a social phenomenon in a real-life setting (Khaldi, 2017; Korstjens & Moser, 2018; Marshall & Rossman, 2016; Yin, 2018). A single, holistic case method was selected for conducting the case study that used semistructured interview technique. The research objective was to use a qualitative research methodology that explored the strategic approaches of leaders of a traditional financial service institution located in the Southeast region of the United States for addressing market disruptions from emerging fintech companies, and to identify the determinants, and the nature of strategic integration between a traditional financial services institution and fintech companies.

A qualitative research methodology based on the interpretive paradigm seeks to gain an in-depth understanding of a given scenario or discover the meaning of phenomena in the environment (Cooper & Schindler, 2014). Exploratory studies are useful to a researcher and provides clarity on mysterious phenomena to determine opportunities for future research. The research design will apply the case study method when examining a modern experience.

The case study method investigates a modern phenomenological occurrence in its existing real-world context where the research has little control (Yin, 2018). How and why questions are best suited for exploring a vague phenomenon to promote open-ended

conversations seeking explanation. A single experiment bounded by the same conditions at the same unit of analysis will be used for the research study is referred to as a holistic, single-case design (Yin, 2018). Stake (1995) indicates that qualitative case study researchers are more of an interpreter or gatherer of interpretations that require them to report their rendition or construction of the constructed reality or knowledge they gather through their investigation. Constructivism and existentialism should be the knowledge theory that guides qualitative case study research since researchers say qualitative research is constructed and not discovered (Stake, 1995). I used the interview technique as the fundamental approach to collect data in the study.

Research Design

I used a single case study design for my research. A case study is appropriate when the purpose is to develop an understanding and real-world perspective of a complex social phenomenon such as organizational and managerial processes (Harrison et al., 2017; Rashid et al., 2019; Yin, 2018). In a management study, the case study design is useful and practical (Rashid et al., 2019). Yin (2018) and Rashid et al. (2019) indicated that a case study is also a research activity that uses empirical material gathered in more than one way.

I considered three qualitative research designs: (a) phenomenology, (b) ethnography, and (c) case study. A phenomenological study is an appropriate design for understanding the participant's lived experiences, meanings, and implications (Mayoh & Onwuegbuzie, 2015; Wilson, 2015). A phenomenological design was not appropriate as I did not seek to understand the leaders' lived experiences related to the strategies the

leader used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. An ethnographic study is appropriate for gaining a deeper understanding of the social interactions of people within the context of their cultural practices and traditions (Denscombe, 2017; Yin, 2018). The purpose of this study was not to understand the personal meanings of the lived experiences of study participants or study organizational culture. Therefore, a case study design was more appropriate than phenomenology or ethnography designs.

Population and Sampling

The sponsoring organization was a large financial services institution in the Southeast United States. I used a purposive sample strategy to determine the participants for this research. The sponsoring organization was chosen because the organization is a financial services institution and the strategies some financial service leaders use to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. The ideal location for the research was to schedule interviews at a location at or near the participants' work. Direct observation allows the researcher to monitor participant behavior and non-verbal communication in their natural work setting. This approach enables the researcher to collect data on subtle behaviors when they occur. These behaviors would otherwise be missed through indirect observation methods. Conducting the interviews in the participants work environment provides a natural setting, which could provoke ideas and create access to documentation. If granted permission for an on-site interview, the interview process will occur in a confidential

setting. If the participant is not comfortable meeting in their work environment, a public place of their choosing would be used.

The sample for this study is an organization whose leaders have successfully mitigated the loss of cash flow from disruptive technologies introduced by fintech companies. The sampling technique selected for the qualitative research study was restricted, nonprobability purposive sampling (judgmental sampling). Purposive sampling is a nonprobability sample that corresponds to specific research criteria (Cooper & Schindler, 2014; Etikan et al., 2016; Saunders et al., 2015). More specifically, a homogeneous sampling was administered for the research study in which the researcher chose participants that conform to a criterion (Etikan et al., 2016; Saunders et al., 2015). Snowball sampling is considered for the study in which the participant will refer the researcher to other potential participants who possess similar desirable traits that benefit the study (Saunders et al., 2015).

As van Rijnsoever (2017) discussed, credible research must have an adequate sample. To provide reliable analysis and reporting, enough data should be available. In qualitative research, the sample size for interviews is rarely justified. Furthermore, Marshall et al. (2013) indicated that qualitative research methodologists do not have specific guidelines for estimating sample size.

Researchers use data saturation to determine sample size (Korstjens & Moser, 2018; Yin, 2018). I used an interview protocol to explore the participants' responses. For this research, I interviewed eight executives; however, depending on the data saturation, additional interviews may be required to reach data saturation. Data saturation applies to

researchers using a qualitative method and interviewing as the primary source of data collection (Braun & Clarke, 2021; Saunders et al., 2018). When no new information is generated, or no new themes emerge from the interviews, a researcher has achieved data saturation (Saunders et al., 2018).

Ethical Research

Researchers use an informed consent form to describe to potential participants the research study process, its risks, and benefits, and to allow the potential participants to determine if they would participate in the study or not (Azim, 2018; Cooper & Schindler, 2014; Figueroa, 2016). Review boards also use the informed consent form to confirm that the research study participants were made aware of the research study's purpose, process, risks, and benefits (Marshall & Rossman, 2016). The participants were informed that their participation was voluntary, there was no monetary incentives or compensation, they could refuse to participate in the research study, and they could withdraw from the research study at any point during the process without penalty. Each participant was provided with the interviewer's name, contact information, and credentials for conducting the study. The potential ethical issues and concerns were explained to each participant, in detail, before the beginning of the interview process. All participants were requested to electronically sign the informed consent form.

