

Volume 11, Number 04, 2023, Pages 4333-4348 Journal Homepage:

https://journals.internationalrasd.org/index.php/pjhss

PAKISTAN JOURNAL OF HUMANITIES AND SOCIAL SCIENCES (PJHSS)

## Perceived Usefulness, Experience and FinTech Acceptance in Pakistan: An Economic Analysis

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#### ARTICLE INFO

### ABSTRACT

Article History: FinTech is an innovative digital financial solution that rapidly Received: October 19, 2023 invade the banking and financial markets. It moves the world economy into digitally design technology known as palm Revised: December 11, 2023 Accepted: December 12, 2023 technology. However, the acceptability of new blockchain based Available Online: December 13, 2023 technology in this new era of digital economy face multiple challenges for customer acceptance. The backbox is much clear Keywords: and need to fill the gap until now. Furthermore in many Economic Factors of FinTech platforms it is misunderstood till now need the quantitative Adoption research to elaborate the economic effect of FinTech with Financial Technology (FinTech) blockchain technology. In this paper estimate blockchain Technology Adoptation Model usability for investigate the elements of trust has an impact on (TAM) customers' willingness to use blockchain digital banking funds Blockchain management and its economical impact on GDP growth of Trust country. Methodology use in this paper to investigate the Experience and Socio-culture FinTech acceptance in the mind of users quantitative research. Questionnaire filled by the target audience to get the primary Funding: data. Moreover, in this research paper Smart PLS4 used to This research received no specific obtain finding of research. In this research study the proposed grant from any funding agency in the new investigation model help to solve the complexity of public, commercial, or not-for-profit technology: The Technology acceptance Model (TAM) with newly sectors. introduced Several blockchain-related variables technology adoption charters such as experience, trust, socio-culture. The survey was conducted among the users that helps to identify the variables impact of users and their intention. The finding of this research indicates the powerful construct, (experience and trust) that encourage the FinTech institutions to adopt the application based on blockchain technology. The experience of customers encourage the trust and adoption of blockchain technology applications. The business societies and government institutes put efforts for enhance the users trust that helps to accept the blockchain technology and its based FinTech applications for banks and financial institutions. © 2023 The Authors, Published by iRASD. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-**Commercial License** 

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#### 1. Introduction

The current study intends to identify the primary elements that influence consumer's intentions to continue using FinTech while considering utilitarian considerations. The financial technology (FinTech) revolution has spread across the entire globe. Regardless of the fact that FinTech technology has a part of the financial services industry since the 1850s. In the last two decades, the term "FinTech" has come to use to signify technological advancements that have the potential shift the financial services in new era. It is support to stimulate the creation of new business models, applications, processes, and products displayed for the users benefit.

(Arner, Barberis, & Buckley, 2015; Feyen, Frost, Gambacorta, Natarajan, & Saal, 2021; Murinde, Rizopoulos, & Zachariadis, 2022; Sironi, 2016).

However, in the same period, the conventional banking industry has undergone significant technological and regulatory changes imposed on them. However, among other things by deregulation and liberalization, improvements, creative ways to save and conduct financial transactions has to changes in cybersecurity and digitization. It gives the significance for banks in the financial system. It has the utmost importance to comprehend the threats and opportunities that FinTech provides to banks. Moreover, it will affect the primary roles of financial intermediaries and their participation in contemporary financial ecosystems. Traditional financial banks have faced rivalry from shadow banks and non-banking financial firms in this environment (Buchak, Matvos, Piskorski, & Seru, 2018). Additionally, in financial services sector the emergence of FinTech has opened the new FinTech competitors in the form of launching new startups and challenger banks known as FinTech.



#### Figure 1: Proposed Research Model

Particular, in key financial services segments FinTech start-ups are active, such as payments crowdfunding, and remittances, lending, enterprise financial management, trading and capital markets, insurance, personal financial management, and wealth management (Freixas & Rochet, 2008; Greenbaum, Thakor, & Boot, 2019; Murinde et al., 2022). The paper's additional value is that it illustrates how the government, trust, and cultural factors will form the future of banking. In this research, paper we elaborate the need of FinTech for digital transformation of banks and look at its motivations for the FinTech narrative, potential opportunities available for them, and threats it poses for conventional banking sector. We provide some perspectives on the future of banking and that look forward to the financial services ecosystems based on the debate. Economic life of many successful cultures the banking has served a crucial role in the form of very beginning as financial intermediation, frequently serving as a sign of economic and financial strength as well as societal and cultural advancement. While banking has undergone significant shifts over time and taken on a variety of reforms but economists and financial theorists frequently link its roots to the existence of inefficiencies in commerce and the capital markets (Freixas & Rochet, 2008; Murinde et al., 2022). Higher transaction costs and asymmetric information, which are key concepts in the literature on intermediation and are present in a large number of economic transactions, serve as a major description of such market deficiencies as well as have contributed to the establishment and growing significance of financial institutions (Bhattacharya & Thakor, 1993; Santomero, 1984). Banks can effectively handle any potential gap between the supply and demand of liquidity and its ramifications by structuring their operations around the maturity shift in assets and liabilities (Drechsler, Savov, & Schnabl, 2021; Navaretti, Calzolari, Mansilla-Fernandez, & Pozzolo, 2018). Typically, a sizable savers having different financial risk profiles make up for the depositors.

