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Conceptual Development of Factors Driving Fintech Adoption by Farmers

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Abstract

The study aims to identify most prominent factors for fintech adoption by farmers and proposes a conceptual framework on the basis of factors identified. The study finds that perceived risk is the most dominating factor that negatively affects the intention to adopt fintech products and services by farmers globally. Perceived risk and security are the major concerns to adopt fintech services. Other dominating factors are perceived usefulness, trust, perceived ease of use, convenience and social influence. Attitude, perceived risk, perceived value and user innovativeness are the significant mediators used in the literature. Demographic factors like age, gender and experience are the major moderators that strongly affected the association between drivers of fintech and intention to use it. The study also offers a new conceptual framework to enhance adoption of fintech products and services by farmers globally.

Keywords: Fintech adoption and farmers, Digital payment, Digital Lending, Mobile money adoption, Fintech and agriculture

Introduction

Technology advancement plays a significant role in agriculture. Technological adoption alleviates poverty and enriches the lives of rural people (Gaffney et al., 2019), also, the technology used through innovations affects the farmer's perception, expectations, and preferences towards farming activities (Sharma & Singh, 2015). According to Rapsomanikis (2015), poverty is the main concern for almost 874 million people (FAO, 2021) employed in agriculture globally. Also, Gaffney et al. (2019) stated that lack of infrastructure facilities in rural areas such as transportation systems, electrification and telecommunications, marketing facilities, and insufficient credit support are the major constraints.

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Figure 1: Challenges for Fintech Adoption by Farmers

Limited Smartphone Ownership	Low Digital Literacy	Cash Culture	Lack of Smallholder Data
Despite growing smartphone penetration across the world, mobile phone ownership among farmers is still limited.	Farmers are an older demopgraphic and face a steep learning curve for digital adoption. Even if they have a phone, they l ack awareness of mobile finance platforms.	Since the agricultural value chain relies highly on cash, farmers generally prefer to cash out even if they have a digital wallet. They also lack trust and confidence in performing digital transactions on their own.	While smallholders lack traditional credit information and collateral, alternative data often require the physical presence of field staff to impute. There is also limited evidence that companies are willing to share the data they do have.

Source: (Economist Intelligence Unit (EIU), 2021)

Fintech is an innovative use of technology to transform the delivery of financial services. It has changed the financial landscape drastically with persistent innovations. Fintech has made financial services accessible to the segment that traditionally fell outside of the formal financial system. Fintech segment comprises payments, Insurtech, Regtech, Cybersecurity, Wealthtech and blockchain/ cryptocurrency (KPMG, 2022). Currently, fintech is applied worldwide but unfortunately rate of fintech adoption is not similar across countries (Utami et al., 2021). According to EY (2019), the consumer average fintech adoption rate is 64% worldwide. Emerging economies are leading the way with 87% adoption rate in both India and China; close behind are Russia and South Africa, both with 82% adoption rate.

Consumers wanting to adopt fintech products and services face consistent risk factors (Giovanis et al., 2012; Jayashankar et al., 2018; Muñoz-Leiva et al., 2017; Slade et al., 2014). Security concern is one of the pivotal factors that negatively influence the adoption decision of consumers (Kim et al., 2015; Ryu, 2018). Also, the literature lacks consensus on the variables and factors that prominently influence the intention to use fintech. Hence, it is crucial to decipher the driving forces behind increased fintech acceptance among farmers """(Utami et al., 2021).

The present study aims to identify the factors that strongly influence the intention to adopt fintech products and services by farmers. The review is divided into four parts: (a) the literature review, (b) factors used in previous studies (c) Dominant factors affecting fintech adoption by farmers and (d) the conceptual framework.

This study gives new insights and future research directions from the extant literature review. The review also highlighted the significance of prominent factors in fintech adoption by farmers. Although, there are numerous literature reviews available on fintech and fintech products and services adoption (Utami et al., 2021; Agarwal & Zhang, 2020; Sangwan et al., 2020; Karsen et al., 2019; Milian et al., 2019), none of them focus on the adoption of fintech products and services by farmers globally. Also, there is no literature review available on the factors which dominantly influence fintech adoption by farmers. Hence, this study provides extant literature on fintech adoption and identifies the most prominent factors of intention to adopt fintech services by farmers and tries to fill this gap. With the aim of enhancing fintech adoption by farmers globally, the study proposes a conceptual framework listing name of the country, acceptance model or theory, technology context and factors analysed with the role of moderators and mediators.