Research participants had the right to withdraw from the research study without any negative consequences (Lee et al., 2019). A withdrawal statement was included on the informed consent form. Each participant was informed they could contact the researcher at any time to withdraw from the study, if so desired, by emailing or calling

the researcher and stating they would like to withdraw with no explanation. If a participant withdrew during the research study, I would not include the data collected from that participant in the final analysis and all data would be destroyed. Monetary incentives or compensation may be used in research studies to increase or encourage participation (Askelson, 2017; Bailey & Williams, 2018). Based on funding for a research study, offering incentives may limit the number of participants available (Far, 2018).

Offering incentives or compensation can promote increased participation in research studies, argued Largent and Lynch (2017). There was no incentives or compensation associated with this research study.

I obtained permission and approval from the Institutional Review Board (IRB) of Walden University and was assigned approval number 12-09-21-1005183, which expires on December 8, 2022. Mandatory Collaborative Institutional Training Initiative (CITI) training to gain additional knowledge to avoid any legal, physical, or ethical harm to the participants and the university was completed on July 25, 2021. CITI training thoroughly outlines the scholastic and legal standards that should be followed during the research process. Two specific ethical considerations are concerned with the identity protection of the participants involved and that all participants are informed concerning the nature of the study and the use of the data for consent purposes. A satisfactory grade demonstrating understanding and knowledge of the importance of ethical considerations during research was obtained.

Ethical dilemmas could be health and safety issues, confidentiality issues, issues related to interviewing location, disclosure issues, and concerns about conflicts of interest. If any of these issues or concerns occur, the participants' well-being is a top priority. Confidentiality of the participants' responses is an essential part of a participant's right to privacy (Cooper & Schindler, 2014). The interviews are confidential, and all names of participants and sponsoring organizations are also confidential through techniques including codification and using a secured database. Cooper and Schindler (2014) stated that participant confidentiality is protected by not disclosing data-sets, restricting access to participant identification or data instruments where the participant can be identified, and only revealing participant information with written consent. Page and Nyeboer (2017) stated that protecting the participants is an ethical consideration for a researcher. Therefore, I used pseudonyms of P1, P2, and P3, etc. as identifiers instead of the names of the participants. The participants' pseudonyms are not connected to the participants' legal names. The pseudonyms and legal names lists are securely stored separately. All paper data was scanned to a password protected USB drive, and the paper copies have been shredded. All data pertaining to the research study is stored in a locked file cabinet and will be kept for 5 years. After 5 years, the USB drive will be reformatted, destroying the data. By destroying and deleting the data, participant confidentiality will be maintained.

Data Collection Instruments

Clark and Vealé (2018), Galdas (2017), and Yin (2018) stated that in qualitative research, the researcher is the primary data collection instrument. According to Yin

(2018), there are six various sources of evidence used in the data collection phase of a case study. These sources are; (a) documentation, (b) archival records, (c) interviews, (d) direct observations, (e) participant observation, and (f) artifacts. Using multiple data collection sources provides a way for the researcher to strengthen reliability, and diverse sources of evidence adding to the study's validity. As the researcher, I served as the primary data collection instrument, using semistructured interviews and archival records and documentation for this case study. I conducted the interviews using participants from one financial service institution in the Southeast United States. I reviewed the company documents to gather information on the mitigation of cash flow loss from fintech disruptive innovations. The sponsoring organization provided a list of executives in specific roles that participate in fintech discussions. I randomly select executives and sent an email requesting their participation.

Conducting semistructured interviews allows the researcher to engage and observe the participants by asking open-ended questions to probe into the participants' knowledge, address any misunderstandings, and encourage dialogue (Cohen et al., 2007; DeJonckheere & Vaughn, 2019). Open-ended questions will also allow the researcher to understand the participants' experiences and attitudes about the phenomenon (Cohen et al., 2007; Yin, 2018). A review of archival records and documentation may provide the researcher with additional insight into the strategic decisions of the financial service institution (Marshall & Rossman, 2016; Yin, 2018). Documents related to mitigating the loss of cash flow from disruptive technologies introduced by fintech companies was requested for the research study.

The interview protocol, located in Appendix A, aided in collecting information during the semistructured interviews. The protocol was used as a guide for conducting the interviews by ensuring I asked the same set of questions to all participants, providing procedures and rules for collecting data and ensuring I remained consistent throughout the interview. As discussed in Kallio et al. (2016), developing an interview guide contributes to the trustworthiness of the interviews. In addition, Yin (2018) stated that a case study protocol provides the procedures and rules for data collection.

During the research, there is the potential for bias; however, there are processes to mitigate these biases (Birt et al., 2016). Member checking can validate the researcher's interpretation of the information received from the participants during the interview process, which helps to eliminate potential biases of the researcher (Birt et al., 2016; Thomas, 2017). Researchers use member checking to increase credibility, accuracy, and transferability (Thomas, 2017). I used member checking to reduce bias and increase the validity of the data collected.

Data Collection Technique

The data collection phase of the case study provides the raw material for generating empirical evidence. Written consent was obtained from each participant. Each participant was informed that the research was voluntary, and at any time, they may stop the interview process. The participants were informed that everything discussed would remain confidential. Participants was notified that all conversations were recorded. No recording took place without the consent of each participant.

The first data collection method was semistructured interviews. I followed the interview protocol located in Appendix A. There were eight interviews; however, that number could have changed depending on data saturation. New ideas from the interviews were used to determine the actual number of participants interviewed. The interviews consisted of a 50 to 60-minute semistructured question and answer session. The questions were open-ended to allow the participants the freedom to express their lived experiences openly (DeJonckheere & Vaughn, 2019). Semistructured interviews create an environment of active participation and a willingness to share first-hand experiences. During the interview, two-way, fluid conversation to elicit new questions that may cause probing down a new path and generate new insights was encouraged. By conducting semistructured interviews, the researcher can understand the participants' experiences (Nguyen & Wood, 2019). The duration time of each interview was determined by how detailed the participants were answering the interview questions and what information was disclosed during the dialogue. Due to COVID-19 restrictions, the interviews were adjusted to Zoom meeting interviews and all interview protocol requirements listed in the study were observed. The participants were informed that a second interview could be scheduled if the first interview exceeds the allotted time. Each interview was recorded on Zoom and immediately transcribed to a word document. The participant's actual name or other identifying factors were not used. A code was assigned to maintain the participant's confidentiality. The same interview protocol was used for all participants.