#### **1.1.** FinTech impact on traditional banking

According to Boot, Thakor, and Udell (1991), the conventional banks are more reliable than non-banks known as FinTech since they can accept deposits. In the same way the conventional banks convert liquid short-term deposits into liquid or illiquid long-term loans in order to fulfill their second basic duty, which is to offer liquidity (Diamond & Dybvig, 1983; Murinde et al., 2022). In addition, banks may mitigate credit risk by diversifying their funding sources by offering seniority to financing requests, providing cushions for capital as well as providing deposit protection of customers Diamond and Dybvig (1983); Gatev and Strahan (2006), Although the FinTech reduce transaction costs at the great extant.

Nevertheless, The FinTech companies without a bank license can only complete the initial stage of this role. However, they particularly need to raise the required capital. According to Navaretti et al. (2018), financial technology firms are similar to "full-reserve or narrow banks" in that they can pool funds for users to access and utilize when needed. Nevertheless, they cannot use these funds to acquire assets with reduced liquidity or make illiquid loans. FinTech companies must need license that allow them to operate as banks. Additionally, according to the authors, financial technological companies that carry out lending are primarily operating as brokers in an agency model, matching counterparties, charging fees for their services. They also passing on the credit risk associated with the loans to investors directly. In comparison to conventional banks, they have fewer unique portfolios for both their assets and liabilities.

### 1.2. Research Gap

In the FinTech revolution it is particularly unclear if will solely destroy traditional banking or, on the flip hand side, whether the portfolio of current banking products will strengthen. According to our knowledge and a review of the body of literature of research on this topic with same variables, culture and methodology has not done yet. It is the black box and the researcher need to explore. In this publication, we aim to rectify those issues. Assessing the growing body of research on FinTech and services made possible by introducing blockchain technology based FinTech services, we concentrate on their benefits and disadvantages for conventional banks.

## 2. Literature Review

The development of personal computers, comprising their use of tablets, smartphones, and hardware has increased significantly over the past few year has influenced consumers' lives. They both had a same impact on the growth of the global economy and the global marketplace. Taking into account the market demand and the rapid growth of information technology, there is a greater commitment to developing and building high-quality mobile applications (Zhonggen & Xiaozhi, 2019). Every day, many novel innovations are introduce to the financial sector, yet the majority of them fail or are not sustainable. Since it has been on the market for more than 10 years, FinTech has significantly disrupted the banking sector and put the future of established companies in danger. It is regarded as a reliable technique (Albayati, Kim, & Rho, 2020; Miakotko, 2017).

#### 2.1. Technology adaptation model (TAM)

Good results for estimating the behavioral intention for utilizing new technologies approved by Technology adaptation model. Though not always, Technology adaptation model must be tailored to achieve the current technology approach in order to explain all new technologies (Mezhuyev, Al-Emran, Fatehah, & Hong, 2018). Three additional constructs, however, not fully addressed by Technology adaptation model. Numerous FinTech technology experts have discussed these considerations and their views on the traits and special features of this technology (Wunsche, 2016).





### 2.2. Perceived Usefulness

The perceived usefulness in known as the degree that a user thinks applying to use a new technology will boost his or her performance (Davis, 1985, 1993; Davis, Bagozzi, & Warshaw, 1989). Davis et al. (1989) discovered that the intended's partial intervention could have a directly impact on users trust and experience. There is relationship between perceived usefulness and FinTech, whereas the perceived usefulness significantly affected by intention. When examining the issue of people who want to use practical new technology but do not have a positive attitude toward usage. Theoretically, perceived usefulness works well because the users tend to support applications mostly this is because of their capacities and skills to do. Moreover, they indicate f complexity level of the system is this regards to encourage the framework to execute those capacities (Davis et al., 1989). This shows that although certain system or technological characteristics, such overall perceived usefulness are associated with usage and they cannot be utilized alone to explain utilization in any effective way (Adams, Nelson, & Todd, 1992). The user perceived usefulness could traced to a variety of causes, such as anomalous environmental conditions that might affect customers' opinions about technologies to alter. The contextual impacts of perceived environmental uncertainty have been anticipated and decentralization impact the perceived usefulness of aggregated data (Chenhall & Morris, 1986). The results support the importance of perceived usefulness earlier adoption into things like technological systems (Saadé & Bahli, 2005). As observed Igbaria, Magid, Stephen, and Thomas that, although perceived usefulness having a similar influence on usage frequency and time. The consequence of computer anxiety relies more on trust, experience, security and satisfaction than perceived usefulness. (Albayati et al., 2020; Igbaria, Schiffman, & Wieckowski, 1994).

