



EXPLORING THE IMPACT OF ETHICS ON FINTECH APPLICATIONS IN THE RETAIL MARKET IN KUWAIT

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رؤية بنك الكويت المركزي والبنوك الكويتية
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ABSTRACT

Fintech is the fusion of finance and technology and is considered to be a revolution in payment systems and financial services. Currently, there is increasing use of fintech in various sectors of the economy around the world. Banks and other financial institutions, consumers, and retailers, among others, now use fintech mainly because of the convenience it offers as well as for its implications for cost-efficiency and reaches. In Kuwait, the realization of the importance of fintech is increasing although adoption and regulation are still in their infancy. Despite the appeal of fintech due to its advantages in Kuwait's retail industry, the technology does raise ethical risks that if left unmanaged, can harm different stakeholders, namely, consumers, businesses that adopt it, as well as fintech companies that offer financial services. In Kuwait, the ethical use of fintech applications in the retail market has not been studied, representing a gap in empirical knowledge that has to be addressed to protect the welfare of society. This study seeks to address this gap in knowledge by answering three research questions pertinent to the impact of ethics on fintech applications in Kuwait's retail market. A qualitative study was conducted to answer these research questions, with interviews of six key participants from both the retail sector and the fintech sector in Kuwait. Three major themes were derived through data analysis, with the themes showing that ethical concerns about fintech in Kuwait remain mostly unregulated. Due to the lack of regulation on ethics in fintech, retailer participants in this study have had to create their own policies on the ethical use of fintech while fintech company owners and representatives mostly rely on the government to regulate and legislate ethics in fintech.

Keywords: fintech, ethics, Kuwait, retail market, regulations.

1 CHAPTER 1: INTRODUCTION

1.1 Overview

People harness technology to obtain health care, study, build relationships, conduct business, receive their education, and make purchases, among other things. Concerning this, technology has been innovatively designed to be used for financial products and services. Now commonly referred to as fintech because of the blend of finance and technology, the technology is considered the future of financial services because of its convenience and reliability to people making financial transactions. Many organizations now use fintech, such as banks and other financial institutions, consumers, and retailers. These users, especially consumers and retailers, use fintech because they trust the latter and its convenience and reach. However, as time passes, there are more concerns about how trustworthy fintech is and the ethics that revolve around the creation, distribution, and usage of this technology. Some studies have been conducted on the impact of ethics on fintech applications, but none of these studies explore the Kuwaiti setting with attention to retailers. Here, it must be noted that there are expectations for laws and regulations to ensure ethical practice. Yet, in a relatively new tech field such as Kuwait, regulation, and legislation about ethical fintech may be at their beginning. This results in failures to protect consumers and businesses such as retailers from unethical business practices.

1.2 Problem Definition

Kuwait recognizes the importance of fintech for the retail industry and the economy as a whole. However, the fintech industry currently is still at its beginning in Kuwait. A comprehensive review of the literature reveals ethical standards applied to financial institutions and banks are the same standards used for fintech. The most notable legislation related to fintech is Law No. 2 of 2001 or the Ci-Net Law. Under this law, banks and financial institutions providing consumer loans must enter customer data on the Ci-Net account. This is to allow the government oversight over these accounts and to determine if these companies have not been implementing outrageous practices. There are also regulations meant to govern electronic payments and settlement systems. Fintech companies are prohibited from engaging in money laundering activities and terrorism financing (Sattout & Ntambirweki, 2019). Unfortunately, there are no specific policies about the application and monitoring of ethics in fintech in Kuwait, especially since fintech in Kuwait is still vulnerable

to cybercrime and consumers become vulnerable to privacy violations (Handoush, 2022; AlKiswani, 2022). On the other hand, retailers in Kuwait value ethical practices (Ali & Al-Kazemi, 2007). However, should there be a shortcoming in ethics among fintech providers, ethical use of fintech among retailers also falls upon the shoulders of the retailers because they directly engage with the consumers.

1.3 Research Objective

As of 2021, nothing is compulsory in terms of regulation, governance, and legal compliance regarding ethics in fintech (Elliott, et al., 2021). As Mittelstadt (2019) asserts, ethics are essential, but knowledge of ethical principles may not be enough if not carefully applied. Fintech companies have duties accounted for and have associations with societal norms. Also, fintech companies operate using a framework of methods for implementation and governance. More than 160 ethical principles exist to date, suggesting fragmentation and difficulty in choosing which principles are best for responsible use of fintech. However, studies have shown that rules, compliance, and enforcement of the ethical tenets in fintech are “vague,” and “loopholes” exist (Bloomberg, 2021). There are many ethical risks in the digital society landscape and its social actors.

Zuboff (2019) studied digital society and symbiotic social relationships relative to technology such as AI, which is a standard component of fintech. According to Zuboff (2019), society is subject to Surveillance Capitalism. Today's technologies track movement where people unconsciously accept digital surveillance as a daily norm. Despite Zuboff's (2019) Western perspective, her work calls attention to the notion of overt and covert data manipulation, wherein users have a “puppet and puppet master” relationship (pp. 14-17). The puppet here represents a device that is used to access digital society. These devices typically have sophisticated technology, such as AI systems operating in the background, harvesting data insights, and building arbitrary user profiles aligned to the masters' interests. This is enabled by the “forward text” and the “shadow text” processes. The forward text is the user experience that makes aware of people's data and who uses said data when engaged online through social media platforms, such as Google and Facebook. Especially, user experience is introduced on a range of appealing features to catch and maintain users and stimulate their interest in continuing to participate. On the other hand, shadow text, as the term suggests, relates to a covert system controlled and operated by the master to benefit the master through sharing and monetizing users' data with selected third

parties. For the digital titans to run, transparency to the user and society is veiled, primarily without regulation in using and re-using data.

The puppet master, which could be a fintech company, a retailer, or a malicious entity, lures individuals to join the digital society. In addition, more technologically advanced services such as fintech have intelligence capabilities to which data are continuously supplied, producing analytics that determines patterns and the algorithms that overt them into rules. All of these raise human, legal, and economic risks that private firms take for guaranteed outcomes, including profitability. In a landscape with many stakeholders, including consumers, fintech companies, and the organizations that use fintech, the ethical concern pertains to whose interests are at play and what works for whom (Elliott et al., 2021).

In terms of business ethics, the concept means different for different people. Generally, business ethics studies what is morally right and wrong (Velasquez, 2009). More specifically, business ethics refers to the relationship of the organization's goals and objectives to its impact on society. Business ethics emphasizes bringing truth and justice to aspects of business activities, including advertising, customer and public relations, social responsibilities, and corporate behavior within and outside the country of origin (Anshari et al., 2021).

It cannot be emphasized enough that most businesses today have an overarching goal of profitability for the growth of their organization and obtaining competitive advantages at all costs, even if doing so is achieved through unethical means (Anshari et al., 2021). This has become controversial in the case of Facebook, where investigations show that users' data are used for generating revenue. Moreover, user data is given to the third business associates of Facebook, leading to potential issues because the data can affect the politics of certain countries. This raises significant questions about privacy and freedom and contributes to a heightened sense of the need to prioritize business ethics for any digitally-oriented organization and incorporate ethics as part of the organizational culture (Anshari et al., 2021).

However, this is not done quickly as many businesses do not know how to identify which actions are considered ethical and which are not. Primarily, this is because of the lack of standardized guidelines for ethically compliant decision-making. Moreover, this is also because of the fundamental structural problem that people are subjected to greed and wealth for their own sake and are even encouraged to do so in a capitalist society. Overall, the lack of regulation and legislation over fintech and its use by retailers in Kuwait raises ethical concerns. As a result,

this qualitative research investigates the impacts of ethics on fintech applications in Kuwait's retail sector. To achieve this research objective, recommendations can be made to support ethical approaches in Kuwait's fintech industry.

1.4 Research Questions

This study seeks to address the following research questions:

- a. Major research question: Do ethics have a significant impact on fintech applications in Kuwait's retail sector?
- b. Minor research questions:
 1. Is there a specific set of ethics applicable to fintech in Kuwait's retail sector?
 2. How do current practices in Kuwait's retail sector reflect the level of ethics in fintech applications?

