


Chapter 18


Data Security and Consumer Trust in Fintech Adoption

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ABSTRACT

The study aims to empirically investigate the role of consumer trust and data security in fintech adoption using the diffusion of innovation theory (DOI) and technology acceptance model (TAM) in India. The data of 200 respondents were collected through a self-administered survey. Further, the study explores the factors that influence users' perception towards data security and trust in fintech adoption. The findings highlight a strong relationship between consumer trust and the adoption of fintech services. Users who perceive a higher level of trust in the fintech platform's integrity and data security are more likely to embrace fintech services. The research also highlights the pivotal role of data security measures that fintech companies are expected to practice. This study will be an addition to the existing literature related to the significant role of trust and data security in fintech applications. This study could help industry practitioners and policymakers to foster a secure fintech environment.

I. INTRODUCTION

In recent years, the financial landscape in India has undergone a profound transformation with the rapid integration of technology giving rise to a dynamic sector known as Financial Technology or Fintech (Barraso & laborda 2022). The importance of this technology is growing rapidly and becoming mandatory in most sectors around the world (Jalal, Mubarak & Durani, 2023). Technology can be optimized to improve productivity and performance. Fintech basically promotes innovative strategies in the financial

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sector. India is one of the world's fastest-growing economies and home to a burgeoning population of tech-savvy individuals, and India has embraced fintech services with remarkable enthusiasm. The convergence of finance and technology has not only disrupted the traditional financial paradigm but has also ushered in a new era of financial inclusion, accessibility, and innovation (Singh & Chaturvedi, 2021). An emerging economy like India is adopting Fintech with an objective of achieving financial inclusion goals. Fintech is the game changer in financial inclusion due to its innovative technology. From digital payment solutions and peer-to-peer lending platforms to robo advisors and blockchain applications, fintech services in India have spurred unprecedented changes in the way individuals, businesses, and even the governments manage and interact with financial systems (Senyo & Osabutey 2020). According to Statista (2023), Fintech has been a rapidly growing industry in India. As an economy with the second largest internet user base (Figure 1), India quickly adapted to the world of Fintech. The fintech market in India was valued at 584 billion USD in 2022.

The growth of Fintech and the use of the internet has contributed enormously to the transformation of the Indian economy in terms of monetary policy and inflation (Mittal et al., 2023). Moreover, the rise of Fintech has ushered in a new era of customer centricity and convenience Pareek et al. (2020). Traditional financial institutions are no longer the sole gatekeepers of financial services. Consumers can now effortlessly manage their finances, invest, and transact with just a few taps on their smartphones. This shift has forced traditional banks to adapt and innovate, thereby enhancing the overall quality of services available to consumers. However, as Fintech continues to reshape the financial landscape, it also brings forth a host of challenges Rajendran et al (2023).

Fintech as a service has several advantages to the consumers where fintech companies provide payment solutions, easy credit, and financial inclusion, among others. There are several challenges that fintech companies face, including basic challenges like illiteracy, poor infrastructure, bank network failure, information asymmetry etc. (Ediagbonya & Tioluwani, 2023). However, there are more serious concerns in Fintech which need attention. Data security and privacy concerns, trust issues, and regulatory complexities are some of the challenges that need to be carefully navigated. Companies need to adopt strategies to overcome challenges to thrive in the ever changing landscape. Risks of cyber threats are on the rise and hence strengthening cybersecurity practices is one of the strategic measures that companies could adopt. This would involve educating customers on cyber security risks and safe online practices, prioritizing security for the digital platforms based on encryption, secure authentication methods and ensuring protection of customer data, thereby maintaining the customer trust (Chen Q, 2024). Due to the storage of data online, customers have concerns on potential breaches but prefer Fintech when their privacy is highly protected (Jafri et al., 2024). Kumar et al., (2023) succinctly brought out the complexities involved in customer's usage mobile banking and the relation this has on perceived risk (data privacy) and trust in Indian context. Customer's are likely to gain more trust and adopt Fintech solutions as they get more accustomed to solutions (Babu et al., 2024).

This study aims to know the data security and consumer trust towards the financial services rendered by companies based on the Diffusions of Innovation Theory and Technology Acceptance Model. DOI provides a broader perspective of the diffusion of the adoption process and the stages of adoption. The Technology Acceptance Model (TAM) is the main theory used to understand fintech services and consumer acceptance. Data security and trust are integral components of the adoption of fintech innovations, and TAM provides a structural framework to understand how these factors interact and influence each other. This study provides insights into the data security and trust issues of customers on fintech services

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