### 2.3. Experience

Experience is the degree of awareness and proficiency an end user has with new technologies (Hackbarth, Grover, & Mun, 2003). A high level of expertise boosts users' willingness to use new information technology systems (C.-L. Hsu & Lu, 2004). According to numerous studies, the experience has strongly influences on trust level of user. Depending on the level of expertise of users this variable has a huge impact and may go in either direction (Chaouali, Yahia, & Souiden, 2016; Kesharwani & Bisht, 2012; McCloskey, 2006). The introductory phase of a new technology the customers must have a specific level of expertise and knowledge to use it (Alalwan, Baabdullah, Rana, Tamilmani, & Dwivedi, 2018). As some systems, require merely brief training. The user's expertise and prior experiences may have an impact on how simple it is for them to use the new technology (Davis, 1985). As previous Studies show that enthusiasm of users about new technology increases their interaction to learn and makes it easier for use with in few a time (Kanwal & Rehman, 2017). Fazio and Zanna evaluate experience as a continuous variable carried out the correlation analysis in 1978. The trust founded on linear behavioral experience, meaning that the more likely trust was to predict later conduct. It has more impact on the experiences of individuals and more receptive they were to rejection. The more certain they were of their experience (Fazio & Zanna, 1978). The benefits of computer applications' high performance and productivity gains may be notably impacted by the trust on the FinTech industry (Howard & Mendelow, 1991). The level of technology usage experience has a significant influence and control over how new technology looks. Any technological system built on an innovative application and it is subject to user trust, knowledge and experience might influence how the user views and how to users perceives the new system (Jarvenpaa, Tractinsky, & Vitale, 2000). The outcome is that when developing and testing the use models of new technology adoption. Moreover, the previous engagement with an information technology is an important component to take into account. One theory is that trust is affected directly by experience (Ajzen & Fishbein, 1977). The relationships revealed in subject pool research, suggested by Fazio and Zanna, indicate in his research the role of experience may affect trust through influencing socio-culture (Fazio & Zanna, 1981). As stated by Venkatesh, "With increasing direct experience with the target system, individuals adjust their system-specific perceived usefulness to reflect their interaction with the system" (Venkatesh, Morris, & Ackerman, 2000).

Further, in keeping with a study by Chin & Hsi, "Flow experience was defined as the extent of involvement, enjoyment, control, concentration, and intrinsic interest with which users engage in an online game activity." (C.-L. Hsu & Lu, 2004). Based on their experience, individual responses to using an information technology evolved all over time. Experience is a

crucial factor that influences the system and the level of trust as well as has been cited in numerous sorts of studies (Bhattacherjee & Premkumar, 2004; Gefen, Karahanna, & Straub, 2003). In 2000, Venkatesh noted that, although experience influences users' actions, people have the ability to change and modify their choices after employing the system in a real test, that is responsible to builds their confidence and experience with new technology (Albayati et al., 2020; Venkatesh et al., 2000). With respect to the experience, Russell & Zanna emphasized the formation and development of a trust through socio-culture. Trust explored whether trust more accurately predicted experience than without experience (Fazio & Zanna, 1981). In FinTech technology, client trust depends primarily on experience. This research makes an inference that there is a direct relationship between experience and the customer trust given the context of all the findings mentioned above.

### 2.4. Trust

It pertains to using new technology, consumers should feel trustworthy, at ease, and comfortable (Jarvenpaa et al., 2000; McCloskey, 2006). Affected parameters that either directly or indirectly promote people to use new technology comprise trust, security, and privacy (Matemba & Li, 2018). A trustworthy system that can adapt to the inevitable changes in trust can manage the long-term growth of social relationships (Fortino, Messina, Rosaci, & Sarné, 2019). Customer trust significant influence on online purchases and other its related activities to using the Internet. The most commonly occurs for new systems all over the development period (Albayati et al., 2020; Fortino et al., 2019). Customer trust also had an influence on electronic banking systems, and this helped to lower the risks associated with online financial transactions. Banks should think about increasing institutional reliance by reducing the risk associated to their transaction systems (Kesharwani & Bisht, 2012). Trust has a vital for online business model and it establishing a strong trusting relationship with customers. It empowers them to communicate with the frequently unknowable, socially distant service provider over a new medium without feeling insecure (McKnight, Choudhury, & Kacmar, 2002b). However, trust has a limit in the relationship between the end user and the vendor. It becomes vital to maintain trust in a commercial partner in order to keep the communication line open and viable. It is a quality of trustworthy connections that might lessen the risk of threats (Ratnasingham, 1998). Trust can be described as the consumers' willingness toward the service provider likewise, it provide protection against negative behavior that can be predicted in advance to support greater protection and monitoring for customer activities and it boost greater customer trust (Mayer, Davis, & Schoorman, 1995).

Individuals who have positive sentiments with regard to a certain technology may be more open to trusting it and feeling confident of its security than others who have unfavorable experience. Taking into account trust, this establishes strong partial relationships between risk and acceptance (Eiser, Miles, & Frewer, 2002). McCloskey and Weaver demonstrated that the trust has greatly enhances acceptability and usability of new technoogy. The trust of customer with their financial and personal information can tell they truly believe internet digital financial finds management is simple in the form of FinTech (McCloskey, 2006). Customers get less willing to take risks and better protected against the likelihood of disloyalty when trust wanes. In these circumstances, where one must take a risk and cannot control the outcomes, trust is the only way to proceed. The risk chances from the standpoint of the consumer should be limited and in the case of blockchain, based FinTech the level of trust should be high. The mindset and perceived usefulness of the available technology directly affected by trust. This study's main component, trust, demonstrates a strong indirect impact of consumers' FinTech acceptability. The decision of users towards new technology or service could change as a result of trust (Kesharwani & Bisht, 2012). Up until recently, technical and financial markets did not place enough trust in FinTech technologies. The common belief is that risks outweigh benefits (Wunsche, 2016). People also believe that FinTech is an extremely challenging and need strong regulations to adopt new technology. However, the trust comes from a consensus system based on FinTech technology, such as proof of stake and it could promote the trust level (Fortino et al., 2019).

