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Digital Finance in Emerging Economies and Challenges

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Abstract: ***This article aims to provide some valuable insights into the happening innovations in the financial services across the emerging economies with the rapid boost in Digital finance. Over the years the financial industry has witnessed a continuous evolution across different finance verticals owing to the power of digitalization among which emergence of Digital Finance is a key factor. Digital Finance encompasses a magnitude of whole new approach towards a Financial Inclusion model: providing affordable financial services to poor families in emerging economies, to make financial transactions more secure and transparent, giving a boost to innovative financial businesses and services. It also aims to cover how digital finance could drive the emerging world economies towards a better new world by overcoming the challenges in its path and looking for sustainable future. "Universal access to financial services is within reach—thanks to new technologies, transformative business models and ambitious reforms... As early as 2020, such instruments as e-money accounts, along with debit cards and low-cost regular bank accounts, can significantly increase financial access for those who are now excluded." – Jim Yong Kim (President, World Bank Group)***

Keywords: Digital Finance, Financial Inclusion, Financial Services, Emerging Economies

1. Introduction

The recent disruption from emerging technologies and upcoming new business models across the globe has led the financial services to think, act and respond in an innovative approach towards the rapidly changing business needs. This is where Digital Finance, the new helping hand for Financial services comes into the picture to meet the globally challenging business needs by shaping the finance ecosystem of the future. Generally speaking, Digital Finance basically refers to the process of carrying out financial services through digital means like via Internet or Smartphones. Digital finance provides a hassle-free financial transaction owing to a less intensive use of cash and utility of traditional banks. Digital Finance aims at providing an array of affordable financial services and business to the poor families in the developing world thereby availing the services at much more cheaper rates, more transparent and secure, and helping them to weather swinging financial shocks in the financial capital markets and hence promoting towards more resilient life. Moreover, it focuses on building long-lasting, inclusive economic infrastructure development across the globe improving governance, creating transparency, reducing theft and graft, and laying a strong foundation for upcoming new innovative business models offering life-changing services.

"Digital Financial Inclusion" also refers to Digital finance and is more commonly used the term these days which encompasses the use of digitization in the financial services. It broadly refers to the digital access to the financial services and its usage by the excluded and underserved population across the world. While delivering such digital services it becomes imperative that the services should be tailored to serve the customer needs and should be delivered responsibly at an effective cost affordable and viable for the customers and should be sustainable for its providers too. Digital Financial Inclusion consists of three primary components that include retail agents, a common digital transaction platform, and end customers.

1) Digital Transaction Platform – It provides a common portal or you may say a transactional platform enabling the end customers to send or receive payments and to store monetary value electronically with a concerned bank or non-bank permitted to work over digital electronic transactions. It acts as an electronic medium providing financial transaction services between the end customers and the agents.
2) Retail Agents – Retail agents equipped with a powerful digital device connected to the communications channel to transmit and receive transaction details allowing customers to convert stored electronically monetary value into equivalent cash or vice versa. With the general and regulatory compliances, retail agents could also perform other functions also as per approval basis.
3) End Customers – End customers having digital access i.e. having means of transmitting data and information like Smartphone's, internet enabled devices or an instrument (e.g., payment card) that connects to a digital device (e.g., POS terminal).

So for any Digital Financial Inclusion model, it is important to have the above-mentioned components working in coordination with each other.

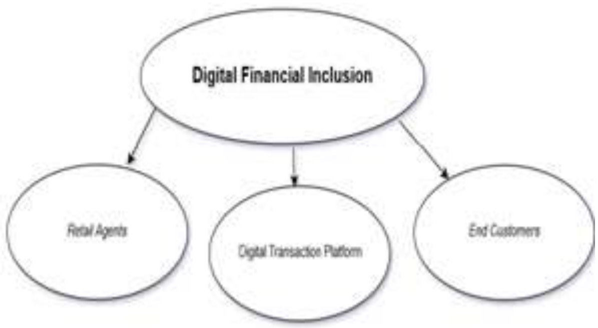


Figure 1: Digital Financial Inclusion Basic Model and its Components

2. Benefits of Adopting Digital Financial Inclusion: What is happening with Digital Finance?

Digital Financial Inclusion offers invaluable services and benefits to the end customers across the globe especially those owing from emerging or developing economies. Digital platforms offer hassle-free, convenient and cheap services to transfer monetary fund's and make merchant payments. Some of the very first digital transactional platforms such as *bKash* (launched in Bangladesh) reached nearly 160 million of country's adult population in as near as 2 years of the time period that offered a safe and secure place to store value for hundreds of millions of households that rely on the proverbial mattress. Such platforms provide accommodation for daily unpredictable and tiny amount of cash flows of the poor families, helping them to deal in transactions whenever they wish to.

