Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 12, Issue 6, July, 2021: 5135 - 5142

Digital Finance: Fintech for Financial Inclusion and Sustainability

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Abstract

United Nations Sustainable Development Goals (UN SDGs), provided a framework of detailed objectives for pursuing sustainable development, adopted by the global community consists of 17 SDGs and 169 targets, to be achieved by 2030. Financial inclusion is at the centre of current global policy attention, driven e.g. by the G20, the World Bank and major development organizations. The Financial Inclusion strategy aims for sustainable financial inclusion by leveraging technology and adopting a multi-stakeholder approach. The 2016 Principles are envisioned to catalyze country-level actions by G20 governments to drive financial inclusion using digital technologies. From 2010 to 2017, much of the progress was related to the impact of financial technology (FinTech) in a number of countries.

FinTech companies are uniquely qualified to drive financial inclusion by leveraging their access to technology. Alliance for Financial Inclusion's FinTech for Financial Inclusion (FinTech4FI) initiative shows the potential for strategies for digital financial transformation. As of now Sustainable Finance, Financial Inclusion and FinTech are now major policy focuses of most national governments and regulators. 80% of adults in India have access to credit as a result of Fintech and 350 million people are gaining access to accounts for the first time. Formal and informal data is becoming available in the form of digital footprints.

Is Fintech with its digital footprints a promising avenue for access of credit or is it discriminating consumers using information generated by big data? Are Disintermediation, Disruption, Digital Finance leads to discrimination of Customers. The power of four pillars in Fintech, a journey towards Financial inclusion is a question or a solution for Sustainable Development Goals ? In this context, a modest attempt has been made to evaluate the promises and pitfalls of role of Digital finance especially Fintech in Financial inclusion, for pursuing Sustainable Development Goals. Challenges of Fintech as a business model for business to business and business to consumer are deliberated. The lessons to be learnt in designing of digital financial infrastructure for India are also reflected.

Design/methodology/approach:

Case study method in deliberating on role of Fintech in Financial inclusion, for pursuing Sustainable Development Goals.

Findings/Practical implications:

The study points out the of role of Digital Finance in Financial Inclusion in India

The Research paper identifies the pitfalls in Fintech and challenges of Fintech as a business model for business to business to consumer are deliberated.

Originality/value –A modest attempt on linking digital finance, especially role of Fintech for pursuing Sustainable Development goals are made.

Keywords: Bank; Digital Finance; Gender; Fintech; Financial Inclusion; Risk ; Sustainability ; India

Introduction:

The prominent buzzwords being used in the context of the Indian economy of late is 'structural transformation'. Structural transformation in Financial services revolves around Fintech, Digital Banking, Sustainable Banking and Financial Inclusion.

Financial inclusion is at the centre of current global policy attention, driven e.g. by the G20, the World Bank and major development organizations. The Financial Inclusion strategy aims for sustainable financial inclusion by leveraging technology and adopting a multi-stakeholder approach. United Nations Sustainable Development Goals (UN SDGs), provided a framework of detailed objectives for pursuing sustainable development, adopted by the global community consists of 17 SDGs and 169 targets, to be achieved by 2030. The 2016 Principles are envisioned to catalyze country-level actions by G20 governments to drive financial inclusion using digital technologies. From 2010 to 2017, much of the progress was related to the impact of financial technology (FinTech) in a number of countries.

Sustainability:

The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all United Nations Member States in 2015. Sustainable Development goals are achieved and addressed by taking care of 3Ps- People, Planet and Profits. At Retail Banking Review's recent Green Banking forum, major financial institutions discussed their efforts to be 'greener', although definitions of the term vary. The trend towards green banking is still largely driven by and directed toward consumer behavior. Although, banking is never considered a polluting industry, the present scale of banking operations have considerably increased the carbon footprint of banks due to their massive use of energy (e.g., lighting, air conditioning, electronic/electrical equipment's, IT, etc), high paper wastage, lack of green buildings, etc.

Green (1989) exposed that a bank is responsible towards government, customers, shareholders, staff, and the community. Social, Environmental, Ethical and Trust (SEET) issues in banking. According to them, interest in the above mentioned SEET issues in banking has witnessed an extemporized or even exponential rise over the last decade through certain international initiatives like the United Nations Environmental Programme Finance Initiative; the Equator Principles.