1.5 Research Methodology

This qualitative study uses the open-ended interview design and deductive approach. As a qualitative study, this investigation uses the interpretive philosophical paradigm. Qualitative studies require an in-depth examination of a given phenomenon, and the researcher achieves this by using instruments that provide rich and comprehensive data, such as open-ended interviews (Silverman, 2015). Using the qualitative method, this study explores and analyzes the impacts of ethics on fintech applications used in the retail industry of Kuwait. The choice of using qualitative research for this study is appropriate because conducting interviews with key participants using open-ended questions allows the researcher to capture the insights, experiences, and knowledge that would facilitate answering research questions. Using criterion sampling, six participants from retailers in Kuwait that use fintech, as well as managers of fintech companies, are interviewed to help answer the research questions. Data analysis is done through coding and thematic analysis.

1.6 Data Analysis Method

After transcribing the interviews of participants, coding is undertaken, followed by thematic analysis. Coding and thematic analysis are widely used valid and reliable qualitative methods. A more detailed explanation of this study's methodology is discussed in Chapter 3.

1.7 Relevance of research topic to Fintech and Retail in Kuwait

Generally, a thriving fintech industry bodes well for a country's economy. Fintech helps overcome barriers to financial inclusion by quickly allowing under-banked households or households who do not use bank accounts, individuals, and firms, to access financial services (Omodero, 2021). These unbanked individuals can now purchase and sell online using their smartphones or laptops, increasing the money circulating in the economy. Going digital using fintech can also make financial services more efficient, which increases the revenue of financial institutions and businesses. Again, this bodes well for the economy and increases competition, especially with the emergence of innovative startups that offer fintech products and services that make buying and selling easier for all parties in the economy (Kaji, Nakatsuma & Fukuhara, 2021). In addition, fintech can further strengthen Kuwait's capital markets because globally, fintech investments have been gathering steam with a series of major investment projects (Kaji et al., 2021). Fintech products that have been launched in Kuwait are the Interactive Voice Response (IVR) portal, the Kuwait International Bank (KIB) fintech, and startup Enabill (Naz, Karim, Houcine & Naeem, 2022). This is a good start, and Kuwait can gain the benefits of fintech to the economy and stakeholders such as financial institutions, fintech startups, and consumers. Adopting fintech innovations in Kuwait's retail market can help the country develop and sustain its retail industry. However, the industry should have ethical standards to fulfill the advantages of harnessing fintech in the economy and commerce.

1.8 Thesis Structure

Chapter 1 of this paper includes the Introduction, followed by a Literature Review in Chapter 2. Chapter 3 discusses the research design and methodology for this study, while Chapter 4 presents the data analysis, findings, and discussion while Chapter 5 contains the conclusion and recommendations in this study.

2 CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

Financial technology, more commonly called fintech, is considered a game changer not only because of its innovations for businesses (Hendershott et al., 2021) but also because consumers benefit from it. Fintech has been described as a disruptive innovation that can replace traditional financial services, change industry boundaries, and revolutionize the ways through which businesses create value, as well as provide services in ways that democratize financial services to result in welfare for all. When consumers use fintech, they have greater access to, and lesser costs for, services (Ng et al., 2021). On the other hand, financial institutions, make processes and operations more efficient that, in turn, makes their services more robust and appealing. Different types of businesses now use fintech, especially among retailers (Lee, Ryu & Lee, 2019). Among retailers, fintech not only makes operations more efficient but also opens up new business opportunities because fintech increases the transparency and timeliness of financial information (Ng et al, 2021).

However, there is a downside to fintech in that it can raise ethical issues, including, cyber risks privacy violations, and data breaches, among others (King et al, 2021). This literature review discusses fintech, starting with the background and overview of fintech, fintech categories, the fintech ecosystem, the disruptive effects of fintech, an explanation of business ethics, the use of fintech in the retail industry including in Kuwait's retail industry, as well as a gap in empirical knowledge about the need for ethics in fintech in retail.

2.2 BACKGROUND AND OVERVIEW OF FINTECH

Puschmann (2017) states that the technological development of information has been transforming the financial system, and among the drivers of this transformation are the evolving roles of IT, consumer behavior, ecosystems, and regulation. Puschmann (2017) also explains that customer behavior has changed because of the rise of the native digital generation, who have a closer relationship with the technologies and seek more transparency in the provision of financial services. According to Schueffel (2016) who reviewed over 200 scholarly articles on fintech, the latter is a new financial industry that harnesses technology to improve financial activities.

As the term suggests, financial technology (fintech) is the fusion of finance and technology (Goldstein, Jiang & Karolyi, 2019). To note, fintech

is also the umbrella term broadly referred to as “the design and delivery of financial products and services through information technology” (Ng, Tan, Sun & Meng, 2022, p. 1). Although it was in the 1970s when the term “fintech” was first used, it was only sometime in 2008 that fintech has begun to be widely used in the business context (Ng et al., 2022; Serbulova, 2021). The concept of fintech is far-reaching and there is no universal definition for it yet.

Varga (2017) explains that even when all the definitions capture important aspects of fintech, there is still no agreement about where the limits of the sector are. Therefore, Varga (2017) refers to fintech as ventures that are not yet regulated ventures that seek to develop novel, technology-enabled financial services with a value-added design that can potentially transform financial practices. On the other hand, Arner, Barberis, and Buckley (2016) refer to fintech as technology-enabled financial solutions. Similarly, Putri, Nurwiyanta, Sungkono, and Wahyuningsih (2019) define it as the implementation and utilization of technology to increase banking and financial services. Thakor (2019) explains that fintech is the use of technology to provide new and improved financial services. The Financial Stability Board (2022) defines fintech as a technology-enabled “innovation in financial services that can lead to new business models, applications, processes, or products with an associated material effect on the provision of financial services.” The Basel Committee on Banking Supervision has adopted this definition of fintech. Regardless of who conceptualizes the term, the two main elements in fintech are the development and use of technology by firms and the financial services/products that are provided.

The most common innovative form of fintech right now is the mobile payment solution although other forms include cryptocurrencies and blockchain, digital advisory and trading systems, artificial intelligence (AI) and machine learning, equity crowdfunding, peer-to-peer (P2P) (Zalan & Toufaily, 2017). Other examples of fintech are Robo-advising, neobank, decentralized finance, open finance, Secured Automated Lending Technology (SALT), micropayments, insurance technology (InsurTech), and regulation technology (Hendershott, Zhang, Zhao & Zheng, 2021).

The World Economic Forum (2022) says that by 2022, 60% of global GDP will be digitized. To enable this, connectivity should be regarded as an essential service for all people. Halfway into 2022, it has also been reported that 63% of the global population has gotten connected (World Bank, 2022). In all sectors, digitally enhanced services, operations, and relationships will be the drivers of economic growth. At the heart of this economic growth are fintech firms, along with big technology businesses.

Current demand for financial services entails availability and worldwide accessibility 24/7 (Stojanović et al., 2021). Fintech is used by applying IT solutions in business models to deliver improved financial services to consumers or clients. However, it must be pointed out that the term “fintech” and its definition continue to be significantly debated. Fintech is an umbrella term for a broad range of technologies that dynamically interact in a common infrastructure. The word “fintech” was first used in 1972 as “an acronym which stands for financial technology, combining bank expertise with modern management science techniques and the computer (Stojanović et al., 2021, p. 1594). As the technology evolved, fintech evolved as well and is currently regarded as on its third wave (Ng et al., 2022).

Fintech depends on different payment methods, including, credit cards and financial transactions, including digital currencies. Notably, digital currencies are built upon the technological foundation of Blockchain that in turn, provides a direct connection to financial institutions (Hendershott et al., 2021). In Fintech, financial transactions involve repeated processes where two peers exchange sensitive information. Current AI technologies are often used to supplement fintech services so that transactions are automated and secure. Business models used for fintech must ensure information security and to not do this is unethical because it could be harmful to stakeholders, such as consumers. Fintech’s business model depends on existing IT infrastructures, financial activities are subject to misuse. Generally, fraudulent acts are directed toward weaknesses in financial activities, including, credit cards, financial transactions, and the underlying Blockchain technology, among others (Hendershott et al., 2021). The corrupt activities of malicious entities can lead to severe consequences. In addition, there is substantial literature on the ethics of fintech but most of these do not provide practical advice but are only theoretical in nature. Only a minority of businesses implement anti-fraud mechanisms and as such, many victims never recover from the consequences of unethical practices.

2.2.1 Fintech Categories, Key Areas, and Business Models

Ng and Kwok (2017) divided fintech organizations into four different categories: efficient

The payment process, Robo-advisor, peer-to-peer loan, and deposit platform, and crowdfunding.