Semistructured interviews allow for flexibility, often have a better response rate, the researcher and participant can decide where the interview will take place, and the

researcher can observe the non-verbal behaviors of the participants. Disadvantages of conducting interviews include lack of accessibility, a greater chance of biases, and interviews are time consuming.

The second data collection method was archival records and documents review. The archival records and documents that supported this study were company reports, videos, archival records, and public blogs related to fintech and its impact on financial services institutions. As Yin (2018) discussed, documentation is to corroborate and augment evidence from other sources. An advantage of using documentation is that it is free and saves data collection time. Disadvantages include that the researcher does not find information directly related to the research question, the data may be incomplete, and often time consuming.

Qualitative research should accurately capture the meaning from collected data and represent it as authentically as possible once it is codified (Creswell & Creswell, 2018). Determining the sample, instrumentation and coding are all means by which data can be efficiently collected and interpreted. For this research study, the data were obtained from executives of the organization regarding strategic decisions due to loss of cash flow from disruptive technologies. I specifically sought documentation and crafted interview questions that addressed the role fintech companies were having on the banking industry as well as how the organization was addressing the disruptive technologies. I used member checking to enhance the credibility of the data collected from the interviews. Data was separated into coded categories that thoroughly analyze the subject matter of each category.

At the end of the interview, the participants were thanked for his or her time, and permission was requested to contact the participant if any follow-on questions or clarification regarding the interview transcript was needed. I also informed the participants that I would provide a copy of the transcripts for validation, comments, or corrections.

Data Organization Technique

Data storage of hard copy information collected (i.e., voice recorder, word documents, and excel spreadsheets) will be stored in a locked file cabinet in my home office. The digital data will be password-protected on a USB flash drive locked inside a lockbox stored in the file cabinet. I am the only person with access to the locked file cabinet and locked box in the home office. After 5 years, the hard copy of the information collected will be shredded, and the USB flash drive will be reformatted, erasing all data.

Data Analysis

Researcher can use methodological triangulation (Abdalla, Oliveira, Azevedo, & Gonzalez, 2018). By using multiple sources of data, a researcher should obtain a better understanding of the phenomena. I utilized methodological triangulation to analyze the data from the semistructured interviews and the company documents. A qualitative research analysis is used to interpret data, identify themes, and gain an understanding of the participants' views and experiences of the phenomenon being researched (Bengtsson, 2016; Noble & Smith, 2014; Sargeant, 2012). Triangulation is the use of two or more data collection methods to study the research topic and increase the internal validity of the study through the collection and interpretation of document analysis, data from one-

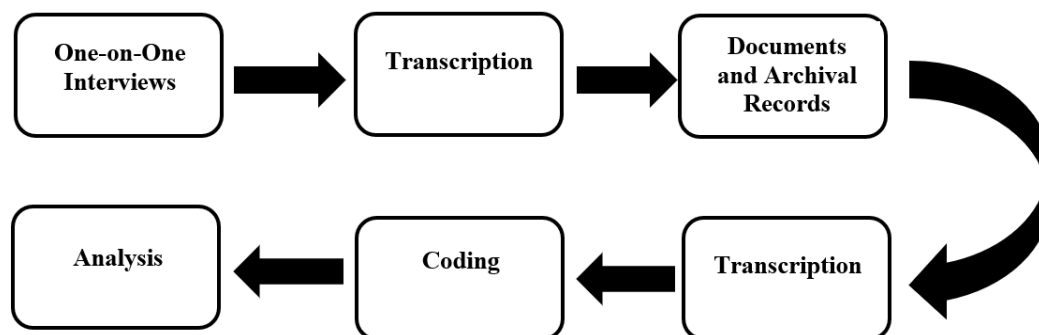
on-one interviews, and archival records or documents (Carter et al., 2014; Cohen et al., 2007; Creswell & Creswell, 2018; Yin 2018).

The researcher's approach to evaluating qualitative data will require intensive analysis, encouraging focus and interaction with the data (Creswell & Creswell, 2018). A linear data analysis model in qualitative research suggests starting with a bottom-up, inductive approach. However, the authors also asserted that researchers would use deductive reasoning to go back and review the relationships between the themes and the database. The interactive learning process behaves somewhat dynamic and non-linear, suggesting adaptation and flexibility will benefit the researcher when immersed in the data. According to Creswell and Creswell (2018), six fundamental tasks represent the data analysis phase: (a) prepare and organize the raw data, (b) review all the data and get a general idea of the meaning from the data, (c) code the data into organized groups and create a label that identifies the unique code, (d) generate themes and descriptions for analysis, (e) make interconnections between themes and descriptions through narrative accounts, and (f) interpret the meaning behind the themes and descriptions developed in the research. The coding process step is further analyzed into several smaller sub steps to look for linkages and interrelationships.

First, I transcribed the interview recordings and compared the transcribed data to the audio recording for accuracy. I then read the transcriptions to gain familiarity with the information received from the participants. Reading the transcribed data enables the researcher to understand the entire transcription before breaking the information into smaller units (Bengtsson, 2016). The data was input into NVivo. NVivo is designed to

support qualitative research studies (Maher et al., 2018). Next, the data was coded. Coding enables the classification and comparisons of data sets (Gale et al., 2013). NVivo assisted with organizing and providing insights into the unstructured data collected through interviews and archival records and documents in the study. Along with coding, classification, organizing, and structuring data, NVivo helped make connections within the data that were important to discovering specific results from the study. Once organized, the data was analyzed to address the research question and sub questions. Triangulation of the data was conducted to ensure the credibility of the research findings by examining documents related to strategies the financial service leaders used to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. I then reviewed the transcribed data, archival document notes, and my written journals to understand the meaning of the information and compared it to the themes developed from the interview transcripts.

