



FINTECH: USHERING IN A DIGITAL REVOLUTION

Dr. Aruna P

Assistant Professor, Department of Commerce, CHRIST (Deemed to be University)

Email id: aruna.p@christuniversity.in

Shubhashree Acharya

Assistant Professor, Department of Commerce, CHRIST (Deemed to be University)

Email id: shubhashree.acharya@christuniversity.in

Abstract

Cash based economies often pose serious challenges to any country in terms of tracking all unaccountable transactions perpetrated by consumers, business entities or even the Government. To tackle these issues, many developed countries have switched to cashless economy. This paper seeks to examine the possibility of converting India from a cash-based to a cashless economy through the intervention of Fintech Innovations. The major challenges posed include, the dominance of the agricultural sector, unorganized markets, non-existence of proper infrastructure and regulatory risks. Further, the country houses many MSMEs which would face impediments in the implementation of technological innovations. This is likely to hamper the growth of Fintech Innovations. However, with rapid urbanization, prolific use of internet, mobile phones and increased reliance on cyber security this paper observes that it would not be long before Fintech Innovations brings in an astounding revolution in the financial services industry. The paper also observes the transition from cash based to cashless economy buttressing the vision of India.

Keywords: Fintech Innovations, Cashless economy, Demonetization, Disruptive technology, Cash based economy.

Introduction

Over the last decade, a new source of innovation in financial services has emerged from financial technology startups ('fintechs') and technology companies ('techos'). These new firms have been quicker than banks to take advantage of advances in digital technology, developing banking products that are more user-friendly, cost less to deliver and are optimized for digital channels. This relative success is unsurprising. These new players are less burdened by the demands of regulatory compliance which banks are subject to. They are unencumbered by complex and costly legacy systems. They can focus on creating single-purpose solutions, designed to offer an improved experience within just one product or service.

The entire world revolves around cash transactions. 85% of transactions are in cash across the world. This trend can be attributed to few apparent reasons: opaqueness of cash related transactions, inability to trace the source of its origin and a sense of security for the holder (Mazzotta, B. C. 2017, October 05)

The disadvantages of cash-based system have lead many countries to adopt digital payment modes; which in entirety is called as cashless economy. A cashless economy is one in which all the transactions are done through electronic channels such as debit/credit cards, Immediate Payment Service (IMPS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS) (Garg, Preeti, and Manvi Panchal 2016).

The benefits of cashless economy are eradication of black money or unaccounted money and an elimination of all the disadvantages of cash based economy. Cash based economy increases corruption, as cash economies have high liquidity leading to increased money supply in the financial system. This makes the system less reliable and less accountable. There are issues related to the transparency of these transactions which renders it practically difficult to sift and locate the fraudulent activities. The less accountability of the transactions, results in loss of revenue to the government.

Fintech has been in the forefront of the technology based innovation across the world in the last decade or so. Fintech has emerged since 1990s and has gained significance only of late. One of the research papers suggest that fintech technology has been initiated only due to Governmental

insistence and regulation for economic development (Arner, D. W., Barberis, J., & Buckley, R. P. 2016) Fintech is a semblance between Finance and Information technology. Financial Technology has helped as well as transformed financial system. It is posing a challenge as well as a threat to the existing system (Zavolokina, Liudmila, et al., 2016) and it is set to transform not only the business world but even the way consumers transact (Pollari, 2016). Further it can connect even the lower income classes which do not have bank accounts (Michael Zucarro, 2016).

India is a unique country with organized and unorganized sectors due to which the usage, depth and spread of fintech in India is a challenge. Around 40 companies have been formed in 2016 alone that cater to fintech. Fintech concept has been in force in many leading economies especially in UK. However India being a developing economy, it is yet to witness potentials of fintech in the future. In Countries like Belgium, Canada, etc. 90% of the consumers make cashless payments while in US, Australia 80% of transactions are made through digital mode (Smrity Baiju, Radha Kumari 2017).

