

Bolstering Financial Inclusion with Technology: Innovative New Business Models

Overview

With around 40% of the population still outside the umbrella of the formal banking sector (PIB, 2016), financial inclusion is particularly relevant for India and technology has the potential to change the face of financial services. Various technologies present a tremendous opportunity to act as a gateway to achieving greater financial inclusion by minimizing constraints such as the challenge of credit risk assessments of such segments due to the absence of financial information like historical cash flows, credit records etc. Information and communications technology related products like ATMs, Credit and debit cards have continued to change customer experience across the globe and newer technologies like that of online banking, digital platforms for payments have begun to penetrate the global markets.

Efforts by Indian government and the banking sector

- RBI has played a significant role in achieving various objectives such as implementation of the electronic payment system such as RTGS (Real Time Gross Settlement), electronic funds transfer (NEFT), mobile banking system etc.
- RBI announced the merger of two funds, Financial Inclusion Fund (FIF) and Financial Inclusion Technology Fund (FITF), into a single Financial Inclusion Fund with a corpus of Rs. 2000 crore to support 'developmental and promotional activities' including enhanced investment in Green Information and Communication Technology (ICT).
- Digital India, an ambitious initiative launched by the Government in 2015, fundamentally seeks to ensure that government services are made available seamlessly to citizens, in electronic form, by improving online infrastructure and increasing internet connectivity.
- RBI has amended its KYC rules to allow banks to open new accounts using OTPs on mobile phones which is likely to quicken the process of opening bank accounts.
- The government rolled out two schemes Lucky Grahak Yojana for Consumers and Digi-Dhan Vyapar Yojana for Merchants in 2016 to encourage people to significantly increase use of digital transactions by offering incentives.
- Technology is significantly leveraged by the Business correspondents. BCs are widely using rural internet kiosks and mobile banking network for acquiring customer and back end support.

Examples of FinTechs in India

Technology Application	FinTechs
Credit Scoring 	<ul style="list-style-type: none"> • Artoo: offers a digital loan origination system based on a mobile operating system that would capture all the required respondent data digitally at the field level which is used for credit scoring enabling the field agent to come up with a decision quickly. Artoo has partnered with a number of microfinance institutions like Ujjivan, Annapurna Microfinance and Grameen Koota.
Digital Wallet 	<ul style="list-style-type: none"> • Mobikwik: helps its users store their money. Founded in 2009, this digital wallet enables users to recharge, pay bills, and make third-party purchases with one tap.
Customer On-boarding 	<ul style="list-style-type: none"> • FRS Labs: provides identity verification and fraud prevention platform to simplify opening a Bank Account asking users for a live selfie which can then be matched with an Aadhaar photo enabling customers to open bank accounts in less than two minutes by simplifying the KYC process.
Biometrics 	<ul style="list-style-type: none"> • Tapits: Fingpay, a product of Tapits uses Aadhaar ID and biometric authentication to let merchants accept digital payments even from customers who don't have a debit/credit card or digital wallet. The bank account linked with the Aadhaar ID is debited after the authentication.

A study by CGAP in 2015 identified over 100 cutting edge digital financial services that provides customers with services beyond making payments such as financial literacy, saving and insurance among others using the following key digital attributes.

Digital Attribute	Leading Examples
Digital data trails: Using advanced data analytics on customer transactional patterns to tailor service offerings.	<ul style="list-style-type: none"> In 2014, Nirvoy which uses mobile data to provide micro-insurance was launched in Bangladesh through partnership between MicroEnsure, GrameenPhone and PragatiLife. It provides free life insurance coverage based on the amount of airtime used each month to the subscribers of GrameenPhone.
P2P Social Connections: Leveraging social networks to increase access to financial services and customers choice.	<ul style="list-style-type: none"> Zidisha is a peer-to-peer (P2P) microloan crowd funding platform that lets ordinary people send zero-interest microloans directly to lower-income people in developing countries.
Instant verification: Using GPS, cell tower triangulation, cameras or biometric data to verify identity or location.	<ul style="list-style-type: none"> EyeVerify, a biometric security technology based in Missouri with its main product Eyeprint ID provides verification using micro-features in and around the eye. EyeVerify licenses its software for mobile banking applications.

Challenges and Lessons to Learn

Technology is seen as a solution to extend banking facilities to the remotest area in cost effective way as it reduces the transaction cost for banks and proposes financial inclusion as a viable reality. However its adoption and implementation throws a number of challenges and lessons to learn predominantly in the developing nations.

Challenges	Lessons for India
Data Privacy, consumer protection ⁱ	Supreme court in India has confirmed that there is a “fundamental right to privacy” in India. It has asked the government “to examine and put into place a robust regime for data protection” ⁱⁱ . Focus on identifying solutions both in supply side and policy regulations where interests of DFS users and providers could be aligned together.
Understanding of risks in peer-to-peer lending	Investors’ awareness of risks in P-2-P lending is an essential requirement. Rbi feels “In its nascent stage, this industry has the potential to disrupt the financial sector and throw surprises” ⁱⁱⁱ .
Digital Currencies credibility and acceptance	Digital Currencies must adhere to (1) Ownership neutrality, (2) Technology neutrality, and (3) Infrastructure neutrality. Digital Fiat Currency involving the banking system as the issuer and mobile-wallet provider as the distributor has been deployed in Senegal ^{iv} .
Limited capacity to comprehend and monitor new applications	Technology capacity building should be at par to the new technologies in order to supervise it. Sensing this challenge SEBI constituted “Committee on Financial and Regulatory Technologies (CFRT)” ^v .
Lack of knowledge of customers in using digital interface	Deeper understanding of customer segment is required. This can be dealt with simpler interfaces and technology solutions. Also voice can be used broadly to conduct transactions and business.
Industry participants ceding outdated technology	This dynamics is to be understood well and a plan should be put in place to cater to it when new product is introduced ^{vi} .

ⁱ <http://pubdocs.worldbank.org/en/877721478111918039/breakout-DigiFinance-McConaghy-Fintech.pdf>

ⁱⁱ <http://www.livemint.com/Opinion/4E9P8VDxKYkwG6jrVOjuQO/Financial-inclusion-and-the-right-to-privacy.html>

ⁱⁱⁱ https://www.rbi.org.in/scripts/bs_viewcontent.aspx?ld=3164

^{iv} <https://itu4u.wordpress.com/2017/01/12/how-digital-fiat-currency-will-drive-financial-inclusion/>

^v http://www.sebi.gov.in/media/press-releases/aug-2017/sebi-constitutes-committee-on-financial-and-regulatory-technologies-cfrt_35526.html

^{vi} https://ttvcapital.com/pdf/TTV_Opportunities_Challenges_in_Fintech.pdf