The software tool NVivo, which is computer-assisted qualitative data analysis software (CAQDAS) to enable thematic grouping and codification of data and evaluation, was used for data analysis. NVivo manages empirical evidence in a specific location that connects data from disparate sources to generate insights and themes (Houghton et al., 2017). Once the data is collected, it will be organized into categories or nodes, and classified into themes to create meaningful information. The process created an efficient approach for storing, retrieving, and mapping seemingly overwhelming and unrelated information.

Figure 4*Analysis Process***Reliability and Validity****Reliability**

The goal of reliability in qualitative research is to establish dependability of the research findings and conclusions (Marshall & Rossman, 2016; Morse, 2015; Yin, 2018). Dependability in qualitative research is to generate similar results and conclusion of a research study if another researcher should replicate the research using comparable procedures (Moon et al., 2016; Stenfors et al., 2020). Credible research projects provide assurances that the data was gathered and appropriately interpreted and truthfully represents what was studied (Yin, 2018). Member checking shares the data, interpretations, and conclusions with the participants (Cypress, 2017). This technique allows the participants to verify and clarify information and provide additional information of the data. The collection of data using interview protocols, observations, and archival records or document analysis also increased the reliability of the research. I

demonstrated dependability by using member checking and an interview protocol (see Appendix A).

Validity

The researcher is responsible for the overall quality and validity of the research study (Yin, 2018). The accuracy of the research findings of a phenomenon that reflects the participants' descriptions is the validity of the research study. Validity is achievable through credibility, transferability, and confirmability (Cypress, 2017; Harrison et al., 2017; Yin, 2018). To achieve the validity of the research study, I used multiple data sources, purposive sampling, and contexts or settings with other respondents.

Credibility is established if the research finding accurately and truthfully interprets the information received from the participants' data and the historical data from the organization (Cypress, 2017; Korstjens & Moser, 2018). Credibility is crucial because it links the research findings with the research participants' information to demonstrate the truth is presented in the research findings. Credibility techniques include triangulation and member checking (Cypress, 2017). Triangulation is achieved by using multiple methods, observations, data sources and theories to gain an understanding of the phenomenon being studied (Cypress, 2017; Yin, 2018). Member checking shares the data, interpretations, and conclusions with the participants (Cypress, 2017). This technique allows the participants to verify and clarify information and provide additional information of the data. I enhanced credibility by using member checking and triangulation of the data.

Transferability is how the results of the research can be transferred to other settings or contexts (Korstjens & Moser, 2018). When readers can associate the research finding to their settings and the data has meaning, transferability occurs (Korstjens & Moser, 2018; Stenfors et al., 2020). A researcher can also enhance the transferability of the research study by providing a detailed description of the data collection process (Korstjens & Moser, 2018). I demonstrated the transferability of the research findings by providing a thorough description of the data collection process.

Confirmability is how the results can be confirmed by other researchers based on participants' data and not from any researcher biases or motivations (Cypress, 2017; Korstjens & Moser, 2018). Korstjens and Moser (2018) confirmed that triangulation and member checking could improve confirmability. To achieve confirmability, I used member checking and triangulation of multiple data sources.

In qualitative research, data saturation adds to the trustworthiness of a study and is essential to ensuring validity. When data saturation is not achieved, inaccurate assessment and reporting of participants' experiences may occur. Data saturation occurs when a sufficient number of participants are interviewed, and no new data, coding, or themes are obtained (Korstjens & Moser, 2018; Marshall & Rossman, 2016; Yin, 2018). Selecting participants who are in specific roles that participate in fintech discussions and are often decision makers of the strategic approach of the organization allowed me to ask probing questions about the phenomena, and member checking for data validation was used to ensure the study data saturation was reached when no new information was obtained. Ensuring data saturation addresses the research question and confirms if the

findings are valid (Fusch & Ness, 2015). To achieve data saturation, I interviewed participants until the data began to replicate and no new information was obtained.

Transition and Summary

Section 2 reoriented readers with background information found in Section 1 and emphasized the methods and procedures used to conduct the qualitative research study. Section 2 presented the role of the researcher, which is, ensuring adherence to the research guidelines and principles of ethics, organizing, and interpreting data collection, recognizing personal biases, and reducing threats that could influence the findings of the study. Additionally, in Section 2, I presented that initially I would interview 10 financial service leaders who have successfully mitigated the loss of cash flow from disruptive technologies introduced by fintech companies; however, I interviewed eight financial service leaders. The research was conducted using a single holistic case study design of a large financial service institution located in the Southeast United States. The data collected during the research study will be maintained for 5 years in a secured locked location in a locked file cabinet and will be destroyed/shredded after the 5 years have lapsed.

Section 3 of the research includes an overview of the study. The discussions in Section 3 include a presentation of the findings, applications to professional practice, and implications for social change. Recommendations for further study, reflections learned during the doctoral study journey, and the conclusion are also presented.

Section 3: Application to Professional Practice and Implications for Change

The purpose of this qualitative single holistic case study was to explore strategies some financial service leaders use to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. I used Bower and Christensen's (1995) disruptive innovation theory as the conceptual framework to explore my research question. I completed interviews with eight executives from one financial service institution in the Southeast United States. The interviews were conducted via semistructured interviews using Zoom, in accordance with the organization's no face-to-face meeting requirements, until I achieved data saturation and following the interview protocol outlined in Appendix A.