Literature Review

According to the Financial Stability Board (FSB) "Fintech is technologically enabled financial innovation that could result in new business models, applications, processes, or products with an associated material effect on financial markets and institutions and the provision of financial services". Zavolokina et al. (2017) defined "FinTech" as the marriage of "finance" and "information technology." and Gai et al. (2018) termed fintech as an innovative technology adopted by financial service institutions. However, Schueffel (2016) stated that there is no consensus on the meaning of the term 'Fintech'. FinTech is seen as a new market that integrates finance and technology with the innovative technological processes.

Different theories and adoption models for technology acceptance are considered to study the adoption of fintech such as the Technology adoption model (TAM) (Davis, 1989), the Unified theory of acceptance and use of technology (UTAUT) (Venkatesh et al., 2003), UTAUT2 (Venkatesh et al., 2012a), Diffusion of innovation theory (DOT) (Rogers, 1995), Theory of reasoned action (TRA), and Theory of planned behavior (TPB). TAM is

developed by (Davis, 1989) for predicting the users' intention to adopt information technology system. TAM mentions two central beliefs: perceived ease of use (PEOU) and perceived usefulness (PU). Perceived Ease of use is related to using a particular system effortlessly *(Davis, 1989)* and Perceived usefulness is the user's belief that using a particular system would enhance his or her performance (Davis, 1989). The TAM is validated by various studies as a robust framework to understand user's adoption of technology in varied contexts, such as the finance and business sector (Huei et al., 2018; Shaikh et al., 2020), mobile money adoption (Oteng, 2019), banking technology (Muñoz-Leiva et al., 2017), internet banking services (Giovanis et al., 2012). Also, studies using TAM have validated a strong mediating effect of an attitude (Huei et al., 2018) and perceived risk and value (Jayashankar et al., 2018) on using fintech and intention to adopt fintech.

Venkatesh et al. (2003) expanded TAM and introduced the UTAUT model considering users' external and internal factors towards adoption. UTAUT model consists of four major variables: performance expectancy, effort expectancy, social influence and facilitating conditions for technology adoption. Several studies focusing on antecedents of fintech adoption used the UTAUT model (Engotoit et al., 2016; Omar et al., 2021; Rezaei & Ghofranfarid, 2018; Singh et al., 2020). Performance expectancy is the belief that using a particular technology will enhance the job performance (Venkatesh et al., 2003). Effort expectancy is the degree of ease related to the using of a technology (Venkatesh et al., 2003). Social influence can be defined as the users' perception influenced by his/ her family, friends and relatives while making technology adoption decisions (Venkatesh et al., 2012b). Facilitating condition is the organizational and technical infrastructure support to use a particular system(Venkatesh et al., 2003). UTAUT is the second most successful model after TAM (Slade et al., 2014).

Venkatesh et al. (2012b) proposed the extension of the UTAUT model based on the further review of literature in the consumer technology context. UTAUT2 model further added four variables: hedonic motivation, habit, price value and interactive visual information. Hedonic motivation is fun or pleasure derived from using a technology (Brown A & Venkatesh, 2005). Habit can be defined as the extent to which people tend to perform behavior automatically (Limayem et al., 2007). Habit is a significant factor in fintech adoption like mobile application adoption (Hew et al., 2015; Septiani et al., 2020). Dodds et al. (1991) defined price value as consumers' cognitive trade-off between the perceived benefits and the monetary cost using them.

Many studies used the UTAUT 2 model in the context of Fintech (Omar et al., 2021; Singh et al., 2020), mobile money or digital money adoption '(Bharati & Srikanth, 2018; Dzogbenuku et al., 2021; Engotoit et al., 2016), and Peer to Peer (P2P) lending (Septiani et al., 2020). Literature using UTAUT 2 model, demographic factors like age, gender and experience acted as a prominent moderators in the association of fintech drivers and intention to use of fintech services. This has been validated by the studies of Slade et al. (2014), Bharati & Srikanth (2018), Hew et al. (2015) and Dzogbenuku et al. (2021).