#### 2.5. Socio-Culture

The norms, value, connections and the role determine the socio-cultural. Additionally, it determine how they view what makes sense for them(Chaouali et al., 2016). The most widely used online funds transfer have taken consideration the socio-cultural element, allowing users to interact with the platform when they are ready and influence their loyalty to the

organization or new technology acceptance (Chaouali et al., 2016; Malhotra & Galletta, 1999). The notion that Socio-culture reflects technology trust and has an essential effect on it makes him unique framework (Albayati et al., 2020; Chaouali et al., 2016). The client was encouraged by these situations and communication settings to investigate, analyze the level of risk, and trust in order to decide whether or not to use this FinTech service (Chaouali et al., 2016). The behavior of user's expectation about new technology and its expected advantages and use will give through an assessment of the effect of socio-culture on FinTech technology. Social factors have a significant impact on user behavior with new technologies. Plenty of research and approaches highlight the significance of socio-culture in describing the experience of consumers (Chaouali et al., 2016; D. H. Hsu, 2004; Malhotra & Galletta, 1999). In accordance with social media research, the social element has a beneficial impact on how useful newly developed FinTech technology. Social variables also improved collaboration by promoting a positive experience. The TRA model suggests that both norm and attitude can have an impact on a user's behavioral intention (Davis et al., 1989). Researchers observed that social environment has exceeds information technology characterized the consumer decisions also it significantly impacts user decisions and actions of consumers (Chaouali et al., 2016; Fulk, 2017; Fulk, Schmitz, & Ryu, 1995; Malhotra & Galletta, 1999). In the information technology market, as described by Varadarajan and Yadav, is a network of technologies with ample of opportunities beneficial for both buyers and sellers to conduct digital FinTech transactions and engage in other activities at various times and for varying lengths of time (Varadarajan & Yadav, 2002).

Perceptions of people together with socio-culture influence to predict their use of new technology. The trust of customer about a system could influence the users and improve their quality of performance and lives (Venkatesh et al., 2000). However, socio-culture reflected in many facets of the general environment that support people's participation and engagement in the information technology ecosystem. These procedures for administration may be useful tools for simplifying the application of information technologies (Venkatesh & Bala, 2008). Mathieson additionally spoke about the need for more tools to help understand the association between socio-cultural norms and technological acceptance (Mathieson, 1991). It tends to be expected that most employees will encourage the use of newly developed technology for the purpose to have positive social effects on people at work (Venkatesh et al., 2000). Family, friends, coworkers, and trustworthy public figures all transmit socio-cultural responses to dangers. The person's perception of risk develops later, as part of the reasoning for their experience (Slovic, 2000). As noted by Chin & Hsi, socio-cultural perceptions influenced how people connect to share information, and communicate through information technology. In general, this interpersonal interaction creates a community (D. H. Hsu, 2004). The circle of Family members or friends approve of the extent of use of the newly digitalized FinTech services strengthen the level of trust and increase the probability that users will actually utilize (Chaouali et al., 2016).

Q1: How does the mediating effect of perceived usefulness and experience (PU\*EXP) on FinTech acceptance in Pakistan?

Q2: How does the mediating effect of perceived usefulness and trust (PU\*TR) on FinTech acceptance in Pakistan?

Q3: How does the mediating effect of perceived usefulness and Socio-culture (PU\*SC) on FinTech acceptance in Pakistan?

## 2.6. Hypothesis and Development of Model

Good results for evaluating the trust intention to use new technologies approved by technology acceptance model (TAM). Though not always, technology acceptance model (TAM) must be adapted to achieve the current technology approach in order to explain all new technologies (Mezhuyev et al., 2018). Three additional components, however, not sufficiently addressed by technology acceptance model (TAM). Several blockchain technology researchers have discussed the features and unique design of this technology, and they all consider these issues into consideration (Wunsche, 2016). In order to wrap up the investigation and be comprehensive over the recent advancements and changes in the FinTech market, new constructs incorporated.

# 2.7. Technology Acceptance Model (TAM) CORE CONSTRUCTS

#### 2.7.1. FinTech

Any technological penetration associated with financial services commonly referred to as FinTech. It implies to the wide selection of financial services that may be accessed and delivered through any digital channel (He et al., 2017). The Financial Stability Board's (FSB) establish definition from 2017 states that "FinTech is any technology-enabled financial innovation resulting in new business models, applications, processes, or products, affecting financial markets and institutions, and provisioning for financial services." These technological advancements could make providing basic financial offerings more accessible, secure, and convenient (Leong, Tan, Xiao, Tan, & Sun, 2017). In addition, heightened usage of FinTech might increase the emerging economies' gross domestic product by US\$3.7 trillion by 2025 (Manyika, Lund, Singer, White, & Berry, 2016). FinTech facilitates the assessment of financial system and facilitate the financial institutions rapid growth and development. By establishing novel applications for delivery, making payments, saving, borrowing, observe risks, and gaining financial advice. It has made the consumption of financial services simpler and easier to use (He et al., 2017). An appetite for technology-based financial solutions within users has surged as a result of technological developments in financial and other industries (Saal, Starnes, & Rehermann, 2017). Companies involved in providing FinTech services are providing faster and less costly ways to move, borrow and invest money in order to meet the client needs (Manyika et al., 2016). Now a day, the FinTech has begun to adopt by the retail businesses and wireless services providers that are innovating to offer financial services using their existing networks model. Formerly, FinTech only use for banking services and investment funds because it refers to financial services providers such as banks and financial institutions. Despite the fact that there are numerous FinTech service providers offering and developing their services but just a few are broadly accepted. Thereby, it is imperative to research the variables determining the acceptance and use of these services.