Financial Inclusion: Role of Digital Finance in Financial Inclusion in India

Morgan Stanley has predicted in its report 'India's Digital Leap – The Multi Trillion Dollar Opportunity', that India will be a US$ 6 trillion economy by 2030, with digitisation expected to boost GDP growth by 50-75 basis points. Greater financial inclusion process is fastening because of JAM Trinity- Jan Dhan Jan Dhan-Aadhaar-Mobile. Financial institutions and banks can leverage on ICT for the financial inclusion(N. Sireesha 2012)

According to the report **'FinTech & Digital Banking 2025'** (Asia Pacific) by Backbase and IDC, 48% of banks in Asia Pacific (APAC) will leverage artificial intelligence or machine learning technologies by 2025. 52% of Indian people have used Fintech, 69% of Chinese people in contrast to the US and world average of 33%. Especially after demonetization in 2016, India has seen interesting developments.

Sustainable economic growth is strongly linked with financial inclusion. Digital technologies can transform an organization's products, services, operations, and business models, as well as its competitive environment (Fichman et al). Social media has become an online conversation of banks with customers(Sireesha 2015). FinTech will bring about lower business costs and profit margins.

Design/methodology/approach:

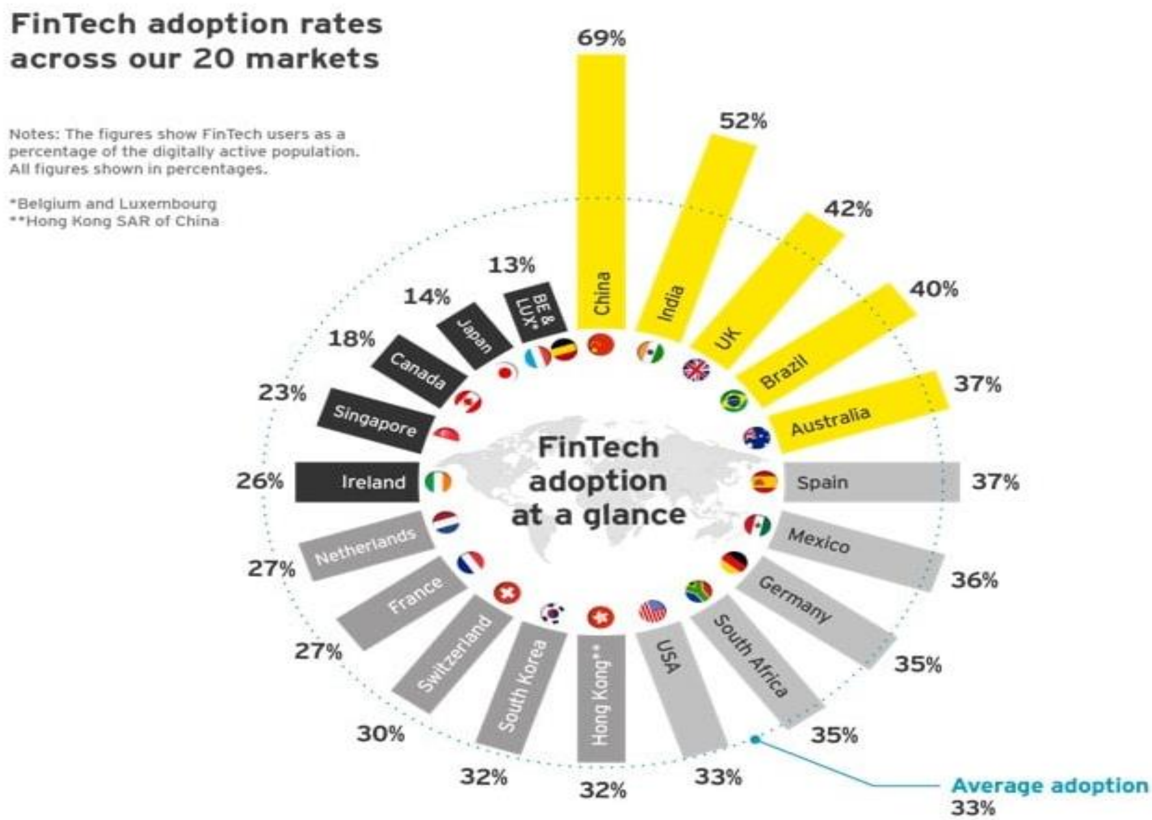
Case study method in deliberating on role of Fintech in Financial inclusion in Indian Banks for pursuing Sustainable Development Goals.