On the other hand, the Global Fintech Adoption Index’s report of 2019

divided it into four broad categories: banking and payments, financial management, financing, and insurance. In addition to these, Thakor (2019) describes the areas that fintech covers as: (a) credit, deposits, and capital raising services; (b) payments, clearing, and settlement services, including digital currencies; (c) investment management services (including trading); and (d) insurance.

In addition, other segments of the financial industry can be added to the above. The use of fintech for collecting data, cryptocurrency, credit scoring, cybersecurity for finance, thematic investing, algorithmic asset management, private securities transactions, and others. Osterwalder, Pigneur, and Tucci (2005) as cited by Visconti (2020) identified nine common business model elements. These are value proposition, target customer, distribution channel, relationship, value configuration, core competency, partner network, cost structure, and revenue model. Meanwhile, Lee and Shin (2018) divided fintech into six models: payments, wealth management, crowdfunding, lending, capital market, and insurance services.

2.2.2 Fintech Ecosystem

According to Lee and Shin (2018), the fintech ecosystem elements as shown in Figure 2.1 symbiotically contribute to innovation, to economic stimulation, facilitate collaboration and competition in the financial industry, and ultimately benefit consumers in the financial industry.

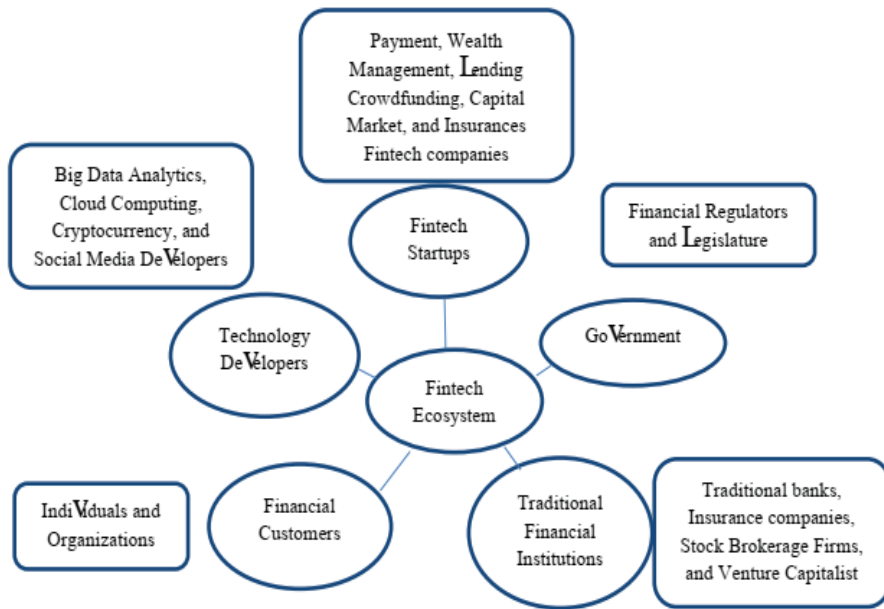


Figure 2.1: Elements of Fintech Ecosystem (Lee & Shin, 2018)

As can be seen in Figure 2.1 above, the fintech ecosystem involves different stakeholders, users, providers, types of fintech models, as well as financial regulations and legislation. This makes the fintech ecosystem a complex one and potential vulnerabilities where ethical issues may arise involving any component in the ecosystem. Therefore, it is important to understand fintech according to its ecosystem – to better understand the sources of potential ethical issues that can adversely affect stakeholders.

2.2.3 Disruption Effects of Fintech

The tech and digital markets have recognized the potential of fintech innovation as, according to Klynveld Peat Marwick Goerdeler International Limited (KPMG), the total fintech investment activity globally involves mergers and acquisitions, private equity, and Venture Capitalist deals. In terms of performance, the global fintech industry is massive, despite having shrunk 13.3% in 2020 largely because of the COVID-19 pandemic. The current market value of the global fintech industry is \$130.4 billion. Figure 2.1 below shows the growth trajectory of the said industry (MarketLine, 2021).

Year	\$ billion	€ billion	% Growth
2016	63.4	55.6	
2017	60.2	52.8	(5.0%)
2018	150.4	131.9	149.8%
2019	150.4	131.9	0%
2020	130.4	114.3	(13.3%)
CAGR: 2016–20			19.7%

Figure 2.2: Growth of Global Fintech Industry (MarketLine, 2021)

The compound annual growth rate of the market between 2016 and 2020 was 19.7%. The Americas segment has the largest share of the global market with a 19.8% share of the global market value (MarketLine, 2021). As shown in Figure 2.2, Asia-Pacific has the second largest share with 12.4% of the global market while Europe has 7% (MarketLine, 2021). This means to say that countries such as Kuwait with advanced financial and tech systems must catch up with the current leaders.

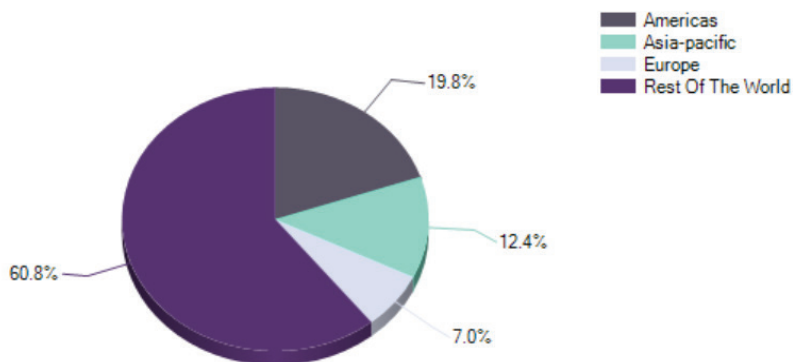


Figure 2.3: Market Share, Global Fintech Market (MarketLine, 2021)

Awareness of fintech, even among non-adopters, is now very high (KPMG, 2019). Around the world, for instance, 96% of consumers know at least one alternative fintech service available to help them transfer money and make payments. Nowadays, practitioners and academics consider fintech as a disruptive force about to revolutionize the financial services industry with major impacts and improvements in efficiency and the future of financial services (KPMG, 2019).

Gomber, Kauffman, Parker, and Weber (2018) state that it is just but fair to consider the entire financial services industry as having been disrupted in different ways. For example, disruption in the industry has been caused by new business models, new market mechanisms, shared tech infrastructures, disintermediation of banks, segment-of-one marketing,

and cross-border innovations. Based on this rationale, there are also emergent complementary effects, including, enhanced business models, extended access by customers, hybridized services by firms, shared tech infrastructures, and Open APIs (Application Programming Interfaces). Lee and Shin (2018) note that fintech is regarded as a game changer and disruptive innovation that can shake up traditional financial markets and technological developments in infrastructure, big data, data analytics, and mobile devices, allowing fintech startups to disintermediate traditional financial firms with unique, niche, and personalized services. Evidence also shows fintech currently competes with traditional mortgage lenders rather than the ones with broadening access (Fuster, Plosser, Schnabl, & Vickery, 2019; Vallee & Zeng, 2019).

2.3 FINTECH IN RETAIL

The retail payments landscape is defined by a broad range of payment instruments and activities at every stage of the payment process, from the front-end services with user interfaces to the back-end services that include settlement and clearing (Yoon & Jun 2019). Retail payment service providers are accountable for completing all stages of the payment chain. However, the payment process is typically tiered by nature. This means that payment providers such as fintech companies usually delegate to other participants such as retail companies and consumers, to complete the process.

The rapid progress in information and communication technology (ICT) has transformed the financial services landscape. New participants in payment schemes are usually non-financial institutions that have historically provided technical services. However, upon the introduction of tech-driven retail payments services, such as fintech, the roles of the latter have expanded beyond simple technical aspects. Examples of fintech payment schemes are Apple Pay and Samsung Pay which have platform structures, providing a diverse range of retail payment services, including both offline and online transactions (Yook & Jun 2019). Their users obtain services through their platforms such as products or services like mobile devices, operating systems, and messaging services.

In many instances, fintech payment service providers (FPPs) provide front-end services only, while the rest of the payment process is provided by incumbent payment service providers which have the capabilities to perform end-to-end payment services. This cooperation or vertical separation must be distinguished from the vertical integration structure

of the past. End-to-end or integrated payment service providers (IPPs) are also used to work with third parties such as value-added networks (VANs). However, these third parties are simply delegated to serve specific technical roles for the service. Users do not even see them or encounter them during transactions.