Research Methodology

The study highlighted the process of searching the factors affecting fintech adoption, analysis, and synthesis. The researcher took the following major steps to execute in this study: literature search, defining research objectives, formulation of review protocols, literature extraction and synthesis of previous research (Pickering & Byrne, 2014).
The present study aims at a systematic search and analyses pervious studies in the last decade, discussing fintech adoption by farmers globally. The research employs 'Fintech adoption and

farmers', 'Digital payment', 'Digital Lending', 'mobile money adoption' 'fintech and agriculture' as the key search terms. In addition, this study also employs the other search strings like research paper criteria and publication time in the last decade to refine the search results.

The relevant research papers are collected through globally recognised databases such as Scopus and Web of Science. These referred journals are affiliated to reputed publishing houses including Tylor and Francis, Emerald, Sage, Wiley, Springer, Google scholar as the initial literature sources. To ensure the quality of the journals, this research follows the ABS and ABDC journals guide list and the impact factors (IF) from journal citation reports (JCR). Moreover, this research focuses mainly on the papers which analysed the factors driving fintech adoption globally.

Research Objectives

- To identify the most prominent factors affecting fintech adoption by farmers.
- To propose a conceptual framework from the identified factors.

Analysis and Interpretation

Table 1: List of Factors / Variables Used in Previous Studies

Authors	Country	Technology context	Acceptance model and theory	Factors/ Variables analyzed		
				Independent Variable	Mediator	Moderator
(Huei et al., 2018)	Malaysia	Fintech	TAM	Perceived usefulness; Perceived ease of use; competitive advantage; perceived risk; and perceived cost	Attitude	
(Dzogbenuku et al., 2021)	Ghana	Digital payment	UTAUT2	Security; ease of use and convenience	Satisfaction	Age and gender
(Belanche et al., 2019)	Spain	AI (Artificial Intelligence)	Triple hurdle model	Attitude and subjective norms		Familiarity; age; gender and country
(Septiani et al., 2020)	Indonesia	P2P lending	UTAUT2	Hedonic motivation; price values and habits		
(Oteng, 2019)	Ghana	Mobile money	TAM and IDT	Accessibility of mobile money; relative advantage; perceived compatibility; simplicity or complexity of use		
(Shaikh et al., 2020)	Malaysia	Fintech	TAM	Perceived ease of use (PEOU); perceived usefulness (PU) and consumer innovativeness (CI)		
(Giovanis et al., 2012)	Greece	Internet banking	TAM and IDT	Perceived ease of use (PEOU); perceived usefulness (PU); service compatibility and perceived risk	Perceived security and perceived risk	IT experience; gender and age
(Darmansyah et al., 2020)	Indonesia	Fintech	TAM	Planned behavior; acceptance model and use of technology		
(Muñoz-Leiva et al., 2017)	Spain	Mobile banking	TAM and IDT	Perceived ease of use; perceived usefulness; social image; trust; attitude; perceived risk; usefulness and risk factors		
(Singh et al., 2020)	India	Fintech	TAM and UTAUT, ServPerf and WebQual 4.0	Perceived usefulness; social influence and ease of use		Digital behavior and demographic characteristic (age and gender)