Fintech Applications in Banking and Financial Institutions:

Large retail banks are deploying "fintech sandboxes," which is basically a space where fintech companies or fintech com panies partners with banks in the following applications:

1. Block chain
2. Data Analysis
3. Insurance
4. Personal Finance
5. Wealth management
6. Financial Services
7. Lending
8. Payment solutions
9. Real Estate
10. Regulatory Tech

So one can suggest all these areas of Fintech applications to a bank.



(Source: EY, Fintech Adoption Index 2017)

Digital Finance- Fintech Applications- Financial Inclusion in Indian Banks:

FinTech companies are uniquely qualified to drive financial inclusion by leveraging their access to technology. Alliance for Financial Inclusion's FinTech for Financial Inclusion (FinTech4FI) initiative shows the potential for strategies for digital financial transformation. As of now Sustainable Finance, Financial Inclusion and FinTech are now major policy focuses of most national governments and regulators. 80% of adults in India have access to credit as a result of Fintech and 350 million people are gaining access to accounts for the first time. Formal and informal data is becoming available in the form of digital footprints.

India 's largest bank –State Bank of India has launched Digi Voucher mobile application so that customers could fill up virtual vouchers on the mobile app before coming to branch in the comfort of their home or office.

SBI introduced P2P funds transfer application that allows customers to quickly transfer funds to a third party without beneficiary registration, either through mobile number or email-ID of the beneficiary. The bank has setup a private cloud for digital channels (for customer facing Internet and Mobile Banking applications), so that it can serve at least 50% of its more than 29 crore debit card customers using digital channels.

India's second largest bank by assets-ICICI Bank has launched a portal of around 250 application program interfaces-APIs to create new fintech solutions with the help of third party developers.

YES Bank has assisted the issuance of a commercial paper (CP) of INR 100 Cr by R3 Corda enterprise blockchain platform developed by US-based MonetaGo to facilitate for Vedanta. Commercial Paper is an unsecured money market instrument issued in the form of a promissory note). Vedanta is a natural resources conglomerate. The blockchain platform, thus, ensures an efficient, transparent and secure mechanism for CP issuance and redemption.

Financial Inclusion in India – Sustainable Development Goals

Is Fintech with its digital footprints a promising avenue for access of credit or is it discriminating consumers using information generated by big data? Are Disintermediation, Disruption, Digital Finance leads to discrimination of Customers. The power of four pillars in Fintech, a journey towards Financial inclusion is a question or a solution for Sustainable Development Goals ? In this context, a modest attempt has been made to evaluate the promises and pitfalls of role of Digital finance especially Fintech in Financial inclusion, for pursuing Sustainable Development Goals. Challenges of Fintech as a business model for business to business and business to consumer are deliberated. The lessons to be learnt in designing of digital financial infrastructure for India are also reflected. Financial inclusion can help achieve the UN's 17 Sustainable Development Goals of ending poverty, protecting the planet and ensuring prosperity for all by 2030

In India- Fintech, blockchain finds application in areas like digital ID, customer authentication, insurance like

1. KYC Verification
2. Supply Chain Financing And Management
3. Simplification Of Remittance Process
4. Trusted Payment Solutions
5. Records Storage And Management
6. Disrupting Digital Insurance
7. Eliminate Dark Tactics Of Stock Market
8. Credit Scoring
9. Faster Processing Speed
10. Eliminating Audit Trails

Source: A report by Kalaari Capital on Fintech India: Innovation for the next 400M

Axis Bank has adopted the Fintech disruption in the following ways:

Axis bank also partnered with OT (Oberthur Technologies) to pilot the first open loop EMV contact less smart cards to use in public transportation in Bengaluru. This allows the people to tap and pay instead of buying a ticket each time.

AXIS Bank has a whole new series of developer-focused support services, from API discovery to supporting ideation, so testing and deployment must be considered in the strategic future of banking. High standards of service should be upheld, high-quality, rich APIs must be produced .