Figure 2: Global Financial Inclusion (Image source: *Author*)

Adoption of Digital services in the financial sector can be transformational owing to a huge population of over 2.5 billion people who excessively relies on having transactions in the form of cash due to lack of effective access to formal financial services. It will have huge benefits for the financially excluded and underserved population that includes the following but not limited only to:

1) Safe and secure transactions offering minimum risk towards loss, theft or other unsolicited crimes associated with carrying cash-based transactions.
2) Digital Transactional platforms will pave the way towards lowering costs involved in the transactions both towards customer and provider sustainability enabling them to transact even in tiny amounts and that too at irregular intervals.
3) Services will be migrated to digitization and will have access towards formal financial services like payments, fund transfers, insurance, securities etc
4) Financial services can be tailored to suit the needs of the customer under different financial circumstances by making use of payment, transfer and value storage services of the digital transactional platform and the data generated by customer usage.
5) It will give a boost to economic empowerment by providing asset accumulation and will also lead to increased economic participation by women.
6) Innovations in the Digital Finance could have long-lasting positive effects on the banking performance. A research was conducted by Scott, Van Reenen and Zachariadis (2017) in order to examine the potential benefits of adopting SWIFT in Banking communication and as per the results after examining over 6000+ banks across 29 countries in Europe it was found that adoption of SWIFT had huge effects on profitability in long term.
7) Adoption of Digital finance services promises an increased Gross Domestic Product (GDP) of digitalized economies by enabling easy access for individuals across a diversified set of financial products and services.

3. Digital Finance in Emerging Economies: How it could boost growth in Emerging Economies?

Having robust financial services model is very critical towards the growth of any country's economy where financial services are regarded as the lifeblood of an economy, providing the individuals, households, and businesses to save, invest their hard-earned income and protect them against outsider's risk. Despite considering the importance and criticality of optimum financial services, there are many developing countries and emerging economies where the majority of their population and business services lack access to general banking and financial services like savings, credit products etc which are acting as major obstruction towards economic growth and perpetuates poverty. As per research studies it has been estimated that nearly 2 billion of the population across the world lack access to basic banking services and around 200 million small businesses find difficulty in raising credit they need to expand their businesses. The majority of this population share accounts in the regions of Africa, the Middle East, Southeast Asia, and South Asia, and is particularly high among poor people and women.

This is where Digital Finance could jump in and provide financial services to the excluded and underserved population and help in boosting and prospering economic development in the emerging world economies. With the introduction and emergence of Digital Finance, individuals and businesses can have easy access to payments, fund transfers, savings and credit products without having the need of visiting a bank branch physically. Adoption of Digital finance on a large scale could convert a pocket-friendly internet enabled Smartphone into a bank wallet, checkbook or more precisely into a bank branch.

So when we talk about Digital financial inclusion in emerging economies, it could really help in boosting those economies. Mobile networks have been successful in penetrating nearly 90% of people across the emerging economies and 80% of the population already owns a mobile phone subscription which in turn could be used to spread out the financial services even in the remotest areas via the ubiquity of Smartphones. For emerging economies which are already struggling financially, Digital finance could prove to be a miracle or boon for their societies as an adoption of digital accounts can lower down the traditional banking operations cost by 90% and with a mere 10$ annual customer fee everything can be easily managed. So it makes a win-win situation for both the customers and the providers, where banking services can be easily provided to those falling under lower-income brackets

1) Digital Financial Services can be reached out to near 2 billion populations in the emerging economies where more than 50% of the population is constituted by women. This could provide a boost in the volume of individual and business loans by over $2.1 trillion and also allow the governments to save over $110 billion annually by curbing the leakage in spending and tax revenues. Financial service providers can also reap in benefits worth $400 billion annually owing to the lower operational costs.
2) As per the research and statistics, it is highly estimated that with the inclusion of digital services in finance could give an upliftment of annual GDP of all the emerging economies by $3.7 trillion by 2025, a 6% increase as compared to the usual scenario. This incremental boost in GDP can lead to the creation of over 95 million jobs across different sectors.