(Setiawan et al., 2021)	Indonesia	Fintech	Integrated TAM	Financial health; brand image; perceived ease to use; perceived usefulness; attitude; financial literacy; user innovativeness and government support	User Innovativeness and financial literacy	
(Hu et al., 2019)	China	Fintech	TAM	Perceived Usefulness (PU); perceived ease of use (PEU); attitude; trust; Brand image; government support and user innovativeness (UI)		
(Gupta & Arora, 2016)	India	M- banking	BRT	Ubiquitous; tradition barrier and openness to change.		
(Pillai & Sivathanu, 2020)	India	IoT	BRT	Reason for adoption: Relative advantage; social influence; perceived convenience; and perceived usefulness. Reasons against' adoption: Image barrier; technological anxiety; perceived price and perceived risk		Farm size and farmers' age
(Chuang et al., 2016)	Taiwan	Fintech	TAM	Brand and service trust; perceived usefulness and perceived ease of use.		
(Kim et al., 2015)	Korea	Mobile payment services	TAM	Ease of use and usefulness		CFIP (Concern for information privacy) and Self-efficacy
(Jayashankar et al., 2018)	USA	IoT	TAM	Trust; perceived value and perceived risk	Perceived value and risk	Farm size and age
(Engotoit et al., 2016)	Uganda	Mobile-based communication technologies	UTAUT	Performance expectancy (PE) and effort expectancy (EE)		
(Bharati & Srikanth, 2018)	India	Mobile learning	UTAUT2	Performance expectancy; facilitating conditions and quality of service (Qos)		Gender; age and experience
(Slade et al., 2014)	UK	Mobile payment	UTAUT2	Trust; perceived risk; trialability and self-efficacy		Age; gender and experience
(Rezaei & Ghofranfarid, 2018)	Iran	Renewal energy	UATUT	Perceived behavioral control; awareness; relative advantage; moral norms and attitude.	Attitude	
(Belanche et al., 2019)	Spain	Robo-advisor	TAM	Perceived usefulness; perceived ease of use; interpersonal influence; external influence; subjective norms and attitude		Familiarity; age and sex
(Omar et al., 2021)	Malaysia	e-Agri Finance	UTAUT	Performance expectancy; effort expectancy; social influence and facilitating conditions		
(Sivathanu, 2017)	India	Digital payment	UTAUT2 and IR	Performance expectancy; effort expectancy; social influence and hedonic motivation		Stickiness to cash payment
(Ryu, 2018)	China	Fintech	TRA	Economic benefits; Seamless transactions; convenience; financial risk, legal risk; security risk and operational risk		User type
(Arifin et al., 2019)	Bangladesh	MFS (mobile financial services)	TRI and E-ECM-IT	Value perception; perceived risk and ease of use	Perceived risk	Income; residence and use frequency
(Hew et al., 2015)	Malaysia	Mobile applications	UTAUT2	Performance expectancy; effort expectancy; facilitating conditions; hedonic motivation and habit		Gender and education level

(Zhao et al., 2022)	China	Digital finance	Digital finance use		Credit constraints, information acquisition, social interaction	Household and production characteristics
(Shi et al., 2022)	Bangladesh	IoT	UTAUT2	Government support; facilitating condition; social influence; hedonic motivation; effort expectancy; trust; price; personal innovativeness; willingness to pay and willingness to adopt		Facilitating condition
(Engotoit et al., 2016)	Uganda	Mobile communication	UTAUT	Performance expectancy		

Dominant Factors in Fintech Adoption by Farmers

Risk factor-

On the basis of the literature available on fintech adoption, it can be ascertained that perceived risk is considered pivotal in fintech adoption '(Arifin et al., 2019; Huei et al., 2018; Pillai & Sivathanu, 2020; Slade et al., 2014). Perceived risk can be defined as the uncertainty experienced by an individual while making a decision. Perceived risk is an important element which shapes customers' behavioural intentions toward fintech adoption (Giovanis et al., 2012; Muñoz-Leiva et al., 2017). Slade et al. (2014) reviewed factors that can influence the intention of customers to use fintech such as usefulness, ease of use, perceived risk, and perceived cost. The study also proposed the mediating effect of attitude towards factors and intention to adopt fintech and ascertained that risk has a significant negative effect on users' attitude towards fintech products and services. Also, "(Jayashankar et al., 2018) studied antecedents of Internet of Things (IoT) adoption among farmers and supported that perceived risk had a negative effect on IoT adoption. Higher the risk, lower the fintech adoption. Adoption and usage of fintech products and services can be enhanced by removing risk factor as perceived risk is one of the major barriers in fintech adoption.

Perceived usefulness-

Davis (1989) perceived usefulness can be defined as "*the degree to which a person believes that using a particular system would enhance his or her performance*". Kim et al. (2015) empirically tested and finds that perceived usefulness is the the pivotal factor in the acceptance of payment type fintech services. Singh et al. (2020) also found perceived usefulness as a key determinant for behavior intention to use fintech services. 'Pillai & Sivathanu (2020) investigates the adoption of Internet of Things (IoT) by farmers using the behavioral reasoning theory (BRT) and finds perceived usefulness one of the prominent 'reason for' fintech adoption. The existing literature has posited that perceived usefulness is one of the most critical factors in terms of fintech adoption and has a significant positive effect on attitudes toward using it (Chuang et al., 2016; Giovanis et al., 2012; Hu et al., 2019; Huei et al., 2018; Muñoz-Leiva et al., 2017; Setiawan et al., 2021; Shaikh et al., 2020). Thus, considering the theoretical and empirical results, it is posited that higher the perceived usefulness for fintech services, the higher will be their actual use.

Trust-

Hu et al. (2019) refered trust as users' overall perceived utility of an object. Trust has always been the pivotal factor in the context of fintech adoption especially by rural people and thus has been a focus of research on the issue of technology adoption.