### 2.7.2. Perceived Usefulness

Perceived usefulness known as the degree to that a user considers utilizing new technology and it will boost his or her performance (Davis, 1985, 1993; Davis et al., 1989). As indicated by Davis et al. (1989), the intended's partial intervention may have an influence on trust and experience. Whereas, the intention has a substantial impact on perceived usefulness. However, the trust has a relatively small link with perceived usefulness. This confirmed because of his articles' research on people's willingness to employ a practical new technology despite their aversion toward doing so. Theoretically, perceived usefulness works well: users tend to support applications primarily because of their capacities and skills to do, and then they suggest how simple or complex the system is in order to encourage the framework to utilize those capacities (Davis et al., 1989). It illustrates that although certain system or technological traits evaluate overall perceived usefulness and they correlated with usage but they cannot be relied on alone to explain consumption in a cost-effective way (Adams et al., 1992). The user perceived usefulness could attributed to a multitude of causes, such as suspicious surroundings that might affect customers' opinions about technologies. It is hypothesized that the factors of environmental uncertainty and decentralization will influence the perceived usefulness for gathered information (Chenhall & Morris, 1986). These findings validate the worth of perceived usefulness earlier integration into things like technological systems (Saadé & Bahli, 2005). Igbaria, Magid, Stephen, and Thomas observed notwithstanding perceived usefulness and fun having a similar influence on frequent use, the computer anxiety effect more about satisfaction than perceived usefulness (Igbaria et al., 1994). Because an assortment of variables from the system environment and computer anxiety had an enormous effect on perceived usefulness for the technology system. This has an impact on the information technology system especially on perceived ease of use (Albayati et al., 2020; Gefen et al., 2003). Thus, it hypothesized that:

H1: The FinTech transactions supported by blockchain technology have a significant positive effect by perceived usefulness.

#### 2.8. External Constructs

#### 2.8.1. Experience

Experience is the degree of awareness and expertise a client has with new technologies (Hackbarth et al., 2003). A users experience level of promotes the trust to promote the new information technology systems (C.-L. Hsu & Lu, 2004). Experience profoundly influences

trust, according to multiple research projects. Depending on the person's level of skills, this variable has an immense effect and may go up or down (Chaouali et al., 2016; Kesharwani & Bisht, 2012; Kim, Ferrin, & Rao, 2008; McCloskey, 2006). Customers need a certain amount of knowledge and competence to use any new technology (Alalwan et al., 2018). Since some systems require just basic training, a user's competence and previous knowledge may have an impact on how easy it is to allow them to use the new technology (Davis, 1985). In certain studies, the interaction and usefulness of new technology can be enhanced by users' experience (Kanwal & Rehman, 2017). Fazio and Zanna to quantify and assess experience as a continuous variable carried out a correlational investigation in 1978. The trust depends on experience, meaning that the more likely socio-culture was to predict trust, the more impact it had on individual experiences, the more open they were to rejection, and the more confident they were of their experience(Fazio & Zanna, 1978). The benefits of computer applications' high performance and productivity benefits may be substantially determined by the experience of the industry (Howard & Mendelow, 1991). The level of technological experience has significant impact and control upon how new technology appears. Any technological system built on an innovative application that is vulnerable to the trust of users, knowledge but the experience may affect how the user understands and embraces with the newly developed system (Jarvenpaa et al., 2000). The outcome of users trust and experience with blockchain help to creating and evaluating of new technology models leads the adoption and use of FinTech. In addition, previous involvement with an information technology service is an important component to take in account. One theory is that experience directly influenced by trust. Fazio and Zanna specified a model for how the experience may affect trust by influencing socio-culture. They grounded their hypothesis on the relationships determined by subject pool research (Fazio & Zanna, 1981). "With increasing direct experience with the target system, individuals adjust their system-specific perceived usefulness to reflect their interaction with the system," said Venkatesh in his article (Venkatesh et al., 2000). Further, in accordance with a study by Chin & Hsi, "Flow experience was defined as the extent of involvement, enjoyment, control, concentration, and intrinsic interest with which users engage in an online game activity." (C.-L. Hsu & Lu, 2004). Based on their experience, individual reactions to using an information technology system evolved all over time. Experience is an essential element that influences the system level of trust and has been cited in numerous forms of studies (Bhattacherjee & Premkumar, 2004). In 2000, Venkatesh mentioned that, whereas experience influences users' options, people have the capability to change and modify their choices after using the system in real. It improves their trust, confidence and experience with it (Venkatesh & Davis, 2000). With respects to the trust matter, Russell & Zanna emphasized that the generation and development of an experience affect through experience and researched whether perceived usefulness more accurately predicted experience (Fazio & Zanna, 1981). In Blockchain technology the experience is an essential factor in the customer's trust In relation to the context of the adaptation of blockchain technology while customer trust mainly determined by experience. This essay assumes that there is an obvious connection between trust and experience given the context of all the findings described above Thus, it hypothesized that:

H2: Trust in FinTech transactions enabled by blockchain technology has been significantly and positively affect by experience.