I employed a data collection process that comprised of semistructured interviews, review of industry publications and documents. Member checking was used to validate my interpretation of the notes from the semistructured interviews; data saturation was achieved. I used methodological triangulation to analyze the data collected. The active participants for my study were labeled P1, P2, P3, P4, P5, P7, P8, and P10. During the interview process, P6 and P9 indicated their knowledge was outside of the scope of study; therefore, they withdrew from the study. The participants provided their perceptions of strategies used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. Before engaging in the interviews, the consent form was emailed to each participant allowing for their review and they were asked to reply "consent" as an agreement to participate in the study.

I posed seven questions (see Appendix A) to gain an understanding of strategies financial service leaders use to mitigate the loss of cash flow. In this section, I offer (a) an overview of the study, (b) a presentation of the research findings, (c) a discussion of applications to professional practice, (d) a discussion of implications for social change, (e) recommendations for actions, (f) recommendations for further research, (g) reflections, and (h) the conclusion of my study.

Presentation of the Findings

The overarching research question for this qualitative single holistic case study was: What strategies do some financial service leaders use to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies? To answer the question, I used a purposive sampling technique to identify and select eight participants from one financial service institution who had the experience and success in implementing strategies to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies and from whom I could obtain data to answer the research question. With the participants' permission, I audio recorded the interviews. The audio recordings were transcribed into Microsoft Word documents. Member checking was performed by emailing the participants the copy of the interview containing my interpretations of their responses to the interview questions to validate the interpretations and accuracy. Conducting member checking ensures reliability and validity of the data from the interviews (Mukherjee et al., 2018). Each participant returned the transcripts with minor corrections, removing filler words; additionally, P3 clarified two responses. The Microsoft Word documents of the transcribed interviews were imported into NVivo

for Windows for analysis, coding, and theme extraction. The themes that emerged from the data analysis answered the overarching research question. The three themes that emerged were (a) senior leadership support as a strategy, (b) adapting technology from fintech companies, and (c) creating the company's own technologies to compete with fintech companies to mitigate the loss of cash flow. In the following, I present the findings of my study. Additionally, I connect the study findings to the conceptual framework of this study: Bower and Christensen's (1995) disruptive innovation theory. For each theme, I identify how study findings confirm, disconfirm, or extend the body of knowledge on disruptive innovation, as illustrated in the literature review, as well as updated peer-reviewed articles considered since writing the proposal. I reached data saturation when my data collection efforts failed to afford new information after eight interviews.

Theme 1: Senior Leadership Support

Participants revealed the importance of senior leadership support and how it shaped the organization's strategies. Analysis of the interview data indicated that in order for the organization to have a successful strategy to mitigate the effects of cash flow loss from disruptive technologies introduced by fintech companies, the organization must have the backing and support of senior leadership of the organization. Senior leadership support, as a strategy, plays an important role in successfully mitigating and implementing a successful strategy to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. P1 stated "my number one challenge for any ideas that we've come up with or the strategies we've proposed is getting the

alignment across the enterprise, and having leadership, and team support”. P2 stated “It has to be one that you can convince senior leaders to invest in. It's going to have the right return. Without leader’s support, it is a mute endeavor.” P4 asserted there were “often delays in moving forward with ideas due to not having prior senior leader concurrence prior to moving forward with a possible strategy”.

I think senior leadership support of the mission is critical. I think that whatever the project is or whatever the idea, the initiative is, I do think that there's tremendous amount of success and failure that can be attributable to lack of leadership interest, buy in or support. (P5)

The participants identified the lack of senior leadership support, on any strategic plan to mitigate cash flow loss would not be successful. Therefore, leadership support is a strategy some leaders use to help mitigate cash flow losses from disruptive technologies introduced by fintech companies. Although the participants indicated the organization’s senior leadership may not be involved in all strategic discussions, the participants did indicate that it is the responsibility of the project leader to place significant emphasis on ensuring the senior leaders are behind any attempts to create or modify a strategy.

Obtaining senior leadership approval before moving ahead with strategy changes is vital. P10 stated “it may be difficult to gain support from senior leaders due to scheduling conflicts” and P3 expressed “senior leaders may have conflicts attending meeting and may cause delays in obtaining their support”.

The literature revealed as fintech companies are entering and disrupting the banking industry at a high rate and incumbent financial service institutions are losing

market share to disruptive innovations, financial service institutions must make strategic changes to remain competitive (Buchak et al., 2018; Chen et al., 2019; Stulz, 2019; Thakor, 2019). However, the literature did not include senior leadership support as a factor. Research of current literature produced no results on obtaining senior leadership support when formulating strategies to mitigate loss of cash flow from disruptive innovations. The literature and some participants agree that the project leader should develop the vision and the process that will be used to realize the vision. The vision has to be processed into the strategy and the leaders should have the ability to set the strategic goals and objectives to mitigate the disruptive innovations entering the market. The project leader advocates for the strategy and gain senior leader approval by including the leaders in the initial workgroups, ensure the senior leaders feel involved, and have the same time expectancy regarding the strategic implementation to ensure the senior leaders have the same sense of urgency.

Theme 1 correlates to Bower and Christensen (1995) disruptive innovation theory in that the participants understood the significance of having senior leader support of any strategies to be implemented to mitigate the loss of cash flow introduced by disruptive innovations. For a company to remain on top of their industry and retain their current customers, well developed strategies must be implemented. Without the support of senior leaders, an organization may not be able to address the disruptive innovations in a timely fashion. The disruptive innovation theory concludes that many companies fail to remain at the top of their industry when technologies and markets change. A company must understand when disruptive innovations are entering their industry. Once disruptive

innovations are within an industry, leaders often do not recognize the disruption until the innovation has already dominated the market. Financial service leaders must identify these disruptions and develop strategies to mitigate them. For any strategy to be useful in mitigating the disruptive technology, financial service leaders should gain senior leader support of any strategy they plan to implement. Any delays in implementing strategies could have an impact on cash flow of the company.