Muñoz-Leiva et al. (2017) integrated TAM and innovation diffusion theory and found trust as an important factor in technology adoption. Also, trust has a very significant and positive influence on the attitude of fintech users for adoption (Chuang et al., 2016; Hu et al., 2019; Shi et al., 2022; Slade et al., 2014). "Jayashankar et al. (2018) studied antecedents of Internet of things (IoT) adoption among farmers and trust in the fintech technology was mediated by perceived risk and perceived value and the IoT adoption was moderated by farm size and age of farmers. The result showed a positive relationship between trust and perceived value and a negative relationship between trust and perceived risk. This study brings to light that trust plays a catalyzing role in reducing farmers' perceived risk and ultimately enhances fintech adoption.

Perceived ease of use-

Ease of use is defined as "*the degree to which a person believes that using a particular system would be free of effort*" (Davis, 1989). Perceived ease of use is a significant factor to influence fintech adoption. It can also be understood as when a user feels easier to use certain types of technology more than others. Perceived ease of use has a positive effect on the intention to use (Arifin et al., 2019; Catalini et al., 2019; Dzogbenuku et al., 2021; Huei et al., 2018; Kim et al., 2015; Muñoz-Leiva et al., 2017; Pillai & Sivathanu, 2020; Shaikh et al., 2020) and attitude (Belanche et al., 2019; Chuang et al., 2016) towards using fintech products and services. Setiawan et al. (2021) also analysed the relationship between perceived ease of use (PEOU) and fintech adoption with perceived usefulness as a mediator considering that usefulness plays a significant role in technology adoption. This scenario indicates that the adoption of fintech products and services can be enhanced when a user finds these services easy and convenient to use.

Convenience-

Service convenience is consumers' perception of minimized efforts used to receive a service (Yang & Yao, 2021). Dzogbenuku et al. (2021) mentioned that service convenience constitutes all possible accessibility beyond traditional brick and motor services that delights consumers. The convenience of digital payment systems has a positive effect on the intention to adopt fintech especially among rural people '(Dzogbenuku et al., 2021; Kim et al., 2015; Pillai & Sivathanu, 2020). Ryu (2018) found convenience as the most strongest factor in the willingness to use fintech products by people in his study. 'Pillai & Sivathanu (2020) examined the adoption of IoT in the agriculture sector by the farmers in India using the BRT framework and supported convenience as a pivotal reason for fintech adoption. However, reasons against technology adoption were image barrier, technological anxiety, perceived price, and perceived risk.

