Trends and Challenges of ICT in Indian Banking Sector

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ABSTRACT

Recently, geometric technologies are developed in all sector of business, banking, insurance and every sector. India, too is watching high development in Information and Communication Technology. The result of this, Indian Banking Sector is ready for contribution better and improved services to its clients. Uninterrupted origination in ICT in the banking sector has made Computer-generated Banking. Formation of Revolution Workshops is enabling the banks to discover various roads in the banking area like Biometrics, Artificial Intelligence, Robotics, Data Analytics, Wearable technology etc. As the nation welcomes innovations in ICT, banks need to prepare themselves with the mandatory set-up. As major percentage of education to take urban youth in the nation accepts and adopts virtual banking. Banks need efforts to reach out to uneducated rural poor areas also. As the nation observers gifted ICT trends in next generation banking. Banks also need to prepare a design to overcome the tasks. This research paper undertakes the study of application of ICT in order to make the entire banking experience customer centric. The study also highlights the application of developing skill in India. It also lists the experiments postured by improvements in ICT and recommends substitutions to overcome the same. This paper is evocative in nature. Secondary data collected from various websites, reports and journals.

KEYWORD: ICT, Innovation, Biometrics, Artificial Intelligence, Technology.

I.   INTRODUCTION

Information and Communications Technology or ICT is the set-up and workings that enable to do every calculation and other things speedily. It discusses to the merging of audio-visual and telephone networks with computer networks. ICT assists interface of people and administrations in digital world. ICT modernization in Indian banking sector has placed strong base of recent banking facilities. Net Banking, digital wallets, mobile banking apps is the technique of life. Evolving know-hows will positively take Indian banking to the next level in near future. This paper pursues to study the tendencies and tasks given by ICT innovation in Indian banking sector.

II.   Objectives
➤ To study the developing skills in Indian Banking Sector.
➤ To study the tasks postured by ICT innovation in near future.
➤ To propose substitutes to overcome the tasks.

III.   Scope
The study covers the technological developments in Indian banking sector only.

IV.   Methodology
The study is evocative in nature and is centered on secondary data. The data are composed from various reports, journals, news articles, various bank portals, RBI portal and internet sources.

V.   Discussion
5.1.   Trends
5.1.1.   Developing Fin Tech Technologies in Indian Banking Sector
FinTech means Financial Technology, i.e. proposing economic amenities by making use of recent know-

how. FinTech companies compete with the banking sector today to deliver financial amenities to the clients.

5.1.2. Modernization Labs

As the FinTech Start-ups are concrete way for inflexible race to the traditional banking services, many banks have adopted proactive strategy by establishing their own internal advance labs. Origination labs function with the main objective of estimating and implementing evolving technologies and subsidize to bank's intention of digitalization. E.g.: AXIS Bank has set up its Innovation Lab named Thought Factory.

5.1.3. UPI

National Payments Corporation of India (NPCI) propelled Unified Payments Interface (UPI) in 2016 with 21 member banks. UPI is a system that powers multiple bank accounts into a single mobile application, merging several banking features and seamless fund routing. UPI has been measured as the innovative formation in disbursement system.

5.1.4. Digital Wallets

Digital Wallets permit an individual to make electronic transactions using a smart phone. Consciousness and routine of e-wallets enhanced post demonetization in India. It is certainly one step towards „less cash" economy. Examples of top digital wallets and UPI apps in India

➢ Paytm
➢ BHIM App
➢ Mobiwik
➢ FreeCharge
➢ Oxigen
➢ ICICI Pockets
➢ PhonePe
➢ Jio Money
➢ State Bank Buddy
➢ Vodafone M-Pesa
➢ Chillr
➢ Citrus Wallet
➢ LIME
➢ CitiMasterPass
➢ mRupee
➢ Trupay
➢ Airtel money
➢ MomoXpress
➢ Ezetap

5.1.5. Wearable Know-how

"To wear your bank on your wrist" is a truth today. Shrewd guard banking aids the clients squared their steadiness, get fake warnings, carry out both financial and information dealings and proposals many more facilities. In India, ICICI has tossed an app named Wear for all smart watches. ICICI is amongst uncommon global players permitting transactions exhausting this app on both Apple and Android platforms. As technology is redefining banking, wearable banking and transactions.

5.1.6. The 3 Big B's

The 3 Big B"s obviously trending today in Indian banking sector are Biometrics, Block chain and Big Data Analytics. India is undergoing innovative alteration in the banking sector in the existence of these 3 Big B"s.

A. Biometrics

Biometrics overcomes numerous difficult. Voice pattern, fingerprints, iris scans, facial geometry are being substituted by keywords to generateuser's character and shorten the login exercise while banking accessible or via a mobile arrangement. Biometrics know-how brands use of biological data and social characteristics that separates one human being from another. Biometrics is safe and rate operative method for validation procedure of the clients of the bank. It eradicates the problem of memorizing passwords, PINs and card numbers. Biometrics substantiation is difficult to copycat but at the same time easy for all people to use. It offers suitability to customers, operative proficiency to the banks and safeguards the dealings.