Prior studies noted the responses to disruptive innovations depends on the flexibility of the incumbent's ability to manage changes in the organizational strategies and structure associated with the innovation processes (Khanagha et al., 2018). The participants of the study agreed that any attempt to address the disruptive innovations would be unsuccessful if any strategy did not have the support of senior leaders. When financial service leaders develop strategies to mitigate disruptive innovation with their industry, the leader must gain concurrence from senior leaders early in the process or delays in implementation may occur.

Theme 2: Adapting Technology from Fintech Companies

Participants revealed the importance of adapting to technologies. Previous research identified fintech companies originally tried to overtake traditional financial institutions as industry leaders, however many fintech companies have allied with incumbents due to growing numbers and size (Chen et al., 2019; Lee & Shin, 2018). Analysis of the interview data indicated that some leaders believe that being first to market is not always the best strategy and often adapting a technology gives the organization a competitive advantage and mitigate cash flow losses from disruptive

technologies introduced by fintech companies. The incumbent organization yields to the fintech companies completing all research and developing the technologies and then purchases or develops a partnership with the fintech company to get the technology to market at a faster pace. As different platforms emerge, financial service institutions must be aware that their traditional competitive advantage is often vulnerable to fintech developments (Jaksic & Marinc, 2019; Stulz, 2019; Zhao et al., 2019).

The interview data indicated that financial service leaders are aware of the competitive advantage vulnerability, therefore, it is often a successful strategy to be patient to market. P2 stated “It's generally not necessary to be the first one out with a solution, or the first one out to compete with a fintech. There is a lot of wisdom in being a fast follower.”

I like watching others. I don't want to be a slow follower; I want to be a fast follower. Being a fast follower, when you think about how much money you have to put into a new idea, to get it up to speed, to get the feedback. You can be the first, but that doesn't mean you're the best. We've done probably a lot of firsts, but I am ok with following behind and letting someone else do all the work. (P4)

Mehrotra and Menom (2021), acknowledged that banks and fintech companies have come together with remarkable developments over the last decade ending in 2020. Indicating that the industry does acknowledge many financial service institutions are partnered with fintech companies. P10 indicated “part of my current job, right now, is to partner, work with, and I guess, vet some fintech companies that we currently work with”, indicating the financial services institution currently have relationships with

fintech companies. Traditional financial service institutions partnering with fintech companies enables the financial service institutions an opportunity to adapt to the fintech developments (Dapp, 2015; Hora et al., 2018). Sauberschwarz and Weiss (2018) provided that although large corporations have money and resources, they are unable to find ways to compete with fintech startups. Research has shown that fintech companies cannot be ignored and financial service institutions should adapt to mitigate the loss of cash flow from disruptive innovations introduced by fintech companies (Coetzee, 2018; Deloitte, 2018; Ntwiga, 2020).

My organization have certain areas where the fintech or some of the disruptive services, you're talking about are quite good, as they are a lot more agile, their systems, not nearly as antiquated as ours, they have those much younger groups who think a little bit outside of the box and they can work at a niche market. So, working with the fintech allows us to get better to work and gain market share with those disruptors, to kind of basically offer those services to our clients through them. (P10)

Theme 2 correlates to Bower and Christensen (1995) disruptive innovation theory in that traditional financial service institutions historically do have interruptions from fintech companies. The theory also asserts that a smaller company with fewer resources can successfully challenge incumbent businesses (Christensen et al., 2015). Many traditional financial service institutions remain focused on improving current products and services for its high-demanding customers and ignoring other segments of their business. Fintech companies target the overlooked segments and gain a foothold by

delivering products and services that are suitable and often at a lower price. Disruptive innovations are not breakthrough technologies that make good products better; instead, they are changes that make goods and services more accessible and affordable, thereby making them available to a broader population (Christensen Institute, 2017). Several participants indicated that they currently partnering with fintech companies which is an indication that mitigating the loss of cash flow from disruptive technologies may be mitigated by partnering with fintech companies. Some participants of the study indicated “working together with fintech companies and building a combined offering” (P10) indicates the financial service institution currently have some type of relationship with fintech companies.

Theme 3: Creating the Company’s Own Technologies

Participants revealed the importance of creating technologies. Though not as successful as other strategies, some leaders believe they are able to challenge fintech companies as the fintech companies challenged them. Dietz et al. (2016) stated 62% of fintech companies are disrupting the retail banking segment, however, only 11% are focused on large corporate banking. P2 stated “when you compete against fintech, you go to your clients. It's not just the two products competing, it is decades of experience. We bring thought leadership, we bring stability.” Wonglimpiyarat (2018) stated it is necessary for incumbent financial service institutions to develop new products and services quickly to attract customers to complete. When asked what a strategy is you have used, P1 stated “banks provide velocity, and lending, and straight to the processes

so that we can seem or feel as fast as some of the smaller financial institutions and fintech and respond more quickly”.

As a business leader, you're defending your share of wallet from fintech eating and eroding at your model and your opportunities, and so that's where the agility comes from. I think that theoretically, from a brand standpoint, brand positioning, posturing and really your go-to-market messaging is around the strength of the bank, the longevity, the trust. I believe we can compete and maintain our share.

(P1)

The literature indicates that financial service institutions competing against fintech companies is not as common as one would think (Iman, 2019; Lee & Shin, 2018). Financial service institutions may have equal possibilities by collaborating and partnering with fintech companies and should find middle ground between partnering versus investing or building technology internally (Iman, 2019). P10 stated “after working in the fintech industry for some years, and then moving to the banking industry, I know many strategies come into play and we are able to compete with fintech companies in the long run”.

