



STUDY OF DIGITAL DISRUPTION WITH SPECIAL REFERENCE TO NUE/ NEO BANKING

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Introduction:

The fastest growing FinTech market is assumed to be growing at rigorous speed with Digital India Campaign initiated in 2015, being the second largest young populated country in Asia. Different financial technologies are creatively implemented to make life of common people easy. The variants of Fintech are Bankingtech, Wealthtech & Insuretech are rising rapidly.

FinTech-Financial Technologies used in banking had brought a stupendous change in the way people used to do banking & financial activities. IT enabled services had made financial life of people easy, expedient & hassle-free. Augmentation in number of FinTechs have played a key role in making the financial sector more efficient (Philippon, 2020).

In the USA, FinTech lenders enhanced ease of borrowing by processing mortgages 15-30 per cent quicker than other lenders with no evidence of higher (conditional) default rates (Fuster et al., 2018). Financial inclusion by overcoming market failures such as information asymmetry or high transaction costs, FinTechs help enhance financial inclusion. In a survey of retail borrowers on a large Chinese platform, more than half reported that they had no prior borrowing history from a financial institution (Deer et al., 2015).

Big data and machine learning techniques may even help reduce human biases against discriminated groups (Bartlett et al., 2018). India has emerged as the fastest growing FinTech market and the third largest FinTech ecosystem in the world (Mankotia, 2020). India has the opportunity of a digital payments market of \$ 1 trillion (PIB, 2018).

The volume of digital payments in India has increased by 33% year-on-year (YoY) during the financial year (FY) 2021-2022. A total of 7,422 crore digital payment transactions were recorded during this period, up from 5,554 crore transactions seen in FY 2020-21, said the Ministry of Electronics and IT (MeitY)

On the inception of digital alteration Neo banks have arisen to encompass the banking facilities with the sustenance of mobiles. There will be no specific location for such neo banks. Neo banks can be called as fin-tech firm. Neo banks are coming up with more customer satisfaction, customer accessibility, speedy customer service and transparency. Neo banks are mainly nonbanking service provider providing banking services with an ultimate safeguard to their customers. Neo banks are considered as non-banking service provider because Reserve Bank of India has not allowed 100% of their online banking services and they have to provide services through traditional bank partners only. Neo banks provides with reckless opening of accounts, cloud storage, ease of making and receiving payments, transfers and remittance solutions and many more, it also provides for creditworthiness to attract MSME.

The Reserve Bank of India (RBI) under Section 4 of the PSS Act, 2007 have authorised a company NUE (New Umbrella Entity), governed by the provisions of the PSS Act and other relevant statutes and directives, prudential regulations and other guidelines / instructions.

Reserve Bank of India Circular (Draft Framework for authorisation of a pan-India New Umbrella Entity (NUE) for Retail Payment System) highlights are as follows:

- Eligibility - The entity eligible to apply as promoter / promoter group for the NUE shall be 'owned and controlled by residents' [as defined in FEMA Regulations, as amended from time to time] with 3 years' experience in the payments ecosystem as Payment System Operator (PSO) / Payment Service Provider (PSP) / Technology Service Provider (TSP).
- Capital - The NUE shall have a minimum paid-up capital of Rs.500 crore (to support / address the need of capital for managing risks, invest in technological infrastructure, for business operations, etc.). No single promoter / promoter group shall have more than 40% investment in the capital of the NUE. The promoters shall upfront demonstrate capital contribution of not less than 10% i.e. Rs.50 crore at the time of making an application for setting up of the NUE. The promoter / promoter group shareholding shall be diluted to a minimum of 25% after 5 years of the commencement of business of the NUE. A minimum net-worth of Rs.300 crore shall be maintained at all times.
- Scope of Activities –Set-up, manage and operate new payment system(s) especially in the retail space comprising of but not limited to ATMs, White Label PoS; Aadhaar based payments and remittance services; develop new payment methods, standards and technologies; monitor related issues in the

country and internationally; take care of developmental objectives like enhancement of awareness about the payment systems.

- Operate clearing and settlement systems; identify and manage relevant risks such as settlement, credit, liquidity and operational and preserve the integrity of the system(s); monitor retail payment system developments and related issues in the country and internationally to avoid shocks, frauds and contagions that may adversely affect the system(s) and / or the economy in general.
- Fulfil its policy objectives and ensure that principles of fairness, equity and competitive neutrality are applied in determining participation in the system; frame necessary rules and the related processes to ensure that the system is safe and sound, and that payments are exchanged efficiently.
- Carry on any other business as suitable to further strengthen the retail payments ecosystem in the country.

There are 5 neo banks working currently in India.

1. NiYo
2. 811 BY KOTAK
3. OPEN
4. YONO by SBI
5. INSTANTPAY

Neo Banks require separate licencing for operating as Neo Banks. This challenges the existence of neo banks as for banking services as it is at the mercy of Traditional banks.

Neo banks as an extension of FinTech must generate Trust among customers by creating value for services offered. Customers need to be trained to use different technological products made available through neo banking adaption. Branchless banking is not fully adopted in country like India. Being at developing stage in spread of banking facility, Neo banks must come up with the solutions to embrace unbanked population. There are still few remote areas where banks have not provided branches.