One hallmark event has increased the awareness about the use and convenience of fintech in India. It was DEMONETIZATION. The implications of demonetization were so extensive that public especially the educated mass embraced fintech with open arms. Although apprehensive in the beginning, it certainly set the ball rolling after few months and was welcomed wholeheartedly once they saw the convenience of Fintech. India's backbone is agriculture where 70% of the households depend on agriculture. India also houses many street vendors whose livelihood depends on cash based selling. The main focus is that India is a country which still depends on cash payments for most of the transactions (Ayash Yousuf Shah 2017).

Statement of problem

Traditionally, complying financial institutions in India, suffer from major issues like overlapping regulatory requirements, changing mindset of the growing population of the country, skill sets required for dynamically adapting to the newer technology, data privacy and cyber security, lack of stringent intellectual property rights, lack of awareness about norms and technological innovations across the globe that could help in widening the horizons of innovative practices in the country.

Need for study

The evolution of financial services, information technology and market regulations has led financial institutions, business organizations, government and various stakeholders to determine how best to drive fintech innovations in their respective domain, which can bring them fruitful outcomes. It further aims at reducing the existing risks with innovative business models and strategies.

Objectives

To explore the opportunities of sustenance and growth of Fintech in India

To identify the challenges that would hamper its growth

Methodology

The study is based on the literature review from various sources.

Analysis



Chart: GDP annual growth rate of India

From the above chart it can be seen that until Jan 2016, the GDP annual growth rate has been the highest at 9.2%. But after November 2016, we can see that GDP has seen a downturn and has been on a nosedive since. The chart apparently depicts the immediate effect of demonetization.

Table: Status of Mobile payments in India

Mobile payments(Billion transactions)	1.0
Mobile payments value (Trillion USD)	0.2
Mobile payment percentage of overall non cash (vol)	5.0%
Mobile payment percentage of overall non cash (val)	0.2%

Source: (KPMG India 2016).

However the good effect of demonetization is that it has lead to a surge in the usage of fintech by the urban population. The major investors who have invested in fintech in India are Paytm, Billdesk, Freecharge, Mobikwik, Policybazaar. The major business categories/areas where fintech is popular are payment gateways, wallets, mobile wallets and insurance (KPMG India 2016).

(in percentage)

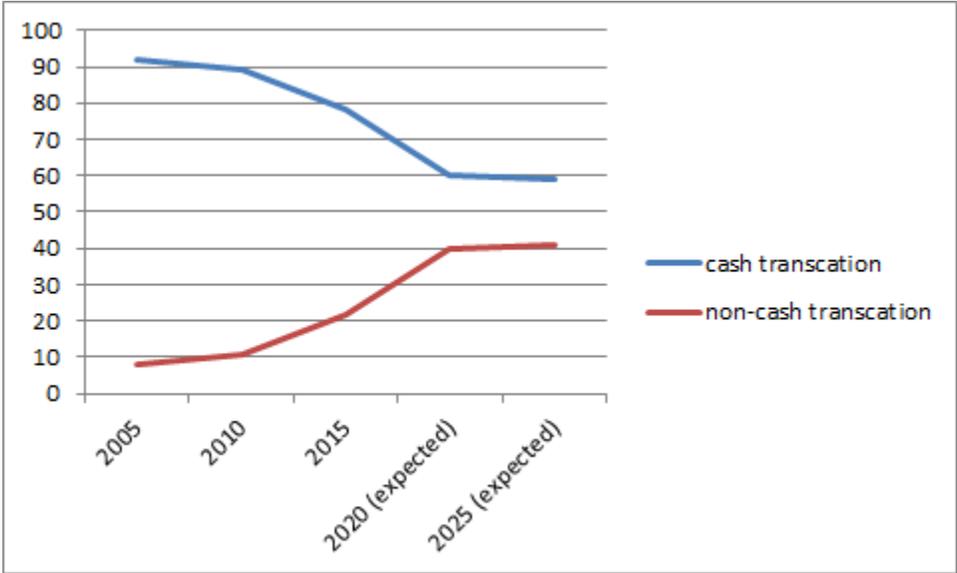


Fig.1 Comparison between cash & non-cash transactions in India projected till 2025.

Source: <http://www.dnaindia.com/analysis/column-cashless-but-not-moneyless-2275390>

From the above chart it is evident that over the years India’s non-cash usage is going to be almost equal to cash usage. And this is possible only through robust fintech.