Social influence-

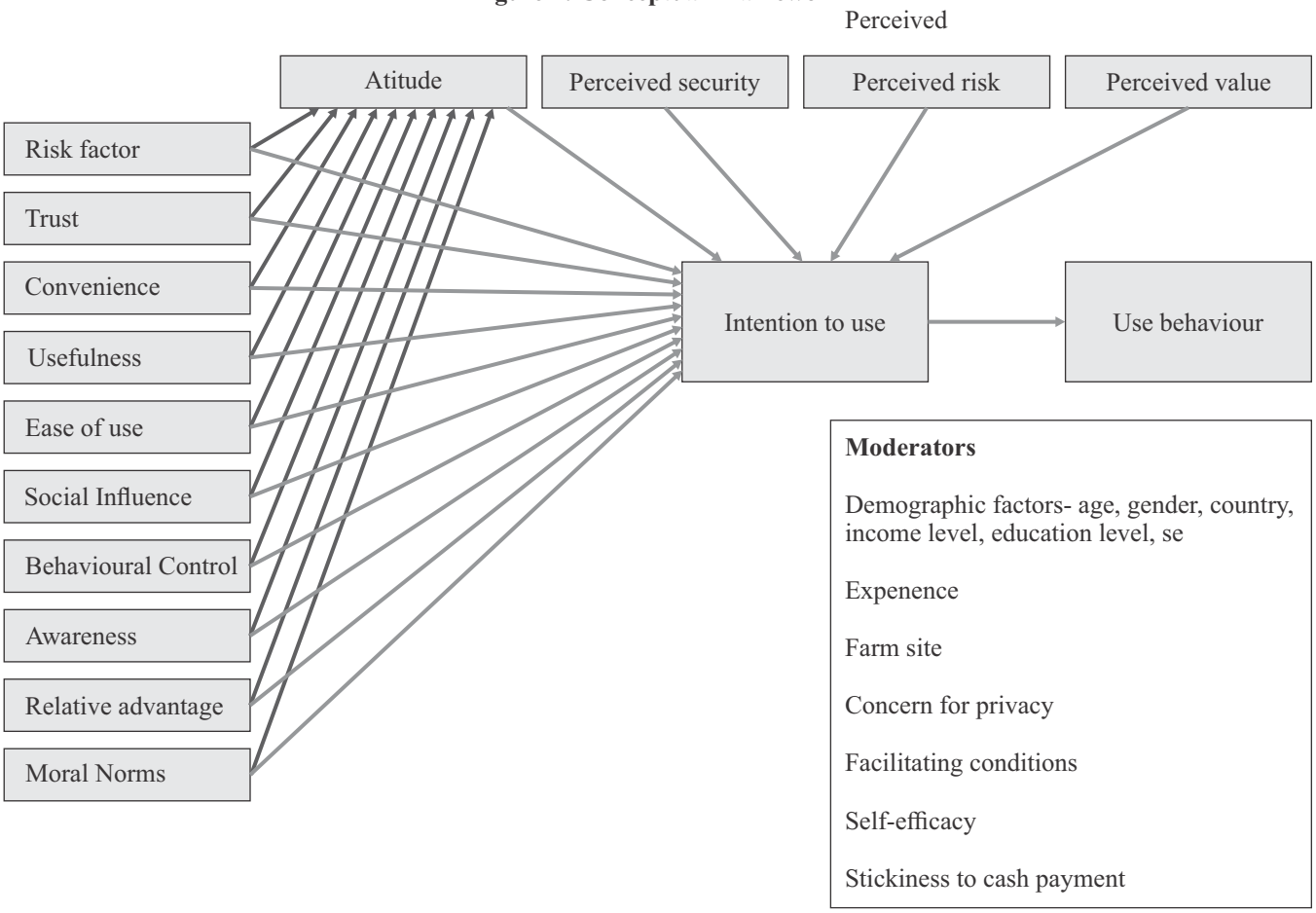
Venkatesh et al. (2012b) defined Social influence as *"the degree to which an individual perceive that others believe he or she should use the new system*". Social norms include family, relatives and friends when it comes to individual technology adoption. A farmer is stimulated to adopt advance agricultural technology, when he receives suggestions and positive feedbacks of utilizing such technology by other farmers, friends, or those whom they follow (Shi et al., 2022). Social influence strongly affects behavioural intention to use fintech services such as digital payment system or mobile money –(Kim et al., 2015; Muñoz-Leiva et al., 2017; Sangwan et al., 2020b; Singh et al., 2020; Sivathanu, 2017). However, Rezaei & Ghofranfarid (2018) tested a model about the intention to use renewable energy sources among rural households and find no

significant positive relationship between social norms and intention to use RES. Nevertheless, social norms play a catalysing effect when it comes to fintech adoption especially by farmers '(Omar et al., 2021; Pillai & Sivathanu, 2020).

Conceptual Framework

Based on the above findings, the conceptual framework developed is given in figure 2.

Figure 2: Conceptual Framework



Source: The authors

Discussion

This paper provides an overview of the many fintech adoption theories that have been employed in research over the past ten years as well as the elements that influence fintech adoption. From the analysis of several factors, the most prominent factors driving fintech adoption by farmers were identified. These factors are (a) perceived risk, (b) perceived usefulness, (c) trust, (d) perceived ease of use, (e) convenience and (f) social influence. These identified factors prominently affect the intention to use fintech products and services by farmers globally. Other factors such as behavioural control, awareness, relative advantage and moral norms also influence the intention to adopt fintech. Perceived risk was identified as one of the dominant factors which negatively influence the intention to adopt fintech products and services '(Arifin et al., 2019; Huei et al., 2018; Pillai & Sivathanu, 2020). This implies that the higher the risk, the lower will be the adoption and the usage rate of fintech. On the other hand, results from the study highlighted that the perceived usefulness, trust, perceived ease of use, convenience and social influence has a significant positive effect on the intention to adopt

fintech services. This study is consistent with the previous literatures (Chuang et al., 2016; Dzogbenuku et al., 2021; Omar et al., 2021; Setiawan et al., 2021; Shi et al., 2022; Singh et al., 2020). Perceived usefulness is a key determinant for behaviour intention to use fintech services and has a positive effect on attitude towards using it (Giovanis et al., 2012; Muñoz-Leiva et al., 2017; Setiawan et al., 2021).Thus, considering the theoretical and empirical results, it is ascertained that the higher the perceived usefulness for the users, the higher will be the actual use. Trust is also considered a pivotal factor in the context of technology adoption (Muñoz-Leiva et al., 2017; Slade et al., 2014). Previous studies highlighted that trust has a positive relationship with perceived value and a negative relationship with perceived risk "(Jayashankar et al., 2018).