On the other hand, FPPs directly interact with users and gain revenue from various channels based on their business models. Although fintech payment services benefit end users in different ways, these services also complicate the retail payment system by adding more layers and segments to the payment process (Yook & Jun 2019). Fintech's layered structure weakens the security of the retail payment scheme precisely because of its different tiers. As the number of cross-institutional transfers of information increases, there is also an increase in the risks of incidents such as fraudulent transactions and data breaches (Yook & Jun 2019).

Moreover, an increase in the number of participants in the payment system makes it challenging to coordinate participants' incentives regarding ex-payment investment and ex-post handling to decrease security incidents. As Anderson and Moore (2006) stated, the problematic effects of the increase in the number of transfers of information can be reduced using an engineering approach. However, this entails complex coordination using an economic approach. In particular, the economic approach requires the correct design of an incentive structure that would provide appropriate rights and responsibilities to each participant. The layered structure of the fintech retail payment services raises calls attention to liability, in terms of who bears the loss from security incidents with this question strongly impacting incentives and decisions on security investment. Fintech companies can be liable for ethical concerns such as fraud, breaches, and surveillance.

2.4 FINTECH IN KUWAIT

Kuwait aims to be a major player in the fintech space at the Gulf Cooperation Council (GCC) (Naz et al., 2022). Kuwait has one of the best-established finance industries in the GCC (Naz et al., 2022). The Kuwait Investment Authority is the oldest independent wealth fund in the world and Kuwait blossomed as an advanced finance player way before Abu Dhabi or Doha did.

However, despite its remarkable human capital, Kuwait contends with an increasingly competitive regional landscape but has been struggling with economic setbacks exacerbated by the COVID-19 pandemic (Winder,

2020). The prospect of Kuwait becoming a leader in fintech is constrained by several challenges, particularly, bureaucracy and political climate. Regulations in Kuwait require authorization by the parliament which is much more empowered than other GCC representative bodies. Overall, the Global Fintech Index 2020 ranks Kuwait City as the 9th ranking in terms of the best fintech investment destination in the Middle East and North Africa (MENA) and the 4th in the GCC after Dubai, Manama, and Riyadh (Winder, 2020)., Kuwait's Central Bank recently introduced the Regulatory Sandbox Framework to inspire fintech growth and allow banking systems to test new technologies.

Currently, the biggest fintech segment in Kuwait is Digital Payments, with a total transaction value of \$10.090 billion in 2022 (Statista, 2022). It is anticipated that the Digital Investment segment will grow by 25.6% in 2023, with the number of users reaching 2.8 million (Statista, 2022). Most banks have developed their fintech applications. Since banks have tight ethical codes of practice, the attention of this study will be on non-bank fintech of which there are three in Kuwait. FinFirst is a digital platform delivering a digital experience for auto loans, personal loans, and car insurance (Monteiro, 2021). MyFatoorah is an online payment solution catering to B2B and B2C markets to maximize efficiency in accepting payments. Tap is a payment gateway that is mostly B2B as well as a bill payment app for consumers (Monteiro, 2021).

2.5 BUSINESS ETHICS

Business ethics is composed of a set of fundamental moral principles that are inherent in the activity of doing business in a market (Hasnas, 2020). These principles are supposed to transcend differences in nationality, culture, and religion, and shape the building blocks upon more complex moral analyses of business decisions, processes, and systems. Business ethics includes a broad range of ethical concerns about doing business in a market environment including corporations' social responsibilities to stakeholders because of inherent business obligations to do what is right (Hasnas, 2020). Moreover, business ethics involve the use of resources in ways that are correct and non-harmful to society.

One such resource is the technology used for business. It is self-evident that using technology is value-laden because of the ways technology is commercialized, and in the process, conveys different commitments on values that range from freedom and individual autonomy to transparency and fairness (Martin, Shilton & Smith, 2019). Regulators and the makers of

commercialized technology have the responsibility to ensure that tech-related business is done ethically.

Businesses that apply ethical and secure fintech business models can provide benefits, including, easier use and cheaper and more secure transactions (Anshari et al., 2021; Hendershott et al., 2021; Ng et al., 2022; Stojanović et al., 2021). Countries need to develop their fintech industry because the latter can provide many benefits for the people such as convenience, efficiency, and saving time from not having to queue or travel to banks or payment centers. However, reports from different consumers in the retail industry indicate unethical practices that could undermine consumer trust and confidence.

2.6 ETHICS IN FINTECH

The growing importance of fintech to the global economy is becoming apparent. Experts have emphasized the role of more advanced computational power, better data capture and storage, and improved machine learning techniques in increasing practical applications (Campolo, Sanfilippo, Whittaker & Crawford, 2017). These are all relevant to fintech. However, there are concerns about the ethical implications of using fintech or its usual component, AI. Nevertheless, the financial services industry continues to propel fintech innovations (Talwar & Koury, 2017). It is expected that financial services will see among the highest returns of all industries in the coming years, featuring a range of applications including cybersecurity, portfolio management, fintech, and customer service chat-bots (FSB, 2017). It is surprising to note that ethical challenges faced by financial services industries including that which use AI have not inspired the development of any ethical guidelines or regulations for the technology's application in financial services as of the initial writing of the Code of Conduct in 2018.

Most reference to ethics in fintech involves AI, which is a component of fintech products. Although the financial services industry continues to lead in AI adoption across all industries, second only to technology, the use of AI in fintech raises several ethical concerns, thereby preventing the full operationalization of fintech. Therefore, addressing ethical risks associated with using AI in fintech within the financial services industry is crucial for reducing barriers to the technology's overall adoption as well as attaining the benefits that fintech can offer.

AI ethics that apply to fintech can be grouped into three broad areas. These three areas are ethics by design, ethics by design, and ethics for design

(Dignum, 2018). Ethics by design is sometimes referred to as machine ethics and pertains to the integration of ethical reasoning capabilities through algorithms or other techniques and tools to enable an AI system to exhibit ethical behavior (Dignum, 2018). There is a current debate about whether or not AI systems do have moral status and as such behave ethically. However, for the purposes of this study on the impact of ethics on fintech application in Kuwait's retail market, the focus is on the ethicality of fintech system outputs including that of AI.

On the other hand, ethics in design relates to the governance, policies, and processes supporting analysis and evaluation of the ethical implications of fintech with AI systems (Dignum, 2018). Meanwhile, ethics for design, commonly referred to as ethics for designers, relates to system designers' conduct as well as the standards, and certification processes that ensure integrity (Dignum, 2018). Ethics by design is at this point less relevant for a discussion of AI fintech because experts believe that AI systems within the next 15 years will not be able to autonomously choose to inflict harm on people and therefore will not be able to exhibit behavior, ethical or otherwise (Stone et al., 2016). Rather, the ethical implications of AI fintech applications arise out of AI systems being used by people to help or harm others instead of the fintech applications directly doing the harm (Stone et al., 2016).

While the specific AI ethics literature remains growing, a review of the broader field of IT ethics is warranted as researchers in the field have proposed that AI is a subset of IT, given that "technology hasn't changed the [ethical] issues, but technology has made the issues' analysis and application more complex" (Cordeiro, 1997). The theoretical models and frameworks within IT ethics can therefore offer a foundation for the study of AI ethics. A key IT ethics model is value-based systems design, a method that recommends system designers focus on developing applications based on a set of system stakeholder-aligned values (Spiekermann, 2015), which is similar to a set of principles or a code of conduct. A value is not equivalent to "the absolute good," rather it is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable, it is not just a preference but is a preference that is felt and/or considered to be justified – 'morally'..." (Spiekermann, 2015). Some values, such as the right to privacy of information, are deemed so important by a group that they become a right and enter that group's legal system (Spiekermann, 2015); a recent example is the newly legislated General Data Protection Regulation in the European Union. Application of the values-by-design method for AI applications in financial services would involve an AI system based on the values of an organization, business unit, department, or other groups.

2.7 GAP IN KNOWLEDGE

Many studies have been conducted on the definition of fintech, its business models, and its disruptive nature and markets. Studies have also been conducted on the use of fintech by retailers and many scholarly investigations have been undertaken on business ethics, including that which involves technology. However, up to this point in time, there is little attention to the ethics of fintech applications used in the retail industry. Currently, there is no existing study on the impacts of ethics in fintech applications in the retail market in Kuwait. This study seeks to address that knowledge gap.