## 2.8.2. Trust

The using of newly launch technology, consumers ought to remain secure, at ease, and comfortable (Jarvenpaa et al., 2000; McCloskey, 2006). The parameters that affected either directly or indirectly foster the people to use new technology comprise of trust, security, and privacy (Matemba & Li, 2018). A reliable system that can adapt to the unpredictable changes in trust can manage the long-term growth of social connections (Fortino et al., 2019). Customer trust, argues Keen, has a direct and major effect on FinTech transaction that involve using the Internet, and that tends to happen for new systems throughout the development period (Keen, 1997). Customer trust also had an impact on electronic banking systems known as FinTech that assisted in reducing the risks linked to digital funds management. Banks should think about boosting institutional reliance while reducing the risk associated with the usage for FinTech transaction systems (Kesharwani & Bisht, 2012). Trust is vital for FinTech acceptance or online business. Developing a trustworthy connection with clients encourages them to communicate with them frequently. However, socially distant service provider over a

new medium without the proper way to create connection with users, in this situation the users becoming insecure (McKnight, Choudhury, & Kacmar, 2002a). However, trust is a threshold in the relationship between the end user and the financial institutions. It becomes crucial to retain trust in a commercial partner in order to keep the communication line open and viable. It is a quality of reliable connections that might lessen the risk of threats (Ratnasingham, 1998). Trust is described as the client's satisfaction level by the service provider ensure protection against adverse conduct that can be predicted in advance to provide greater protection and the new technology provider monitoring for users FinTech transaction process and promote customer trust at greater extant (Mayer et al., 1995). Individuals that have positive sentiments with regard to a certain technology may be more open to trusting it and feeling comfortable of its security than others who have adverse views. Taking into account trust, this establishes strong partial relationships between risk and acceptance (Eiser et al., 2002). McCloskey and Weaver demonstrated that trust significantly improves usefulness. The customer trusts enhance by financial service provider offering users digital transactional information that help to understand and really on them and the users think internet based digital financial transaction is convenient and trustworthy (McCloskey, 2006). Customers becoming more reluctant to take chances and have greater safeguards against the possibility of disloyalty when trust wanes. In these situations the FinTech users must take a risk and cannot control the outcomes, therefore the trust is the only option to do. In the case of blockchain, there should be less risk and a lot of confidence from the customers' standpoint. Both experience and perceived ease of use of present technology directly affected by trust. This study's main component, trust, exhibits a strong indirect influence on consumers' experience. The customers decision concerning about FinTech technology or probably could change as a result of trust (Kesharwani & Bisht, 2012). The technological advances and financial markets have not yet established enough trust in blockchain technology. The belief is that threats outweigh benefits (Wunsche, 2016). People additionally consider that blockchain is an extremely challenging technology to understand and regulate. However, the trust comes from a consensus process based on a blockchain, such as proof of stake could encourage the trust building process (Fortino et al., 2019). Likewise the IBM Hyper ledger platform involves a collaborative management system that protects data security and user trust and provides optimal performance for blockchain applications (Demirkan, Demirkan, & McKee, 2020). Thus, it hypothesized that:

H3: The perceived usefulness and usability of blockchain based FinTech transactions significantly and positively influenced by trust.