Discussion

Fintech innovations have enabled financial and technological inclusion in developing countries like Brazil, China, India, Mexico, etc., The supply side innovation of these economies are slow and have mammoth potential for growth. The startup culture in these developing nations are also seen as a conducive environment for investing in fintech based services (Soule, 2016). A fintech revolution is expected to streamline the traditional financial services operations and bring in innovations in the way investors exchange value. Studies reveal that phased introduction of technology, especially mobile technology for banking activities can be a harbinger for financial inclusion (Guild, J. 2017). Financial services industry would be transformed to the extent of exchange of value and data over mere exchange of services. The Indian Government's economic and fiscal reforms via., Demonetisation, Digital India, UPI based digital banking payment systems, etc., have paved way for the digitization of transactions. These innovations and, the paradigm shift in the way value transactions occur, act as a catalyst to distort a corrupt, non-transparent, cash based economy and transform it to a self sufficient and self reliable cashless economy. Fintech companies leverage on groundbreaking technologies and breakthrough processes, thus creating optimal and economic solutions and transparency in the digitized transactions. Fintech innovations improve efficiency of financial services and achieve increased scalability in the financial market. These innovations can build sustainable businesses by reshaping the way traditional economies work, making a transformational shift from agile to cloud based technology. One undeniable contribution of fintech to the financial world is its fight against cybercrime. The Fintech industry's' ever growing promise to provide seamless transactions in a secure environment is being tested by central banks of various countries in the areas of fund transfers and payments, consumer banking, general insurance, smart contracts and, cross border payments. Governments across are collaborating with technology innovation partners like IBM, Accenture, etc., through Distributed ledger technology or Block chain technology, thereby decentralising the regulatory framework and reducing the reliance on market intermediaries. Market intermediaries would be forced to be more competitive and less intrusive in the way businesses are handled. The exchange of value across service industries at low transaction cost, in least possible time, is the key driver for Fintech innovations to be touted as the next big wave of technology disruption game-changer. Algorithmic and network security and advanced data protection features will be appraised to make transactions remotely secure, thus, safeguarding the interests of stakeholders.

Risks and Challenges of Fintech Innovations

Fintech innovations have potential risks and challenges that need vigilant scrutiny and overhauling for the long sustenance of the technology and for the successful implementation of the same. These innovations can disrupt the infrastructural framework behind which the traditional financial institutions and regulatory bodies were formed. The rapid transformation from a traditional, centralised system to a digital, decentralised system can pose multitude of risks. Although digital payment technology heralds a transformation in the way payments are made, it requires a culture change especially in a country like India where people are accustomed to cash based payment (Skinner, C. M. 2016). The lack of awareness about the technological innovations amongst the policy makers and the general public and, the impediments in enforcing these innovations in the financial market, present greater challenges than the disruptive innovation itself (Chiu, Iris H-Y, 2016). There is a widespread threat for the semi-skilled and unskilled category of human workforce as the fintech innovative services require specific technical skills which can be garnered only by improving the skill ability of the workforce in stellar proportions. Due to the less reliance on the regulatory bodies, there can also be a possible increase in technologically advanced criminal activities, which becomes difficult to trace and thus, may result in losing confidence among the various stakeholders. Thus, regulatory risk is an issue to be weighed by Fintech companies. These innovations attract continuous research and development activities in the field of technology that leads to huge investment in R&D and infrastructure implementation costs. This, in essence, negates the foundational principles of prudence and cost optimisation, upon which Fintech companies base their discrete comparative advantage. SMEs and small business houses might face competitive redundancies due to the huge cost of implementation of these technologies.

Conclusion

This article concludes after analysing the existing financial institutions and infrastructure for payments that authoritative settlement based on central bank support is seen as being essential for both large value and retail payment systems and in developed countries like UK, EU and US the fintech innovations are working smoothly and successfully. In the wave of technological revolution where IoT is going to rule the roost, Fintech cannot be far away from this revolution (Stich, A. 2017). It is suggested that, the transparent and complete accountable transactions at all

levels is likely to bring social benefits through commercial developments. It is also understood that fintech is likely to increase competition and improve financial inclusiveness, which could reduce the cost of financial intermediaries. The paper has analysed the various benefits, risks and challenges of fintech innovations in the economy.

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