3 CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter discusses the methodology for this study on the impacts of ethics in fintech applications used in the retail market in Kuwait. In the following sections, detailed discussions are made on the methodological framework used for this study, propositions, assumptions, research design, and data collection and data analysis methods.

3.2 PROBLEM STATEMENT

It was earlier discussed in this study that the fintech industry is still at its beginning in Kuwait. There are currently three competitors as fintech providers in Kuwait, excluding fintech applications used by banks. There are no specific policies about ethics in fintech particularly since fintech regulations are mostly if not all based on regulations for financial institutions and banks rather than fintech specifically. As a result, fintech in Kuwait is vulnerable to cybercrime and consumers become vulnerable to privacy violations. However, a problem at hand is that retailers are already using fintech applications for their business transactions but the fintech providers, themselves, do not have clear policies for the ethical use of fintech while the government also does not have clear ethical laws, rules, or regulations for ethics in the use of fintech.

Without these clear laws, rules, or regulations on the ethical use of fintech, stakeholders including customers and fintech companies themselves, can be harmed. Although there have been no reported breaches in Kuwait's fintech market, cases in other countries have been reported. For example, a customer filed a lawsuit against mortgage fintech Decrease because of a hack, alleging that the fintech company failed to guard its customers' private information (Martinez, 2022). On the other hand, there have been many incidences of data breaches and hacking in Kuwait. It has been reported in reliable sources that 887 Kuwaiti websites had been hacked early in 2022 (Arab Times, 2022). More than 4,360 files containing customer data and information have been compromised. The hacked websites even included government websites as well as those of private institutions, in the fields of various services, education, communications, transportation, and online retail (Arab Times, 2022). When a data breach such as this occurs, unscrupulous entities gain access to the personal data of millions of customers and has become increasingly common, affecting even large companies like Adobe, Anthem, Equifax, Home Depot, Sony,

and Target (Hoehle, Venkatesh, Brown, Tepper & Kude, 2022). Customer's personal and sensitive information, including addresses and credit card numbers, can be stolen in a cybercrime called identity theft (Hoehle et al., 2022). Identity theft is associated with massive fraud and compromises the real owners of data, the customers, to use their own personal and sensitive information. Against this backdrop, this study seeks to address the following major and minor research questions:

3.2.1 Major Research Questions

The major research question that this study seeks to answer is: Do ethics have a significant impact on fintech applications in Kuwait's retail sector?

3.2.2 Minor Research Questions

The following are the minor research questions that this study seeks to answer:

1. Is there a specific set of ethics applicable to fintech in Kuwait's retail sector?
2. How do current practices in Kuwait's retail sector reflect the level of ethics in fintech applications?

3.3 RESEARCH OBJECTIVE

The literature review of this study reveals a knowledge gap. This knowledge gap relates to ethics in fintech applications used by retailers in Kuwait. Therefore, in order to address this gap in knowledge, this study seeks to explore the extent that ethics impacts fintech applications in Kuwait's retail sector.

3.4 METHODOLOGICAL FRAMEWORK

It is important for fintech providers and the retailers that use fintech to ensure that consumers can trust these solutions. The methodological framework used in this study combines ethical principles, business ethics, and regulatory frameworks (Anshari, Almunawar, Masri & Hardy, 2021; Au & Kauffman, 2008; North-Samardzic, 2020). The ethical principles of deontology and consequentialism are relevant to this study. First, in

fitting into consequentialism theory, one can use the Utilitarian principle in understanding why companies operating in Kuwait's retail sector would use fintech even though there are unethical risks (Anshari et al., 2021). According to utilitarian moral theory, the morality of an action is calculated by totaling up the happiness or well-being created by that action. The action of deploying fintech is considered right if it results in greater happiness over suffering and pain. The advantage of utilitarianism is that the consequences of actions are calculated while the disadvantage is that the concern with aggregate happiness neglects the worth of the individual who, although in a minority, may deserve help. Therefore, the use of fintech is warranted despite its risks because people have been demanding more effective and efficient means of making financial transactions.

Second, deontology or ethics of duties are underpinned by moral rules that emphasize doing things that are right without considering the consequences (Anshari et al., 2021). The deontological theory of the use of technology such as fintech for business use has variable duty ethics in terms of their internal shareholders. In analyzing information privacy or data privacy, which are the greatest unethical risks relative to technology, with this ethical method, there should be corresponding duties for claiming a right to information privacy. Therefore, in protecting the privacy of information, duties that must be determined and imposed are maintained by considering the sources of rights such as privacy. In relation to these, regulatory frameworks are expected to ensure the moral application of technologies such as fintech. These regulatory frameworks need to be created to protect the right of the consumers. Protecting this right is a duty forced on fintech companies.

Meanwhile, privacy and data protection legislation and regulations are the cornerstones of the appropriate use of fintech, protect important issues such as function creep as well as establish clear guidelines around data ownership, proportionality, benefit, access, transparency, and purpose (North-Samardzic, 2020).

The methodological framework for this study is interpretivism. The use of interpretive inquiry is justified when the researcher engages with the subjective process of interpreting and seeking to understand findings based on his or her belief and values. Interpretivist studies interpret the social world as "culturally derived and historically situated" (Blaxter, Hughes & Tight, 2010, p. 61). According to the interpretive perspective, there are different realities among different people, which means to say that making generalizations in interpretive inquiry is undesirable

and not possible although the study is “value-bound” (Onwuegbuzie, Johnson & Collins 2009, p. 114). In interpretive studies, the investigator comprehensively described and defines the phenomenon being studied so that it can be subsequently analyzed according to themes (Shenton & Hay-Gibson 2009). In this study on fintech, interpretivism plays a crucial role in data analysis. It is important to note that in interpretive inquiry, the basis of data analysis is the theoretical belief that reality is socially constructed. Therefore, the investigator knows that reality is negotiated within cultures, social settings, and relationships with other people. Meanwhile, this qualitative study also uses deduction. The deductive approach to qualitative inquiry is used throughout this study, including participants’ interviews.

3.4.1 Propositions

Propositions form the basis for scientific research (Avan & White, 2001). The validity of a research study is, to a large extent, evaluated on the criteria of its propositions. In this study are relational propositions that help to identify the association between concepts and define the distinctive characteristics to a required level. By suggesting a link between two concepts, a scientific proposition can suggest promising areas of inquiry for researchers. In areas of study where valid hypotheses can rarely be made, a proposition may serve as a common assumption that can support further speculation. Propositions are also valuable in areas of study in which there is little empirical evidence.

- a. According to the utilitarian moral theory, fintech companies operating in Kuwait’s retail sector must follow clear ethical code.
- b. According to the utilitarian moral theory, adopting ethics in fintech applications will result in the well-being of many rather than suffering and pain.
- c. Ethics in fintech according to the utilitarian moral theory should not neglect the worth of an individual deserves help.
- d. According to deontology or ethics of duties, it is the duty of fintech companies to do what is ethical even if there are adverse consequences such as increased costs (Anshari et al., 2021).
- e. The deontological theory of the use of technology such as fintech for business also gives the fintech companies duties to their internal shareholders.

- f. The deontological theory of the use of fintech for business says that fintech companies have the duty to ensure rights to information privacy. The privacy of users' information must be protected.
- g. Regulators have the duty to ensure the moral application of technologies such as fintech.
- h. Lawmakers and regulators must establish privacy and data protection legislation and regulations addressing the ethical use of fintech (North-Samardzic, 2020).

3.4.2 Assumptions

The lack of strict standards encouraged unethical parties to take advantage of the situation and maximize their gain. Just as importantly, it is assumed that despite the potential ethical risks of fintech in retail, affecting the range of stakeholders in the said industry, the tradeoff is such that these stakeholders would continue to use fintech. This points to the relationship that society has with technology – a relationship that could be impacted by ethical dilemmas (Au & Kauffman, 2008; North-Samardzic, 2020). Moreover, as these dilemmas are generally new, existing laws and policies may not apply nor regulate them appropriately.

3.5 RESEARCH DESIGN

This study uses the qualitative research design. In qualitative studies, the researcher seeks to deeply understand the phenomenon being studied. As a qualitative inquiry, this study seeks to describe, explore, and discover the impacts of ethics on fintech applications used in Kuwait's retail market. The main rationale for choosing the qualitative research design for this study is to obtain a richly detailed understanding of ethics in fintech.