#### 2.8.3. Socio-Culture

The socio-cultural norms, roles associations influence how they view what makes sense for them to do (Chaouali et al., 2016). The best-known online services FinTech have taken into consideration the socio-cultural element, allowing users to interact with the platform when they are ready and shaping their loyalty to the firm or technology (Chaouali et al., 2016; Malhotra & Galletta, 1999). The fact that Socio-culture reflects technology trust and has a significant effect on it makes it a distinctive framework (Chaouali et al., 2016). The client was encouraged by these interactions and communication contexts to investigate, analyze the level of risk, and put their trust in the process of deciding whether or not to use this FinTech service (Albayati et al., 2020; Chaouali et al., 2016). The anticipated socio-cultural impact on blockchain technology will help understand how users will behave and what benefits they may expect from employing it. Social variables have a major effect on user experience and trust with new technologies. Plenty of research and approaches highlight the significance of socioculture in characterizing the experience of users (Chaouali et al., 2016; C.-L. Hsu & Lu, 2004; Malhotra & Galletta, 1999). In accordance with a social media, study on the social element has an advantageous influence on how useful role has the FinTech technology. Likewise social variables boosted cooperative by creating an optimistic belief (Alenazy, Al-Rahmi, & Khan, 2019). The TRA model claims that both the subjective norm and experience can have an influence on a user's trust (Davis et al., 1989). Researchers revealed that a social environment that transcends information technology characteristics and consumer choices significantly affects user choices and actions (Chaouali et al., 2016; Fulk, 2017; Fulk et al., 1995; Malhotra & Galletta, 1999). The information technology market, stated by Varadarajan and Yadav, is a network of technologies with enough of opportunities have both users and financial banks to carry out FinTech transactions as well as participate in other activities at various times and for various periods of time (Varadarajan & Yadav, 2002). Perceptions concerning people as well as social influence used to predict their practicality. Customer trust in FinTech system that could influence the collective and it also improve standard of life and performance (Venkatesh & Davis, 2000). However, socio-culture is apparent in many aspects of the wider society that promote people's involvement and dedication in the FinTech. These procedures for administration may be useful tools for improving the application of information technologies (Venkatesh & Bala, 2008). Mathieson additionally talked about the need for more tools to help understand the relationship between socio-cultural norms and technological acceptance behavior (Mathieson, 1991). It is usually expected that most employees will support technology use for its beneficial social effects on others in the workplace (Venkatesh & Davis, 2000). Social influences shared by loved ones, family members, coworkers, and respected public figures supervise how people react to hazards. Risk perceptions frequently arise later, as part of the reasoning behind a person's action (Slovic, 2000). As noted by Chin & Hsi, socio-cultural perceptions influenced by how individuals connect each other, share knowledge, and communicate through technology such as FinTech. In general, this interpersonal connection creates a community (C.-L. Hsu & Lu, 2004). Family members and friends that approve of the extent of use of the new products or services boost the level of trust and the likelihood that people will actually make use of them (Chaouali et al., 2016). The users of FinTech based blockchain technology and their based applications strongly influenced by sociocultural factors. Thus, it hypothesized that:

H4: Socio-Culture has a positive and significant influence on how positively people see blockchain-based FinTech transactions.

## **3.** Research Methodology

Validated criteria from former studies and researches utilized to develop the new proposed model to test customer trust and experience on blockchain technology and underlying applications FinTech. The Technology adaptation model (TAM) (Davis, 1985, 1993; Davis et al., 1989) and the Blockchain external structures model serve as a basis for the design new technology model. Technology adaptation model should be associated with additional factors, as this article stated previously. In order to fully comprehend the study's purpose of understanding customers' trust and experience expectations toward blockchain technology and supporting applications. Experience, trust, and socio-Culture were three of the new dimensions that interconnected and integrated with the Technology adaptation model. The freshly presented model may viewed as a recent addition to past studies, adding a novel perspective that considers various new aspects in the area of assessing consumer experience and assisting in the future vast acceptance of new technology blockchain based decentralized FinTech application. The validation of all components is the primary benefit of the technology adaption model. Every parameter and scales used in technology adaption models reviewed and authorized by earlier researchers working in the same area. (Albayati et al., 2020; Davis et al., 1989; Kesharwani & Bisht, 2012; Slovic, 2000; Taylor, 1974).

FinTech acceptance and perceived usefulness have a relationship with trust and experience (Eiser et al., 2002; McCloskey, 2006; Ratnasingham, 1998; Schoorman, Mayer, & Davis, 2007). Socio-Culture is closely associated with perceived usefulness and trust and has an impact on both of them (Chaouali et al., 2016; C.-L. Hsu & Lu, 2004; Mathieson, 1991; Slovic, 2000). Globally the group of individuals from various backgrounds and experiences such as students, employees of the private sector and government employees use money transaction based new digital technologies for domestic and international FinTech based funds transfer services. The banks or Jazzcash, Upaisa, and Western Union, among others, surveyed as part of the FinTech research design. There are prerequisites for Pakistan's Punjab, Lahore, and other cities. Regional and social factors, however, exhibit varying implications and experience, which will affect customer perceptions and responses.

The purpose of this research paper is to investigate the differences between each classification offered and determine whether the users' socio-culture, trust, experience and other characteristics have an impact on the effects of their decisions about FinTech acceptance. Each of the 34 particular questions in this survey is assessed using one of five measurement scales (five-point Likert), with low support for the question or the case (strongly disagree) and high support (strongly agree), respectively. In order to categorize the criteria in this study the researcher added four demographic questions. The study's limitations included

the fact that actual usage of this technology not taken into account because adoption is still in its earliest stages and only a tiny proportion of users actually utilize. It is according to the author's objective, perspective, and belief. There may have been correlations between the constructs that were not included in this study. Future research might examine these with other relationships and draw novel conclusions. The goal of this research has to examine consumer trust, experience and socio-culture role with regard to using blockchain-based FinTech transactions. The financial market predicts that in the few years to come, blockchain based FinTech will offer additional applications as client experiences and trust enhance (Wunsche, 2016).

### 4. Results And Discussion

### 4.1. Descriptive Statistics

### 4.1.1. Demographic Profile of Respondents

Total data was collect from 600 respondents at different locations of Lahore out of which 501 were return. The response rate was 83.5%. The respondent demographic profile table given below. The respondent information based on gender, use, age, education.