Figure 3: Impact of Digital Finance in Emerging Economies (Image source: *McKinsey Global Institute Analysis*)

(i) Availability of Mobile phones and internet connectivity is what that could prove to be a game changer in this whole dynamics of Digital Financial Inclusion. Back in 2014, it is estimated that around 80% of the population in emerging economies had mobile phones with them as compared to the 55% of their bank account status. So with the facilitation of banking services via Mobile phones, it could be possible for every individual to associate themselves with the banking and financial services.

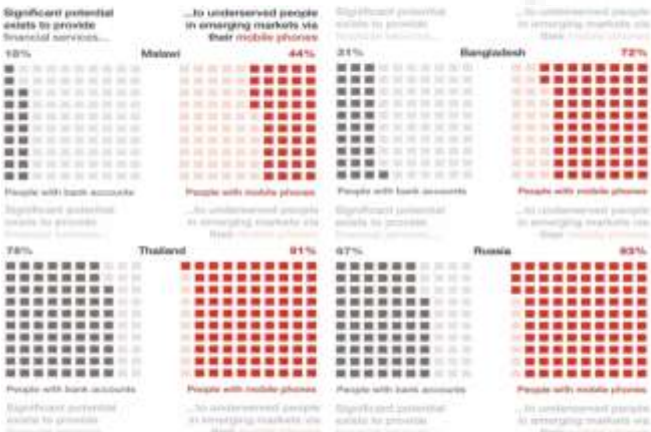
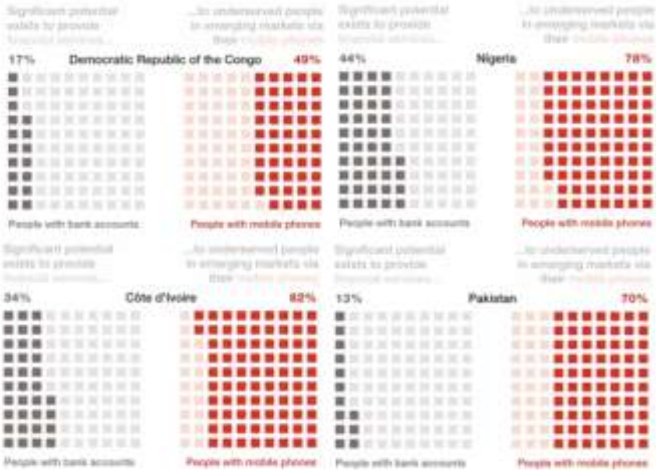


Figure 4: Bank Accounts and Mobile Phones Penetration (a) (Image source: *GSMA; Global Findex Database 2014, World Bank; World Development Indicators, World Bank*)



Bank Accounts and Mobile Phones Penetration (b) (Image source: *GSMA; Global Findex Database 2014, World Bank; World Development Indicators, World Bank*)

4. How is Digital Financial Inclusion penetration across the Emerging Economies?

Well as discussed above apart from getting financial services associated digitally via Mobile phone's there are other ways also which can prove beneficial as a start towards Digital Financial Inclusion in the emerging world economies and that can come through *"Fintech"* Providers (Financial Technology).

"Fintech" Providers basically refers to the individuals or businesses that make use of a modern technology platform (online/offline) in order to facilitate new financial services or improved delivery of already existing financial services led by high-end computer programs and data algorithms. These Fintech companies could range from small scale to large scale industries. These Financial technology providers can also prove to be a game changer in the digital finance economy. As per the current trends, Fintech companies are equally competing with the banks while complementing their customers with all the functions of banking and financial services. Fintech companies are trying to provide a faster, smooth and convenient way of processing banking activities to their esteemed customers like enabling quick check-cashing services, payday lending and much more. Fintech companies are still in their nascent stages and therefore in many developing economies, there initial cost of offering financial services is comparatively higher as compared to the traditional banking activities but still the advantage of getting things done at a reasonably fast pace like obtaining loans quicker and easy credit lending has forced customers or companies to turn up-to these Fintech providers. In the longer run Fintech providers have great implications towards a better financial inclusion and stability.