As a qualitative study, this investigation does not seek to prove or disprove a hypothesis. Rather, this study seeks to better understand fintech ethics relative to retailers in Kuwait, and interviewing them through the appropriate questions can provide deeper insight than proving or disproving a hypothesis. In order to obtain a deep insight into this study's subject matter, six participants were interviewed using open-ended interview questions (Silverman, 2013). Through open-ended interview questions, the researcher can capture the experiences and viewpoints of the study participants. The participants were interviewed to help address the research questions and gaps in knowledge.

3.5.1 Target Population and Sampling Methods

The target population for this study was comprised of interview respondents who are knowledgeable about ethics, fintech applications, and the retail industry. There were six participants for this study who were involved in the interviews to gather information on the research questions. Notably, in qualitative studies, purposeful sampling is applied in order to get respondents who have critical and in depth information. This means that the sample is not recruited through randomization but rather, according to the researcher's convenience. However, the goal is to find "information-rich cases for in-depth study" (Mills, 2010, p. 838). First, a list was generated of possible interview respondents for this study. They were contacted through email so that they may be invited as participants. The first three retailers and the first three fintech company managers who responded were selected to be participants. The aim was to get representation from the fintech company managers and retailers in order to gain information on the typical cases of fintech service providers in Kuwait.

Six interview participants were recruited for this study. The specific purposeful sampling method used in this study is criterion sampling to select the participants. In criterion sampling, study participants are selected according to pre-established criteria. Also, in qualitative studies, the sample is kept small, and the goal is to find information-rich participants. There were participants in this study sharing certain traits. The pre-established criteria are that the participants should be (a) managers of a fintech company in Kuwait and managers of a retailer in Kuwait; (b) knowledgeable about business ethics, and (c) may be Kuwaitis or of other nationalities. Knowledge about ethics was requested in the invitation to participate in the study, with knowledge about ethics defined as knowledge about fundamental ethical principles. For participants from fintech companies, knowledge about ethics encompasses knowledge about tech-related business ethics.

The number of participants was kept small in this study because the researcher's main goal is to deeply understand the phenomenon being studied (Williams, 2012). Therefore, for this study on the impacts of ethics on fintech applications in Kuwait's retail market, only six participants comprise the sample. Containing the sample size to only six participants prevents saturation. By keeping the sample population for this study small, the researcher had only a few sets of responses to analyze, thereby having the time and faculties to effectively explore themes, dimensions, and qualities relevant to the data collected from the participants. It was

also important to divide the participants into two groups: fintech managers and retailer managers in order to gain insight from both the perspectives of fintech and retailers. These two groups are affected by ethics or the lack of ethics in the use of fintech applications in Kuwait's retail industry.

3.5.2 Data Collection Instrument and Source

The instrument used for data collection is an Interview with open-ended questions. The source of the questions were topics of interest in articles on the subject matter published in peer-reviewed journals including Aderonmu et al. (2013) and Phukan and Dhillon (2000). The interview questions were also based on the AITP (2022) Standards of Conduct. Permission was sought from the participants for their interviews to be recorded to facilitate subsequent data analysis. The informed agreement was also obtained from all of the participants.

Email invitations were sent to 24 individuals: 12 from the retail sector and 12 from the fintech sector. The email invitations asked them if they were interested in participating in this study through interviews. Only 11 invitees responded and only 6 responded in the first affirmative. Fortunately, of these 6 invitees, three were from the retail sector and three were from the fintech sector. However, one from the retail sector was not a manager but a key developer of a fintech company with significant experience in application development. He was considered qualified to participate in this study. Purposeful sampling was used in selecting the participants.

In this study, one of the goals is to find information-rich participants consistent with the qualitative method. Open-ended questions were asked from these participants with the interview questions seen in the Appendix of this paper. An open-ended interview guide that the researcher developed guided the interviews, which is seen in the Appendix of this paper. The interviews were conducted through the online platform Zoom to save time for both the researcher and the participants. The interviews were recorded with the permission of the participants. The transcripts were analyzed using coding and thematic analysis.

The interview questions were modified from questionnaires that researchers have earlier used in their studies. Although there is no widely-validated scale as of yet relevant to the ethical use of fintech, questionnaires relevant to the ethical use of technology and information technology (IT) have been validated (Aderonmu, Aasheim, & Rutner, 2013; Phukan & Dhillon, 2000). Phukan and Dhillon (2000), sought to investigate

the beliefs and attitudes of small- and medium-sized enterprises (SMEs) on the ethical use of IT. The survey questions that Phukan and Dhillon (2000) used to address organizational information security policies that are applicable to this study on the impacts of ethics in fintech applications in Kuwait's retail industry. On the other hand, Aderonmu et al. (2013) sought to design a survey instrument to determine the effectiveness of the IT and information systems (IS) programs in teaching ethics and ethical behavior as it relates to the IT profession. Part of its questionnaire for IT/IS professionals are also applicable to this study on the impacts of ethics in fintech applications used in Kuwait's retail market. Lastly, the Association of Information Technology Professionals (AITP) (2022) Standards of Conduct also contributed to the creation of the interview questions for this study's participants.

3.5.3 Data Analysis Methods

For this study, the researcher utilized qualitative coding. The coding was done manually with the researcher creating a codebook. In the qualitative coding for this study, the researcher first transcribed data collected through participant interviews. Excerpts from the interview responses were then systematically categorized into blocks of information that reflected specific patterns and subsequently, themes were extracted from the codes. Through this type of coding, the researcher can derive in-depth analysis based on open-ended interviews (Flick, 2018). External validity was achieved because the study is theory-driven. Reliability was achieved through the use of the appropriate methodology and data analysis as well as the appropriate analytic constructs and premises while having multiple participants.

3.6 TRUSTWORTHINESS AND CREDIBILITY OF STUDY

As a qualitative study, this investigation ensured trustworthiness and credibility rather than reliability and validity which are associated more with quantitative studies. Trustworthiness is crucial for all qualitative studies. To achieve trustworthiness, a study has to be credible, transferable, dependable, and confirmable (Merriam & Tisdell, 2015). The study is free of bias particularly in interviewing participants. This was done by preparing an interview list beforehand so that credibility will not be compromised.

3.7 ETHICAL CONSIDERATIONS

This study was undertaken according to the highest ethical and scientific standards. This study does not expose participants to harm, discomforts, or inconveniences. As mentioned earlier, informed consent was obtained and processed from the participants, who were all fully informed about the study objectives and the nature of their participation in the study. The participants were also assured that they can withdraw from this study at any point they may so desire. The participants were also informed that they may refuse to answer any of the questions asked during the interviews. None of the participants are identified in the study to protect their identity and confidentiality. Data collected will be stored in the researcher's personal database.

3.8 RESEARCH LIMITATIONS

This study has two limitations. First, there is a high degree of subjectivity in data because data collection focused on participant interviews. Second, the sample is small because of resource constraints on the part of the researcher. Even though qualitative studies have intentionally small sample populations, more participants from fintech companies should have been recruited for interviews.

4 CHAPTER 4: DATA ANALYSIS, FINDINGS, AND DISCUSSION

4.1 INTRODUCTION

Six participants were interviewed for this study to answer open-ended interview questions. Their responses were transcribed and coded, after which themes were extracted from the codes. This chapter presents the results of the interviews as well as a discussion of participant responses according to concepts discussed in the literature chapter.

4.2 RESULTS AND ANALYSIS

This study aimed to determine whether ethics has a significant impact on fintech applications in Kuwait's retail sector. Three other minor research questions are to be answered through this study. These are to determine (a) the extent to which ethics impacts the application of fintech in Kuwait's retail sector; (b) the specific set of ethics applicable to fintech in Kuwait's retail sector; and (c) the current practices in Kuwait's retail sector and the level to which ethics is reflected in fintech applications. Six participants were interviewed for this study. The summary of the participants' qualifications for this study are shown in Table 4.1 below. Aliases are used to identify the participants according to ethics in research.

Table 4.1: Participants' details

Participant ID	Rank/Organization	Knowledge on Ethics	Nationality
Participant 1	Manager of online retailer	Yes	Kuwaiti
Participant 2	Owner of online retail	Yes	Kuwaiti
Participant 3	Sales manager of retailer	Yes	Kuwaiti
Participant 4	Manager of startup fintech	Yes	Kuwaiti
Participant 5	Developer of startup fintech	Yes	Kuwaiti
Participant 6	Manager of startup fintech	Yes	Kuwaiti

As a result of the interview, three themes were extracted from the coding of the interview transcripts.

The following are the said three themes.