B. Blockchain

The operational of Bitcoin is centered on Blockchain know-how. Bitcoin is numerical currency that allows the user to accomplish peer to peer dealings without the help of a third party such as banks. A blockchain is a statistics arrangement that is used to generate a numerical record of businesses and share it among a distributed setup of computers. The fundamental standard is cryptography, wherein each member on the network is allowable to employ the record in a safe method without the essential for a chief specialist.

Benefits of Blockchain

➢ Shared Control
➢ Reliable and high quality data

➤ Faster transactions
➤ Provides audit trail
➤ Transparency and process integrity

Scope

Block chain know-how proposals distinctiveness authentication through a perceptible record and has possible to condense cyber hazards. It deals giantlatent to Indian banks to gather clearings from across the globe Indian banks can use blockchain to present mechanization through trade-finance, remittances, funds transfer, open account transactions and identity amenities everywhere KYC and secure documents space.

C. Big Data Analytics Big Data are said to be extremely huge data set that has to be analyzed, handled, managed and validated through typical data management tools. Indian banks have millions of customers. The data of these customers is stored in the database. Retrieving the data in meaningful manner becomes a complex process as many times the data collected is unorganized. Big Data Analytics helps in resolving this problem. The analytics tools give the bank insights into personal habits of its customers, allowing it to promote offers accordingly. To achieve competitive edge in today's modern banking era, banks in India are using data analytics to attract new customers, retain them and make the entire process consumer centric

5.2. CHALLENGES
5.2.1. Computerization and AI may lead to unemployment

AI and computerization are the major advances of today's improvement era. Even though the aids are promising, technology revolution attitudes a great hazard to many of the jobs which will be completely automatic and occurrences for job volunteers will therapist. Banking is no prohibiting to this fact.

5.2.2. Voice Revolution will take over online banking

As voice gratitude and voice verification developed, web circulation to banking places and mobile rights might drop by 50% in next few years. Clients will purely TALK to an internet associated trick and achieve most common banking responsibilities within few seconds. The clients, who presently visit the websites for banking responsibilities, also go through the marketing advancements on the site. The banks

may drop the chance to fractious sell present clients with drop in web traffic.

5.2.3. Problems associated to Biometrics

Operational issues – A slight could variation the voice excellence and may attitude difficulties in speech confirmation. People who work in labour comprehensive jobs may have injured impressions. Even the senior citizens may have problem in impression substantiation.

5.2.4. Safety matters

In its note on 'Digital Payments - Analyzing the cyber landscape', KPMG stated, fake safety is one of the most serious challenges faced by stakeholders of the digital payment ecosystem. With more and more users favouring numerical outflows, the chances of receiving uncovered to imitation safety risks like online fraud, information theft, and malware or virus attacks are also increasing. Lack of consciousness and poor digital payment environment are some of the crucial explanations that have led to growth in these attacks.

5.2.5. Digital literacy in rural areas

There has been significant progress in the operators of smart phone in rural India in last few years. But not many are aware and self-assured about online banking through smart phones. The primary usage of smart phone is delimited to entertainment and communication only. As the urban tech practicality customers adopt the changing countryside of ICT revolution in banking, Indian rural population yet needs to be educated about the ideas of AI, Biometrics, Blockchain, Big Data etc.

5.3. ALTERNATIVE SOLUTIONS

Following steps can be approved by the banks to overcome the challenges

5.3.1. Transition to AI

Top management and Leadership of the banks should play a substantial role. Active communication regarding the essential and application of AI in the association to all the employees may help realize smooth evolution. All employees unrelated of their age, will have to equip themselves with newest technology creation in the industry and upgrade their skills.

5.3.2. Voice Revolution

As voice uprising takes over, outdated online banking circulation is assured to get displaced. Banking industry should develop its web occurrence by proposing higher end products such as loans, mortgages and financial planning tools. Websites should soon develop to emphasis on superior understandings for financial education, planning and simplifying complex financial decisions.

5.3.3. Biometrics

Multifactor verification with biometrics being conspicuously used could help diminish frauds. Interactive biometrics could afford extra defence to augment banking safety in the future.

5.3.4. Security

As stated rightly in KPMG report, Cyber Security should be shared responsibility of government, organizations as well as the end users. Users should be conscious of the basic safety structures. Organizations should repeatedly update their software and deceit detection systems. The government should emphasis more on cultivating the customers and should implement basic safety standards for organizations. All the breaches should be mandatorily informed.

5.3.5. Digital Literacy

The government of India has launched National Digital Literacy Mission with the vision to sanction at least one person per household with vital digital literacy skills by 2020. It targets to train 60 million rural Indians. This mission will help in cultivating the rural population to appreciate the reputation, ease and benefits of digital transactions. This will boost affordability of Indian banking sector in years to come.

VI.   Conclusion

6.1. The advances in Indian banking sector emphasized in the study direct that the banks are ready and organized to take a leap and proposal modern banking services. The current tendencies in banking are building blocks of the „Cashless Economy". The initiative of Government of India will very soon achieve its mission and rural India too would be „digitally literate". Banks will have to develop a strategy to bridge the gap of technology in rural banks and urban banks

6.2. Scope for future study: An empirical comparative study of public sector and private sector banks will lead to in depth analysis of readiness of the banks and its employees with respect to the trends and challenges of ICT revolution.

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