Figure 5: Digital Financial Services Penetration across Globe (Image source: *GSMA State of the Industry, 2015*)

5. Challenges and Risks Posing Digital Financial Inclusion

With the growing trends in Internet technology innovation, the day is not so far when the whole world will be under Digital Financial Inclusion but it does pose some challenges and building blocks especially across the emerging economies that must fall in one place together in order for Digital Finance to take off. Some of the key barriers posing threats towards a complete digital financial inclusion program across the world are as follows:

(i) Weak Infrastructure Development

The major building block that emerging economies face towards establishing a proper digital financial services model is the lack of appropriate and right infrastructure that is not only limited to widespread network coverage area but also includes mobile phone's ownership; facilitation of powerful and robust digital payment gateways; existence of a well-disseminated personal ID system for authentication and a flexible regulatory environment.

(ii) Data Security and Regulatory Concerns

The increased penetration of digitization has also led to the occurrence of the large scale of cyber attacks that could pose a significant threat towards the security and privacy of customer's data on digital channels. While offering digital financial services there is a huge trade-off between the efficiency and security of financial services. The cost of ensuring a robust secured digital financial services framework could be much more than that of the cost of offering digital financial services which in return could have dreaded negative effects on long-term profitability and viability of digital financial services business models.

(iii) Underdeveloped Technology Ecosystem

Apart from infrastructure development, high-end technology penetration is very important to shape the landscape for the provision of financial services to be provided by Fintech providers and banks. Shortage of high skilled tech/finance entrepreneurs, limited market size, and limited revenue potential could be another major risk towards establishing a successful digital financial services model.

(iv) Inadequate Formal Financial Services

In many small emerging economies, there is even very low penetration of formal financial services which has led to cash dominance transactions and informal credit and savings which could be a major challenge for those economies governance to adopt for digital financial services framework.

(v) Lower Income and Financial Literacy Levels

A lower scale of income levels, poor families accompanied with low financial literacy levels poses a major barrier towards establishment and usage of digital financial inclusion services.

6. Conclusion

A comprehensive Digital Finance solutions model can radically fasten the progress of economic development of emerging economies by establishing a robust financial services framework and at a relatively low and affordable cost. Digitizing finance could be very hard and challenging initially for lot's of small economies and could turn up into a multiyear effort but the sooner they eradicate the barriers towards digital financial inclusion stability, the faster the rewards will start to reap in, in the form of higher growths in terms of increasing GDP, multidimensional technology innovation and more financial inclusion covering a wide range of population. In the longer run, digital finance could open up increased opportunities in the development of e-commerce business and on-demand services. Digital finance could act as a development tool that can effectively work towards improving and reducing poverty levels, opening up job opportunities and promoting inclusive economic growth and reducing inequalities among individuals. Though digital finance is still in its nascent stage in the developing countries and couldn't be regarded as a miracle cure for the economic prosperity definitely it is within the reach among the countries and is well available among the emerging economies willing and ready to seize its magnitude of benefits.

It can be well understood and estimated that individuals will be more keen towards adopting digital finance if they prefer them over the already existing traditional financial services or get some incentives to do so. So it's not only up-to towards the fintech providers to come up with smart and innovative financial products and services accompanied with incentives but also requires government involvement and appropriate measures to promote the adoption of digitized financial services in the early stages of market development. The government can step up to identify the market failures, hurdles faced by tech entrepreneurs and come up with strong measures and working with providers to create incentive models to encourage the usage of digital finance products and services.

Overall speaking every trend in the digital financial inclusion is moving towards the right direction and a comprehensive financial inclusion model is far from inevitable. Digital finance will have positive effects towards the welfare of individuals and businesses thereby prospering economic development. Though there's still a long race to go before the full potential benefits of digital financial inclusion program could be realized and it poses a great benefit towards boosting the emerging economies.

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Author Profile

Pankaj Kumar received the B.S in Electronics and Communication Engineering from G.B PANT GOVT. ENGINEERING COLLEGE (GGSIPU), New Delhi in 2015 achieving first division with distinction. During 2015-2017, he worked as Software Analyst in Life sciences Research Division of TCS, providing support and research analysis over an array of software applications. Currently he is pursuing MBA (Global Business Operations) from Shri Ram College of Commerce and has strong inclination towards Finance and Equity research. He is passionate about Technology happenings and is also the co-founder of his own blog (http://www.rushinformation.com) where he has contributed over 700+ uniquely and well research articles purely crafted by his own expertise and intelligence.