Theme 3 correlates to Bower and Christensen (1995) disruptive innovation theory because traditional financial service institutions must find ways to mitigate disruptive innovations in the banking industry. Gomber et al. (2018) found that the different processes of fintech innovations entering the market have changed how traditional financial service institutions operate. As Fintech continues to emerge, companies are finding that digitization is impacting many industries. Therefore, companies are finding

that there is a need to reposition themselves and adjust their business models (Medeiros & Chau, 2016). As evident in the literature, fintech disruptions are significantly impacting the financial service industry (Das, 2019; Jagtiani & Lemieux, 2018; Zavolokina et al., 2016). In that regard, fintech companies produce disruptive innovations, therefore, the theory of disruptive innovations would apply to fintech companies.

The findings of my study were to determine successful strategies used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies which produced (a) obtaining leadership support as a strategy, (b) adapting to fintech technologies, and (c) creating the company's own technologies to compete with fintech companies.

Applications to Professional Practice

The results from this study are applicable to business practice as a source of information regarding successful strategies financial service leaders have used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. The literature review revealed that many institutions in the financial services sector are losing market share to disruptive technologies introduced by fintech companies (Stulz, 2019; Thakor, 2019). Gomber et al. (2018) determined financial service institutions identified fintech companies are continually disrupting the sector and providing new products and services faster than traditional financial service institutions. Chen et al. (2019) determined since 2008, fintech start-ups have been on the rise, with 57.8% of fintech corporate filings from technology firms outside of the financial industry. Buchak et al.

(2018) determined as competition among fintech companies and financial service institutions increases banks have lost roughly 9% of market share to fintech companies in technology. As different disruptive innovations enter the market, financial service leaders must be aware that their traditional competitive advantage is often vulnerable to these fintech developments (Jaksic & Marinc, 2019; Stulz, 2019; Zhao et al., 2019). The findings of this study provide business leaders insight to the complexities of mitigating cash flow loss and are applicable to business practice as a source of information to other financial service institutions regarding successful strategies that could mitigate the loss of cash flow from disruptive technologies.

The strategies that some financial service leaders have used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies have beneficial applications to professional practice. The study revealed three strategies advantageous to financial service leaders to help mitigate cash flow losses from disruptive innovations. Senior leadership support as a strategy would allow leaders to gain necessary approvals prior to moving forward with specific strategies. Some project leaders move forward and complete the work of executing a strategy just to be stalled due to not having support of the strategies from senior leaders which could cause delays in funding, personnel, and implementation of the strategies. Adapting technologies from fintech companies would allow incumbent organizations to take a step back, have the fintech company complete the research and launch the product, and the traditional financial institutions would adapt the product or service into their business models. By being a fast second allows an organization to manage other priorities and to determine if the new technology or service

performs in the market before any allocation of funds are put into the product or service. If an organization decides to compete with fintech companies, creating their own technologies to launch into the market could be successful, however, the literature indicates that traditional financial institutions are encumbered by legacy systems, regulatory framework, and slow turnaround time on introducing new technologies (Iman, 2019; Lee & Shin, 2018).

The presence of fintech companies continuously entering the industry have increased, causing disruptions in the financial service industry, while also generating products and services at a faster rate than traditional financial service institutions. The disruption has caused a need for transformation in the industry. Boratynska (2019) stated fintech is one of the most significant innovations in the financial industry and is evolving rapidly, driven mainly by the sharing economy, information technology, and favorable regulation. Numerous theorists have considered how financial service leaders should address the disruptions within the industry. Chen et al. (2019) asserted many observers have welcomed the rise of fintech and claims the newly emerging technologies have the potential to radically transform financial services by making transactions less expensive, more convenient, and more secure. Although this study focused on one financial service organization, the findings could be applied to a number of other financial service institutions and other industries. The study also relates to business model transformation within the financial service industry.

Implications for Social Change

As financial service institutions continue to focus on providing products and services to make the lives of consumers easier and providing what consumers want, there are implications for positive social change. The availability of technologies and innovations also stimulate the economy and generate economic growth (Frame et al., 2018). Improving financial sectors encourage more savings and investment decisions, allowing for opportunities to make better financial decisions and improved consumer involvement, which boosts local economies, providing consumers access to resources to improve their financial literacy, and providing knowledge and products to promote stabilization within their communities. Using the finding from this study, business leaders may become aware of additional successful strategies that could be used to mitigate cash flow loss from disruptive technologies resulting in sustainable business practices, improved growth, and increased profitability.

Recommendations for Action

The findings of this study are applicable to financial service leaders and financial service institutions struggling to mitigate loss of cash flow from disruptive technologies introduced by fintech companies. By using the findings of this study for successful strategies to mitigate disruptive innovations, a financial service institution could mitigate cash flow losses and may affect sustainability and market share.

Glinkina et al. (2019) asserted disruptive innovations exist and are often successful because consumers incorporate the technologies into their personal and business lives and rely greatly on the products and services. Business leaders in the

financial service industry and in other industries may benefit from data in this study to mitigate cash flow losses. Based on the findings of my study, I propose several actions financial service leaders can execute to mitigate disruptive innovations. Leaders should continue to: (a) monitor market share and competitive position to be aware of significant changes, (b) comprehend how consumers are reacting as new products and services emerge, (c) recognize how disruptions are affecting their business models and execute adjustments as necessary.

Execution of the first action would allow financial service leaders to monitor how new products and services may cause the market share and competitive advantage of the company to decrease or increase. Arani and Najmi (2019) stated achieving competitive advantage is often based on consumer value. Customer value is defined as all the benefits that the customer perceives from the product against all the costs to pay for the product. Customer value leads to the execution of the second action of comprehending how consumers respond to a new offering or services as they emerge and monitor any trends. Understanding consumers pay for the benefits of the products and services and not necessarily the product or service allows financial service leaders to focus on the needs of the consumer. By understanding the needs of consumers, financial service leaders can focus on strategies that could be used to help mitigate cash flow losses. For example, adjusting credit terms, providing incentives and penalties to customers, and current sales to customers. Without customer's purchases of products or services, a business may not survive. Execution of the third action of recognizing how disruptions are affecting their business models and execute adjustments as necessary keeps the organization focused

and up to date based on what is happening in the industry and allows financial service leaders to react to consumer behaviors, trends, and market changes.