1. For the fintech providers, ethics is not as important as technology.
2. For fintech providers, regulatory compliance ensures ethical products and services.

3. For retailers, an extra step for ethical use of fintech is required for consumers.

Theme 1. Throughout the interview, it seemed that the fintech providers are more concerned about the innovativeness of their solutions. There is little attention to ethics except for the “usual ethical measures” (Participant 4).

Theme 2. The participants from the fintech companies believe that complying with the government’s regulations and laws about ethics is enough to ensure ethical products and services. According to Participant 5, their fintech company fully trusts the government to ensure ethical protection for all fintech users. Participant 6 says that their company will be expanding to other countries because they aim to be a global fintech company. In other countries, they will also ensure regulatory and legal compliance to ensure ethical practice.

Theme 3. There is agreement among the retailers using fintech that they need extra measures to ensure the ethical use of fintech when transacting with their companies. An example of these extra measures are reminders about not sharing passwords, logging out, not using the app in internet cafes, and using two-factor authentication.

4.3 DISCUSSION AND FINDINGS

Three major themes were determined from the interviews of the participants. Overall, there were six participants representing five organizations. Three participants represented three retailer businesses and three participants represented two fintech companies. This means that Participant 4 and Participant 5 belong to the same fintech companies. This chapter discusses the findings of the interviews and is organized according to themes derived from the data analysis of participant interviews. The themes were identified through cross-referencing participants’ interview responses according to similarities, differences, frequencies, correspondences, and causations (Saldana, 2008).

Theme 1. For the fintech providers, ethics is not as important as technology.

Fintech applications are innovative. Due to the intensely competitive fintech industry, fintech companies usually compete on the basis of innovation. The pursuit of innovation in fintech is warranted because of the increasing demands of businesses and users. Participant 4

emphasizes: "Innovation is at the heart of our operations." Moreover, Participant 5 says, "The best contribution that I can make to our startup is continuous innovation. All of our end users will gain from innovation. Believe me."

New technologies are reshaping the financial services industry, actively displacing traditional players and traditional business models. It cannot be emphasized enough that attempting into the development and rollout of fintech products and services require large financial capitals. Therefore, ensuring innovativeness is one way that fintech companies to recapture their investments. As a result of fintech, consumers and businesses now have financial solutions that allow them to change consumption patterns, reduce costs for certain functionality such as processing of customer bases, loyalty programs, rewards, and so forth. The use of fintech applications is beneficial for retailers and their customers. For example, fintech applications enhance the efficiency and accuracy of transactions. For businesses such as retailers, fintech enhances business processes quality such as audience targeting and scoring and significantly influences the sustainability of core business development. Consequently, fintech is transforming itself into an intensively developing sector of the modern economy.

Although fintech has revolutionary and disruptive potential, it continues to be a topic of contention (Ng et al., 2019). This is because fintech can be applied in ways that are unethical to the disadvantage of users. One cannot deny that fintech products and services have led "to new entrepreneurship, unbridled innovation, and significant growth in interest by venture capital firms to become involved" (Ng et al., 2019, p. 1). Today, fintech companies provide many benefits in the innovativeness of fintech.

However, as can be determined from the interviews with Participants 4, 5, and 6, ethics has been considered as secondary to innovation. All of the participants are knowledgeable about ethics as well as knowing right from wrong. Ethics in fintech is specialized because of the nature of fintech. According to Anshari et al. (2021), ethics as a business concept has different meanings for different people. In a nutshell, business ethics pertains to what is morally right and what is wrong in business (Anshari et al., 2021). Business ethics is important because when sustained, it protects the welfare of society as treasured in an organization's culture.

Today, many companies focus on profitability and the growth of their organization even at the expense of ethics. For the participants in this study, ethics is not fully disregarded although it takes a back seat to competitive advantage. Sometimes, this is unintentional (Anshari et

al., 2021). Indeed, there are many organizations that know about ethics but lack the knowledge about how to ensure ethical business practices (Anshari et al., 2021). This is more rather the case of the participants for this study. As mentioned in chapter 2 about the Utilitarian principle, when analyzing information privacy or data privacy, there should be corresponding duties for claiming a right to information privacy. However, now ethical privacy protection for users is not full but rather, only for the sake of compliance. This is related to the second theme determined through this study.

Theme 2. Compliance with national regulations and legislation will ensure ethics.

According to Participant 5, “We fully trust the government to ensure ethical protection for all fintech users.” Moreover, Participant 6 says that “Our company will be expanding to other countries because they aim to be a global fintech company. In other countries, they will also ensure regulatory and legal compliance to ensure ethical practice.” Here, it may be understood that the participants rely on regulations and laws to ensure ethical practice. However, right now, ethics in fintech in Kuwait is not fully ensured by regulations and laws.

Currently, in Kuwait, digital payments through banks constitute the largest share of fintech services. Banks and other financial institutions have their own tight ethical policies for the products and services that they deliver. However, not all fintech in Kuwait are banks and financial institutions. Many fintech startups are technology companies, implying that the codes of ethics of banks and other financial institutions do not apply to these tech companies. Therefore, the latter simply depends on laws and regulations when it comes to ethics, as well as existing ethical standards for tech. A risk here is that these ethical standards for tech may not be applicable to financial services. These make fintech retailers and their customers vulnerable to suspicious entities that hack and steal their information. As mentioned in Chapter 2 of this paper, Kuwait’s Central Bank is now implementing the Regulatory Sandbox Framework to inspire fintech growth and allow banks to test new technologies. Again, not all fintech companies in Kuwait are banks. The Sandbox does not even touch on ethics. This means to say that fintech companies are relying on regulations and laws for ethical practice but the laws and regulations that they rely on for ethical practice do not touch upon ethics.

At the other end of the spectrum, having effective regulations can provide the potential for fintech to be a good societal intervention that makes transactions convenient for parties involved, as well as increased

efficiency in analyzing large datasets, reduction of mundane tasks with reliability and consistency, opening financial services, to complementing hazardous human tasks-bomb disposal, and precise medical interventions. By tempering good with ethical practice, a fintech with AI systems can behave according to its intended purpose. Regulation must also cover policies of ethical engineering that are unbiased and fair as well as promote equality of use aligned with societal values.

Regulations and legislation should take time to look at the gray areas of AI systems. Despite the promise of AI, it is AI that raises significant ethical issues for fintech. In this gray area, computer scientists and engineers find that the machine learning systems used for predicting an outcome continue to be opaque or cannot be adequately observed. Ensuring that stakeholders are protected in this gray area, regulators and legislators must make sure that fintech is not only done ethically but also satisfies machine learning principles.

Theme 3. Retailers using fintech that they need extra measures to ensure the ethical use of fintech when transacting with their companies.

Retailer participants of this study emphasize that they have to ensure ethical use of fintech products that they ask their customers to use. Participant 1 says: "We are an Islamic company. Because I still worry about the risks of using fintech in relation to ethics, I asked our tech consultant to make policies ensuring ethics. This way, I can uphold my Islamic views about protecting my customers."

Participant 2 has the same view. "Most of our customers are Muslims. I do my business honestly according to our faith. It is my responsibility to protect my customers. So yes, I have rules about the ethical use of the fintech app that we ask our customers to use. Of course" (Participant 2).

As mentioned earlier, examples of extra measures that fintech companies use are reminders about not sharing passwords, logging out, not using the app in internet cafes, and using two-factor authentication. For Islamic businesses, ethics is built into the DNA of their operations (Fernández, 2021). "In Islam, we protect and love our community. We have a saying in Islam that Muslims are my brothers and sisters to whom I must never do wrong. If I do good to them, Allah will fulfill my needs and relieve me of all troubles." This means I have to ensure that my customers are secure when they purchase from me using the fintech application.

Meanwhile, Participant 3 is fully aware of the ethical issues that may arise from his use of fintech in accepting payments from customers.

“Black hat hackers, misuse and fraud, hacking, identity theft, these are all risks that can expose my customers. I don’t want to expose them, which is why I have a clear link in my online store about how customers can easily reach the fintech company for any issues and fears about privacy” (Participant 3).

Although all the perspectives of retailer participants are insightful and ethical, it cannot be emphasized enough that they are not tech companies and their knowledge about ethics in tech could be lacking. This means to say that even if they have policies for the use of fintech, retailers still require ethical policies coming from the fintech experts themselves.