Table 1: Demographic Profile of Res        Respondent demographics	Frequencies	Percentage
Gender (N=501)	inequencies	rereentage
Male	357	71
Female	143	29
Use (N=501)	-	-
1 year or less than 1 year	152	30
2 years	136	27
3 years	106	21
4 years	73	15
5 years OR more than 5 years	34	07
Age (N=501)		
Less than 25	328	66
25-34	118	24
35-44	46	09
45-54	09	02
More than 54	00	00
Education (N=501)		
both elementary or junior high	14	03
High School	187	37
Undergraduate degree	230	46
Graduate degree	49	10
Master or Ph.D. degree or higher	21	04

In the above table there are total respondents were 501 out of them 357 (71%) were male and female were 143 (29%). The next step of the users of FinTech technology are divided on the basis of years of usage 1 year or less than 1 year users were 152 (30%), last two years users were 136 (27%), up to three years users were 106 (21%), users of FinTech last four years 73 (15%) and last five years users 34 (07%). There ages divided in 5 basic categories in above table set. The age of respondents, less than 25 were 328 (66%), 25-34 age 118 (24%), 35-44 were 46 (09%), 45-54 age were 09 (02%) and More than 54 are no respondent. In last step of demographic table was about the educational level of respondent in this study is also divided into five categories. First of all Elementary or Junior high school were 14 (03%), High School education 187 (37%), Undergraduate degree 230 (46%), Graduate degree holders were 49 (10%) and Master or Ph.D. degree or higher 21 (04%). Out of 600 questionnaire were distributed to the respondent most of them were willing to give their data but unfortunately during filling the questionnaire some respondent withdrawn few of them have emergency calls and afraid to share their personal information in research.

## 5. Data Analysis

SmartPLS 4.0.9.3 applied in the statistical evaluation of this research. This advance software evaluate the survey data using partial least squares-structural equation modeling also known as (PLS-SEM)(Al-Maroof & Al-Emran, 2018; Sarstedt, Hair Jr, Cheah, Becker, & Ringle, 2019). SmartPLS-SEM considered the most significant software technique to find the optimal results. And the present study is an exploratory based research. (Hair Jr et al., 2021; Henseler, Ringle, & Sarstedt, 2015). In relation to the reflective measurement model, Hair Jr

et al. (2021) proposed that researchers should take consideration of the outer loadings of all items and the average variance extracted (AVE) and it also help to evaluating the convergent validity very accurately. The values of the coefficient and the path coefficients of drive by the structural model very accurately. (Hair Jr et al., 2021; Henseler et al., 2015; Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012). In order to support the measurement and structural model, the present paper employed all the aforementioned criteria.

## 5.1. Structural Model Assessment

By evaluating the level of inconsistency for dependent variables, employ the model validated. The primary metrics used for estimating the structural model are the path coefficients and the R-squared (R2) ratio. The measurement of the extent to which the variance of a dependent variable's explained by an independent variable or set of independent variables in a regression model referred to as R-squared (R2). The magnitude of an association between an independent and dependent variable defined by correlation. The variability of one variable's justification for the variability of the second variable tracked by R-squared (R2).

## Table 2

Hypothesis	Path	t-Value	p-Value	Significance (p<0.05)?
H1	Experience -> Fintech Acceptance	4.128	0.001	Yes
H2	Experience -> PU	5.409	0.001	Yes
H3	PU -> Fintech Acceptance	8.402	0.001	Yes
H4	Socio-Culture -> Fintech Acceptance	5.267	0.001	Yes
H5	Socio-Culture -> PU	7.331	0.001	Yes
H6	Trust -> Fintech Acceptance	4.261	0.001	Yes
H7	Trust -> PU	5.72	0.001	Yes

## Figure 2: Proposed Research Model



# 6. Conclusion and Future Work

The global industry for FinTech/blockchain technology has recently been expanding swiftly enabling a variety of solutions for protecting FinTech transactions in financial institutions and other service provider's. Customers' substantial opposition to blockchain technology based FinTech. However, indicates that the FinTech technology is not nicely accepted and that its practical application is still quite limited. This study desires to determine the usefulness of blockchain technology in context with its low adoption rate as well as recognize the elements affecting customers' acceptance of financial technology (FinTech) transactions performed via blockchain-based applications. The designing the new proposed model aims to provide support, provide new perspective, and support the adoption of blockchain technology based FinTech funds management. In context with the rise of new technology adaptation with the limited resources that can be effective to support this research. Customers in Pakistan received surveys and findings analyzed using the approach known as PLS-SEM and the newly integration model. The results of the questionnaire indicated that new variables have an enormous effect on customer preferences for blockchain based

FinTech transactions. The research stresses trust as a key factor influencing consumer experience, actions, and ultimately FinTech acceptance. However, these outcomes show that socio-culture and experience are two strong factors that affect and encourage by trust.

As Blockchain-based applications regulated and encouraged by the local government, the people who got involved in the study strongly agreed that, they believe trust, security and privacy offer by the service providers. Likewise, the audiences feel secure and have trust in the solutions based on blockchain once they have gained some understanding about new technology. Regional and cultural considerations, however, present slightly distinct patterns in customer perceptions. The manner in which each government regulates blockchain and FinTech technology has an effect on how people experience. Governments and decision-makers must take the findings regarding this study into considerations. The trust of consumers should take into consideration fueled by government regulation and user trust and experience, while launching blockchain-based applications. The blockchain application in order to avoid fraud activates. Thus clarifying each transaction operation thoroughly to users and exhibiting them how to operate the experience with blockchain-based FinTech applications. FinTech may promote their plans and models of operation in keeping to the actual requirements.

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