Other stakeholders in the financial service industry could benefit from this study. The findings of this study could also provide valuable insights to researchers interested in further research in mitigating cash flow losses from disruptive innovations introduced by fintech companies. This information is vital and relevant to the target audiences of this study.

Recommendations for Further Research

In conducting this study, the concept of cash flow losses from disruptive innovations was examined, focusing on some strategies that can be used to mitigate loss of cash flow introduced by fintech companies. Only successful strategies were considered. This means that the possibility of other means to address cash flow losses introduced by fintech companies were not considered. The variation in other possible solutions exists, therefore needs to be considered for future research.

The complexity of the financial service industry can lead to variations in successful strategies that could be used to mitigate cash flow losses. Smaller institutions may find some of the strategies too complex for their business type. While different types of institutions may require different approaches to strategies. There were eight participants interviewed for this study in the Southeast United States who used strategies to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies. I recommend completing a similar case study with multiple small size financial service institutions to determine if smaller size financial service institutions

have the same strategies to mitigate cash flow losses. I also recommend using a larger sample size to determine if a larger sample would produce different results. Additionally, researchers could use the findings from this study and compare them to findings of the smaller financial service institutions to determine if size plays an important role.

Reflections

When I first started my doctoral degree journey, I didn't know a lot about fintech. My organization started working on different ways to address what they were seeing in the industry. Knowing I wanted to continue my professional career in the banking industry, I knew expanding my knowledge on fintech, strategies, and how it is shaping the industry would be vital. This study allowed me to better understand the world around me and to think outside of the box. I allowed the participants knowledge and responses to guide my findings. Their expertise and years in the banking industry were indicators that the criteria for my study was acceptable.

Reflecting on the past four years, I have grown in research. Before I started my journey, I had little knowledge of the research process. Having to learn the steps of writing a doctoral study allowed me to become confident in research requirements and understand why the process is as in-depth and thorough. As with most things, the doctoral study had parts that I enjoyed and parts that were tough. Being able to overcome self-imposed barriers enabled me to keep moving forward in the process. My role as a researched required me to comprehend and gain knowledge from the executives' views and experiences to complete my doctoral study in an ethical and organized way.

Conclusion

Cash flow and market share can be dramatically affected by disruptive innovations introduced by fintech companies (Buchak et al., 2018; Stulz, 2019; Thakor, 2019). The concern to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies remain the driver for implementing strategies. The number of fintech companies continue to grow in the banking industry. However, many organizations are still looking for successful strategies to mitigate the market disruptions. Financial service leaders recognize these disruptions and continue to develop strategies to allow their company to have a competitive advantage.

The findings from the semistructured interviews of eight financial service leaders who successfully mitigates the loss of cash flow from disruptive technologies introduced by fintech companies revealed three themes: (a) senior leadership support, (b) adapting technology from fintech companies, and (c) creating the company's own technologies. The themes that emerged from this research revealed the strategies financial service leaders use may be strategies that have an internal focus. The knowledge gained from the findings could create effective solutions to address cash flow losses. The implication for positive social change included the potential to provide consumers choices for financial service products, opportunities to make better financial decisions, access to resources to improve their financial literacy, and knowledge and products to promote economic growth and stabilization within their communities.

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Appendix A: Interview Protocol

Thank you for your participation today. My name is Shenita Martin, and I am a doctoral student at Walden University. I am conducting my research study in the partial fulfillment for the requirements of a Doctor of Business Administration degree. This interview will take approximately 50 minutes and will include seven questions regarding your experience. I would like your permission to digitally record this interview to accurately capture the information you present. If at any time during this interview you wish to discontinue the use of the recording or the interview, please feel free to stop me immediately. All of your responses are strictly confidential. Your responses will remain confidential and will be used to develop an understanding of how you and your peers assess and mitigate loss of market share due to disruptive technologies.

I would like to remind you of your email consent to participate in this study. You replied with consent, certifying that we agree to continue this interview. I will keep a copy under lock and separate from your responses.

Once again, thank you for your participation. Do you have any questions?

Let's begin....

The background of the study is a significant number of financial service institutions are losing market share to disruptive technologies. Competition among fintech companies and financial service institutions is increasing, with 57.8% of fintech corporate filings from technology firms outside of the financial industry. As traditional financial service companies struggle, fintech companies are openly challenging the market and are continually growing significantly due to their technological advantage. Development strategies of financial service institutions are needed to address the services provided by traditional financial institutions if the service companies are to remain relevant.

The general problem is the disruptive technologies associated with fintech developments are challenging the business strategies of many leaders in the financial service industry. The specific business problem is some financial service leaders lack strategies to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies.

Research Question

What strategies do some financial service leaders use to successfully mitigate the loss of cash flow from disruptive technologies introduced by fintech companies?

Interview Questions

1. What are some strategies you used to mitigate the loss of cash flow from disruptive technologies introduced by fintech companies?

2. What strategies did you find worked best to mitigate the effects of competition from fintech companies?
3. How did you assess the overall effectiveness of the strategies used to mitigate the effects of competition from fintech companies?
4. What were the key barriers encountered in implementing strategies to mitigate the effects of competition from fintech companies?
5. How did you address the key barriers you encountered when implementing strategies to mitigate the effects of competition from fintech companies?
6. What strategies were unsuccessful in your pursuit to mitigate the effects of competition from fintech companies? Why?
7. What additional information or examples would you like to contribute to this subject on assessing and mitigating the loss of market share to disruptive technologies?