Another factor strongly influencing fintech adoption is the perceived ease of use of the technology. Perceived ease of use has a positive effect on intention to use (Arifin et al., 2019; Catalini et al., 2019; Dzogbenuku et al., 2021; Kim et al., 2015; Pillai & Sivathanu, 2020; Shaikh et al., 2020) and attitude (Belanche et al., 2019; Chuang et al., 2016). This scenario indicates that user friendly fintech services enhance adoption rate. The convenience of digital payment systems has a positive effect on intention to adopt fintech especially among rural people (Dzogbenuku et al., 2021; Kim et al., 2015; Pillai & Sivathanu, 2020) and one of the strongest factors in willingness to use fintech products (Ryu, 2018). On the other hand, image barrier, technological anxiety, perceived cost and perceived risk are the reasons against fintech adoption. Fintech adoption decisions by farmers are also affected by their family, relatives and friends. Thus, Social influence strongly affect behavioural intention to use fintech services such as digital payment system or mobile money by farmers (Omar et al., 2021; Pillai & Sivathanu, 2020).

The study also listed various moderators such as demographic factors (Age, gender, country, income level and education level), experience, concern for privacy, farm size and facilitating conditions used in previous studies in the context of fintech adoption. Demographic factors such as age, gender and experience significantly moderate the association between the drivers of fintech adoption and intention to adopt fintech (Belanche et al., 2019; Bharati & Srikanth, 2018; Dzogbenuku et al., 2021; Giovanis et al., 2012; Hew et al., 2015; Pillai & Sivathanu, 2020; Singh et al., 2020; Slade et al., 2014).

Practical Implications

The aim of the study is to identify the most affecting factors in fintech adoption by farmers and propose a conceptual framework based on the factors identified in the study. Technology adoption is positively related to the overall welfare of farmers (Chavas & Nauges, 2020) and uplifts socio-economic status. On the basis of literature and previous studies used in the study, the result shows that risk is the main critical and dominating factor which has a negative relationship with the intention to adopt fintech. Higher the risk, lower the adoption. Fintech adoption by farmers can be enhanced by removing the fear of risk. Other prominent factors such as perceived usefulness, trust, perceived ease of use, convenience and social influence also promote and enhance fintech adoption.

Outcomes of the study are beneficial for corporates and policy makers including academicians researching on most prominent factors affecting intention to adopt fintech services by farmers. Further, this study helps government to promote digital financial inclusivity for rural communities especially farmers.

The study also provides insights to digital finance providers to develop apps that will be well adopted by farmers globally. They should consider

identified factors to promote fintech adoption among farmers. The study highlights the fact that fintech companies should focus on factors that are more dominant and pivotal in adoption. Moreover, firms should reduce the risk and security concerns and increase the usefulness and trust to enhance fintech adoption rate. Furthermore, this study makes an important contribution to the theory and adds body of knowledge on fintech adoption.

Conclusion

The objective of the study was to identify the most prominent factors affecting fintech adoption by farmers globally and propose a conceptual framework from the factors identified. The study identified the most dominant factors used in extant fintech adoption research. These factors are (a) perceived risk, (b) perceived usefulness, (c) trust, (d) perceived ease of use, (e) convenience and (f) social influence. These identified factors prominently affect the intention to use fintech products and services by farmers. Perceived risk negatively affects the relationship between factors and intention to use fintech, whereas other identified factors like perceived usefulness, trust, perceived ease of use, convenience and social influence has a strong positive association between factors and intention to adopt fintech services by farmers. The study also highlighted that UTAUT2 theory of fintech adoption is widely used in the literature especially on mobile money and digital payment adoption. Mediating role of attitude, perceived risk and security, perceived value and user innovativeness was also emphasized in the study. Demographic factors such as age, gender and experience significantly moderated the association between the drivers of fintech adoption and intention to adopt fintech.

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