

Chapter 18


Revolutionizing Finance: The Synergy of Smart Cards and FinTech in Process and Product Innovations

Reepu

 <https://orcid.org/0000-0002-5607-9825>

Chandigarh University, India

Sanjay Taneja

 <https://orcid.org/0000-0002-3632-4053>

Graphic Era University, India

Luan Vardari

 <https://orcid.org/0000-0003-3212-5783>

University “Ukshin Hoti”, Kosovo

ABSTRACT

This paper investigates the ever-changing field of financial innovations with particular regard to the interface of two game changers: Smart Cards and FinTech. The industry's financial paradigm has changed due to the role of technology, which enables the creation of advanced service delivery methods that are efficient, secure, and accessible. This study critically evaluates the interdependence between Smart Cards and FinTech, demonstrating how the two can work together to enhance financial services and products. The first part considers the history of the development of Smart Cards when they first appeared and what he has now in various areas of finance. . The second segment addresses the emergence of FinTech and the role it plays in financial innovation. Fintech has changed the traditional range of banking, and instead, the culture of digital financial services, including the use of crowd finance and robo-advisors, has emerged. This paper reviews the prominent aspects of Fintech, including the blockchain.

INTRODUCTION

The smart card has been a long and eventful journey, closely intertwined with technological changes. Financial ecosystems worldwide are evolving in synergy or tension, depending on the vantage points held by different stakeholders. This paper explores the origins of Smart Cards and their design for various

DOI: 10.4018/979-8-3373-0240-9.ch018

applications across different financial sectors. One of the main innovations in the fast-growing field of financial technology (FinTech), smart cards have transformed payment methods.

This paper's first part explores Smart Card practical design outside their history throughout time and numerous periods of change that have moulded them. Smart cards have evolved over the years from a primary data storage tool to a vital part of most financial systems. Here, I will provide a high-level overview of the technical layer that allows intelligent cards to become a natural component of our everyday economic lives.

The following explores how FinTech set off a domino effect driving financial innovation to hitherto unthinkable heights! While FinTech is often praised for its innovative ideas, it is equally crucial to thoroughly review the present developments in blockchain technology that directly result from producing new native digital assets, like artificial intelligence and machine learning. These developing technologies have brought fresh ideas for security, efficiency, and accessibility, as well as being able to challenge established banking processes.

The final half of this paper explores these issues and the moral questions raised by Smart Cards and FI, or Fin Tech + Issuers, in line with their FinTech or Smart Card debate. The combination of these technologies is creating several new difficulties, including security issues and ethical problems regarding data usage. This paper explores these issues and raises concerns about smart card balance. Although smart cards are a great tool for FinTech companies, ethical adoption might still need work.

An increasing reliance on digital technologies and the Internet has fundamentally altered the way economies around the world operate. Consumers can now go beyond the conventional cash-based payment system, thanks to the emergence of a wide variety of FinTech applications. The use of digital payment methods is rapidly becoming the norm in people's everyday lives. Digital payment systems abound, thanks to the lightning-fast progress in the financial industry. These innovations pave the way for digital app-based money transfers between payers and payees. Since digital forms of payment are more efficient, faster, and more convenient, the payment system is quickly shifting away from coin-based and paper-based money.

There has been a dramatic shift in the payment business due to the COVID-19 outbreak. Digital payments have grown in popularity as a result of the pandemic, which has also spurred sectors to work together more closely and innovate more rapidly. According to the 2020 World Payment Report, the rise of non-cash transactions is casting questions on the future of cash as a payment method. Global non-cash transactions surpassed 708 billion in 2019, a rise of more than 14% compared to previous decades, according to the research. The most significant subset of financial technology in 2020 was intelligent card payments, with a total value of \$5,204 billion, according to the 2021 digital payment report. As COVID-19 quickens the digital transformation, new legislative measures and industry developments are encouraging innovation, which in turn boosts trust, increases collaboration, and stems uncertainty created by the epidemic. Quickly prioritizing digital change, the payment industry is fighting for a place in the market. As a result, as businesses implement these improvements, we will be more involved and in sync with their customers' payment schedules.

The benefits of digital payment technology go beyond their apparent ease. Governments see an increase in tax revenue as a result of digital payments since they broaden the pool of possible customers for businesses, decrease the costs associated with handling currency, and highlight numerous informal shadow economies. There will be less economic friction as a result of all of these things and more thanks to digital payment systems. Because of this, people will spend more money overall, which will lead to more output, more employment, more excellent salaries, and overall economic growth. While there are

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