Neo banks are auxiliary to traditional banks that ensures speedy payment & collection mechanism. The adoption of AI in Traditional banks has generated pecuniary backing to the employable sector like SMEs. It has enabled adoption of easy techniques to overcome time spending on lengthy processes of loan acceptance. Higher rate of interest on saving account will cement neo banks in Indian culture easily & vastly.

RBI Annual report 2020-21 elaborates the use of different methods used for digital transaction & the progress in volumes of transaction.

Table IX.1: Payment System Indicators – Annual Turnover (April-March)

Item	Volume (Lakh)			Value (₹ Crore)		
	2018-19	2019-20	2020-21	2018-19	2019-20	2020-21
1	2	3	4	5	6	7
A. Settlement Systems						
CCIL Operated						

Systems	36	36	28	11,65,51,038	13,41,50,192	16,19,43,141
B. Payment Systems						
1. Large Value Credit Transfers – RTGS	1,366	1,507	1,592	13,56,88,187	13,11,56,475	10,55,99,849
Retail Segment						
2. Credit Transfers	1,18,481	2,06,506	3,17,852	2,60,90,471	2,85,62,857	3,35,22,150
2.1 AePS (Fund Transfers)	11	10	11	501	469	623
2.2 APBS	14,949	16,766	14,373	86,226	99,179	1,12,747
2.3 ECS Cr	54	18	0	13,235	5,145	0
2.4 IMPS	17,529	25,792	32,783	15,90,257	23,37,541	29,41,500
2.5 NACH Cr	8,834	11,290	16,450	7,29,673	10,43,212	12,32,714
2.6 NEFT	23,189	27,445	30,928	2,27,93,608	2,29,45,580	2,51,30,910
2.7 UPI	53,915	1,25,186	2,23,307	8,76,971	21,31,730	41,03,658
3. Debit Transfers and Direct Debits	4,914	7,525	10,456	5,24,556	7,19,708	8,72,552
3.1 BHIM Aadhaar Pay	68	91	161	815	1,303	2,580
3.2 ECS Dr	9	1	0	1,260	39	0
3.3 NACH Dr	4,830	7,340	9,630	5,22,461	7,18,166	8,68,906
3.4 NETC (Linked to Bank Account)	6	93	650	20	200	913
4. Card Payments	61,769	72,384	57,841	11,96,888	14,34,814	12,93,822
4.1 Credit Cards	17,626	21,773	17,641	6,03,413	7,30,895	6,30,414
4.2 Debit Cards	44,143	50,611	40,200	5,93,475	7,03,920	6,62,667
5. Prepaid Payment Instruments	46,072	53,318	49,392	2,13,323	2,15,558	1,97,695
6. Paper-based Instruments	11,238	10,414	6,704	82,46,065	78,24,822	56,27,189

Total – Retail Payments (2+3+4+5+6)	2,42,473	3,50,147	4,42,229	3,62,71,303	3,87,57,759	4,15,12,514
Total Payments (1+2+3+4+5+6)	2,43,839	3,51,654	4,43,821	17,19,59,490	16,99,14,234	1471,12,363
Total Digital Payments (1+2+3+4+5)	2,32,602	3,41,240	4,37,118	16,37,13,425	16,20,89,413	14,14,85,173
Note: 1. RTGS system includes customer and inter-bank transactions only.						

The above table published on RBI site explains the change in the volume of online transfer with the help of different instruments like NEFT, UPI, IMPS, BHIM-Aadhar & so on. The total digital payments have increased in larger volume & the overall value of transactions are also rising.

The change is symptomatic of progress Indian population adopting online services for settlement of payments.

Review of Literature:

Tinesh Bhasin in his article “What do neo banks offer and should you try them?” has stated that neo bank is coming up with a new concept to ease the banking services with the help of information technology and artificial intelligence. He has also included in his article about the companies taking initiative to come in India. He further mentioned the services they offer, mode of offering services. Thus, the author finds this paper as a useful material for conducting research on the given topic.

Advait Rao Palepu in his article “India’s Neo-Banks: What’s So ‘Neo’ About Them?”⁶ has done quantitative research where he has mentioned about the global approach of the neo banks in terms of capital investment and global reach. This paper also takes about regulatory framework for neo banks in India and also stated reasons for the restrictions imposed by RBI on certain aspects where neo banks cannot deal in. He also mentioned in his paper that neo banks have great opportunity in India because they have targeted customer segment with digital services which they are providing is much more than what traditional banks are providing. This paper has also mention in his paper about such companies showing interest in doing business in India and their market analysis.

Vanita D’souza in her article “5 Neo Banks that are changing the way India Does banking” has included a report published by ‘Allied Market Research’ which states the growth rate of neo banks from year 2017 to 2020, the research also mention about the view of the customer and their preference in respect of neo bank. This article also states that neo bank has a great opportunity in Indian market and can be proved beneficial for MSMEs in terms of loan advancement, ease of payment method, creditworthiness. Thus, the author has mentioned the purpose of analyzing the market condition suitable for Neo banking and in what ways MSMEs can be benefited from neo banks.