To better serve businesses desperate to improve operational efficiencies, cut costs and better serve their customers Banks can allow third party fintechs access to business accounts, payment providers, lenders and equity managers. For bank to make this necessary step, they must work hard to make their platforms and sandboxes attractive to third-party developers looking to rapidly prototype new applications. To attract much-needed talent, developers need to be treated as a valued customer.

Mining for better data is the essential next step in delivering on Open Banking's potential which means collaboration must extend beyond financial services.

Scale: Banks can only collect a limited layer of data; the actual owners of the data tend to be the retailers or service providers that customers are purchasing from. If banks were to take the plunge into insurance and retail data, there would be a greater understanding of consumer behaviour, leading to an enhanced service offer. Equipped with open API, digital banks can offer new, value-adding services with the help of other third-party providers and banks and monetise these connections.

Omnichannel engagement leads to higher levels of product use.

Cloud competing: B anks will focus on building resilience through employee education, by maturing their cloud competence, and by acquiring new tools for managing cloud security.

Digital identity management : Adaptive or risk-based authentication . Leverage behavioral analytics will employ a combination of biometrics led multi-factor security.

5G and Internet of Things: 2020 will see more devices connecting to 5G

Banks are moving to migrate cash and check transactions to digital channels. Financial advice is a critical area where customers are increasingly receptive to virtual interactions.

Automation / AI / Machine Learning: Use of AI and automation to understand, identify and prevent cyber attacks.

Axis bank to be a digital bank, , it must be able to adapt their business logics, as the industry is evolving fast across different dimensions, e.g., functionality, business and technologies. Thus the Axis bank will be able to turn the constraints posed as challenges and be able to adapt as opportunities. The goal is to provide a seamless, omnichannel experience, with more self-service, increased automation, and a reduction in manual work. Bank should escalate investments to compete on "real-time" — focusing first on payments, then digital marketing, fraud management, and product offer.

Axis bank has launched Digital KYC as a measure of Fintech.

In 2017, Axis Bank's acquisition of mobile wallet company FreeCharge for Rs 385 crore in an all-cash deal. Axis Banks's first bunch of startups which are S2Pay, FintechLabs, Perpule, Pally, Paymatrix, and Gieom are indeed defining how banks should function in the future. Of these startups Pally, FintechLabs and Gieom have been selected for long-term engagements with the bank.

Axis bank partnered with startups in multiple domains, including payments, security, artificial intelligence, BlockChain, lending, big data, and others.

Axis bank is the first Indian bank to use Ripple's block chain network for cross-border payments. Netork for real-time settlements as it targets future growth. Ripple's network offers full transparency of associated fees.
Axis bank has unveiled a real –time cross border payment service for corporates using Ripple's Distributed Ledger Technology solution. This way will disrupt the international payments. Using APIs and DLT the corporate payments will also alter.

The Difficulties encountered

Almost 25-40% of total loans are under moratorium for many major banks, and most of them believe that only a small portion of these loans may turn NPAs. The shortage in staff, insufficient digital maturity and pressure on the existing infrastructure

Bank	Total loan	Moratorium
SBI	Rs 24,22,845 crore	23%
Bank of Baroda	Rs 6,90,121 crore	65%
Axis Bank	Rs 5,71,424 crore	28%

(Source –RBI website)

Conclusion:

AI Fintech has been deployed in the banks to improve customer experience, sales and marketing, and to reduce operating costs, as well as to increase revenues. Banks of all shapes and sizes have invested significantly in streamlining their processes so that the regulatory checks such as Know Your Customer (KYC).

India has the largest smart phone adoption so the Direct Bank transfer is feasible because of digital and Fintech. DBT allows to send welfare payments, fuel subsidy, food subsidy or education, which are traditionally sent through cash via intermediary are now transferred through Bank accounts directly.

Fintech can make a difference to SMEs by providing loans cheaper so that suddenly it becomes profitable for companie. It also can use alternative sources of data so that a new entrepreneur who doesn't have an existing credit record or, where personal credit histories are very limited or nonexistent, then one can use those alternative data sources to actually evaluate someone's creditworthiness and make them a loan.

Fintech apps appeal to the newer generation of banking customers, who expect multi-channel access and round-the-clock services and being connected by smartphones, wearables. In conclusion, we can say that Fintech is the new mantra to achieve financial inclusion through sustainability.

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