Eight propositions were made for this study. The utilitarian moral theory says that fintech companies operating in Kuwait’s retail sector must be ethical but the findings of this study show that the companies are not ethical because, for the participants, innovation and technology are more important than ethics. It was also proposed that ethics in fintech applications will result in the happiness and well-being of many rather than suffering and pain, and this was demonstrated by retailer participants. Moreover, ethics in fintech according to the utilitarian moral theory should not neglect the worth of an individual who deserves help but again, this was not manifested by the fintech participants since ethics is not as important as technology for them. However, retailer participants did care about the worth of individuals, particularly their customers. The deontology or ethics of duties says it is the duty of fintech companies to do what is ethical even if there are adverse consequences such as increased costs but the fintech company participants in this study did not do their duties, although it seems that they are more vested in their internal shareholders.

The deontological theory of the use of fintech for business says that fintech companies have the duty to ensure rights to information privacy and the fintech participants do see to the privacy of their users’ information. Regulators have the duty to ensure the moral application of technologies such as fintech, but this has not happened in Kuwait yet, and lawmakers and regulators have yet to establish privacy and data protection legislation and regulations addressing the ethical use of fintech.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Technological innovation plays an important role in the development of the financial services industry. The manners through which individuals and organizations manage finances have already quickly changed over the past decade as different technologies, such as electronic banking and automated advisers, and fintech has been designed to help achieve better financial well-being. However, an issue at hand is the lack of regulations and legislation on ethics relative to fintech. For example, challenges presented by AI-enabled fintech have highlighted the need to urgently regulate information privacy regulations and the principles that underlie them to meet the needs of the new era. This is because responsible and ethical data utilization is part of the requirements of using data effectively and efficiently. As such, data collected must be used in a way that is in the best interests of the customers. Awareness and control of the data collection and its intended use could also minimize ethical issues and public concerns.

Besides that, all the stakeholders play a vital role in any organization as they are the key to successfully managing the organization where fairness and trust should exist as well as taking social responsibilities. If the problems of the responsible and ethical usage of fintech in retail would be successfully solved, very positive consequences for the financing of people and enterprises will come. Some platforms allow the use of fintech for payments linked to other banks and so as to support corporate financing and the development of corporate activities. Extending the possibilities of financing companies with additional resources can contribute to their development and thus to society-wide progress, such as the development of employment and the development of structurally disadvantaged regions.

In Kuwait, the fintech industry is at an early stage. Therefore, there is inadequate regulation and legislation requiring the ethical use of fintech applications in the retail industry. It is essential to acknowledge the strides taken by the CBK in enhancing the development of the sector. Some of the key initiatives set by the CBK include the development of a dedicated fintech unit for its regulation. The regulatory sandbox framework has also been essential as a tool for enabling banks to test new technologies and regulation of e-payment activities in the state of Kuwait. The sandbox framework allows companies to test technologies and products in a four stage process where they are exempt from regulatory and licensing requirements (Handoush, 2022). This sandbox framework can also be applied to evaluate the impact of regulations set for the sector on

ethical consequences of the products and fintech innovations through assessment of the regulatory and operational aspects.

This qualitative study sought to address the major question of whether ethics has a significant impact on fintech applications in Kuwait's retail sector. Based on a review of literature on fintech in Kuwait, it does not seem that ethics has a significant impact on fintech applications in Kuwait's retail sector. Indeed, ethics seems to have minimal impact on the retail sector. This is made possible by retailers, most of whom are Islamic, who want to ensure that they protect their customers. Unfortunately, for the fintech companies themselves, competitiveness and market share are more important than ethics.

Aside from the knowledge gathered from the literature review of this study, this conclusion was also derived from participant responses to interview questions about ethics in fintech applications in Kuwait's retail industry. Six participants were interviewed, all of whom are actively involved in Kuwait's retail industry as retailers or managers of retailer stores, as well as in fintech companies. The participants were asked open-ended questions so that they can discuss their experiences and insights at length. Coding and thematic analysis was done on their transcribed interview responses.

On the other hand, three minor questions are addressed in this study:

1. Is there a specific set of ethics applicable to fintech in Kuwait's retail sector?
2. How do current practices in Kuwait's retail sector reflect the level of ethics in fintech applications?

Regarding the first question, interviews with six participants shed light on ethics has little impact on the application of fintech in Kuwait's retail sector – from the perspective of fintech companies, regulators, and legislators. It is only the business owners who seem to significantly care for ethics in fintech. Regulation and legislations are at the beginning stage and a work in progress. Fintech companies rely on these regulations and legislations that, in turn, are inadequate in attention to ethics.

The specific set of ethics that are applicable in Kuwait's retail sector is Islamic in nature on the part of retailers but for the fintech companies, the usual ethical standards for technology are used. An issue with the latter is that the usual ethical standards may not be sufficient for finance-oriented applications that require volumes of private customer information.

Lastly, as explained in the previous chapter, current practices in Kuwait's retail sector show the aspiration for ethical practice which is why retailers implement their own ethical rules for the use of fintech. The bottom line is that the retailers blame the fintech companies for any problems with the tech, including ethical issues. This is a cycle wherein the fintech companies that deal with issues also rely on regulations and legislations that do not have adequate attention to ethics.

Considering the ethical challenges in fintech used by retailers in Kuwait, the following recommendations are made.

1. The government should update the Sandbox to incorporate ethics.
2. The Central Bank officers must work with the Ministry of Finance and National Assembly in order to ensure the ethical use of fintech.
3. Fintech regulators must ensure that support for ethical practice among businesses is provided, including, customer support. As such, fintech firms should allow B2B and B2C customers sufficient independence in choosing the services they will benefit from with the assurance that there are no risks of ethical violations.

In conclusion, fintech companies must ensure that they are not only in the business of fintech services and exchange of information. In this scenario, fintech companies must take it upon themselves that the ethical use of fintech is guaranteed to every user in the absence of comprehensive regulations and legislation on the ethical use of fintech. It cannot be emphasized enough that responsible data usage and ethical data usage are both part of the requirements of using data effectively and efficiently, which falls under the responsibility of the fintech provider.

In terms of future research, it is important to study how society's interest would be best supported by fintech providers. It is also necessary to define who should be responsible for confirming that digital safety is ensured in the likely event of more rollouts of innovative AI systems within fintech that are lacking human oversight. Aside from the fintech providers, future research must also tackle how organizations such as retailers can structure their own ethical conduct on the use of fintech from their perspective. Studies must be undertaken on how retailers can frame actions and governance so that they can build a digital ethics culture. Lastly, it would also help to investigate how fintech providers and retailers can collaborate with one another to craft ethical standards and policies.

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Appendix

Interview Questions

1. Up to your knowledge, how would you describe the history of fintech application/significance in your retail business.
2. Does your business have a clear policy regarding ethical use of fintech?
 - a. If yes, please describe these policies.
 - b. How can you ensure that employees abide by these policies?
 - c. What is the theoretical basis of ethics in your fintech policies?
 - d. What are the penalties for the violation of these fintech policies?
 - e. If no, please explain the reason(s) for not having such policy.
 - f. If no, please explain how you ensure ethical use of fintech in your business.
3. Does your company have policies for the protection of customers using fintech?
 - a. If yes, please describe these policies.
 - b. How can you ensure that these policies will effectively protect the privacy of your customers using fintech?
 - c. How can you ensure that customers are aware of their obligations in protecting their own privacy when using fintech?
4. In your opinion, what do you think are customers' motivations in adopting fintech?
 - a. What is the possible ethical issues implication in this fintech adoption?
5. What do you think are the implications of fintech adoption in your business ethics?
 - a. Has fintech adoption complicated your business practices? Why or why not?
6. Who is responsible for ensuring ethical use of fintech in your organization?
 - a. What are the duty ethics of this person?
 - b. Who established these duty ethics? How and why?

7. Does the ethical use of fintech impact your mission and vision?
 - a. What are the mission and vision of your retail business?
 - b. How has ethical use of fintech affected the attainment of your mission and vision?
8. Is there a specific set of ethics applicable to fintech in Kuwait's retail sector?
 - a. Please describe these national ethics in fintech adoption within retail?
 - b. What are compliance requirements for these rules?
 - c. How do you enforce these rules on ethics?
9. From your perspective as a retailer, how does current practices in Kuwait's retail sector reflect the level of ethics in fintech applications?
 - a. What is your process of selecting fintech applications?
 - b. What are the ethical criteria you expect to be met by fintech application vendors?
 - c. Do you consider fintech applications to be ethical risks?
 - d. Do you think providers of fintech applications address these risks?

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