Raghav Agarwal and Avneesh Singh Nagar in their article “Neo Banks and the next banking revolution” 7 they have mentioned about how the business of banking is changing rapidly. They have further differentiated between digital bank and neo bank with a case study of e-KYC and UIDIA. They have jagged out certain advantages of neo bank and the trials and gaps of neo bank. Later they have discussed about the structure of neo banks like their core infrastructure, B2C/B2B Modules. The article elaborates the structure of neo banks that how they channelize end to end service.

Gabriel Hopkinson, Romeo V. Turcam, Diana Klarova and Valeria Gulieva in their article “How neo banks business models challenge traditional banks” 8. They have mentioned about the revolution that has been brought by the neo banks in the banking sector and have also stated the reason for such a great revolution i.e. transparency, Low-cost structure, end to end customer services, 24*7 customer support, money management tools etc. They have also mentioned about how neo banks have made investment easy for everyone. Now everyone can invest into mutual funds without any difficulty. Neo bank also provide them with the flexibility of anytime switch in or switch out which is widely attracting customer for investments through neo banks, not only this but customer also get advanced rate of interest than what they get through old banks. They have also focused in this article about the future of banking sector.

Vinod Kothari is his book “Banking Law and Practice in India” 9 has talked about various functions performed by commercial bank in order to provide services to its customer. Though this book does not talk about the function of a neo bank or a fin-tech firm but it has helped in understanding the comparison between the functions of a commercial bank & a neo bank.

Michael Magrath is his article “Top Regulatory Consideration for Neo Bank”¹⁰ has mentioned about the various challenges faced by the neo banks in providing services to its customers mainly in respect with privacy of data. He said that most of the customers are having same concern that whether their data and money will be safe in neo bank.” So he has given certain way to overcome these challenges. He said in his article that the layering of security is very important in order to protect customer’s privacy. It has empowered in gaining knowledge about strong security measures to be adopted while using Neo Banking.

Objectives of study:

- To study digital disruption introduced in Banking with the aid of Technology.
- To study the challenges faced due to upcoming technologies in banking sector.

Rationale of study:

The life of common person has gone through a paradigm shift in recent years due to advent of technologies & its speedy adoption in Banking sector in particular. Present generation have started using smart phones for all financial transactions without hesitance & hostility to it. Previous generations are adopting it slowly but Pandemic had speeded up the activity.

The present paper is an effort to study all such technical disruptions that have changed life of common person at a large.

Importance of study:

Adoption of banking technologies have undoubtedly made an impact on the way people were living. Standing in a queue, waiting for journal entries in passbook, verifying amounts on the counters in bank premises have changed to just checking with the mobile app at one place.

People who were hesitant to use credit cards & visiting ATM was a difficult task in the beginning of 2000, now easily scan & pay through mobile with a smile & wonder. This is a beginning of Digitisation. NUE will definitely change the way banking was done.

Discussion & Interpretation

As per RBI circular, the NUE shall be a Company authorised by Reserve Bank of India (RBI) under Section 4 of the PSS Act, 2007. It shall be governed by the provisions of the PSS Act and other relevant statutes and directives, prudential regulations and other guidelines / instructions.

API (Application Programming Interface)-APIs comprise a set of rules and specifications that software programmes use to communicate with each other. They allow new applications to be built on top of others.

Cloud Computing- The use of an online network ('cloud') of hosting processors to increase the scale and flexibility of computing capacity, generating cost savings.

Biometrics- The study of distinctive and measurable human characteristics that can be used to categorize and identify individuals.

DLT (Distributed Ledger Technology)- A digital system for recording the transaction of assets in which details are recorded in multiple places at the same time.

Big Data - Voluminous amounts of structured or unstructured data that can be generated, analysed and utilized by digital tools and information systems.

AI (Artificial Intelligence) & **ML** (Machine Learning) IT systems that can perform functions that would otherwise require human capabilities. ML entails computers learning from data without human intervention.

Neo bank is a new concept emerging in Indian Banking Sector, which will be operated completely through online mode using "Information technology" and "Artificial Intelligence"

Challenges

The safety of online transactions is a bigger challenge faced by providers & users. Customers are falling prey to fraudulent calls & schemes. RBI has initiated awareness programmes through advertisements telecasted, still the cases where fund is lost is at alarming stage.

This challenge can be overcoming through training sessions to be conducted at branch level and improving technology to tackle such problems. Customer's awareness is the primary step and changing password often is the solution at this stage.

Findings & suggestions

It was very clear from above discussions that in technology driven society, more the people try to misuse it, more efforts to be made by financial authority to make users alert about safe pattern of working. Reframing security regulations at regular intervals are successful keys as prevention is better than cure.

Conclusion

Technology is the key to future. It is adopted in all over of different fields & areas. people being smart & proactive can protect themselves through security measures updating from time to time. Banking & Financial sector are disrupted a lot due to technology, but mindful use of it will work crucially in coming future.

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