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DIGITAL REVOLUTION IN BANKING SERVICES AND ETHICAL ASPECTS: A REVIEW

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Abstract

Ethics in banking simply means morality or a moral code of conduct in banking operations and service activities. Ethics is an essential aspect of the existence and survival of the banking and financial service system. The banking system dramatically changed all over the world with the advent of cyber-physical systems that facilitates instant delivery of financial and customer services. The journey of the traditional banking system to the modern digital technology-enabled banking or financial system is the decisive and most important point of innovation. The digital transactions and payments system has become more customer-centric and become an inherent part of all business activities. The financial inclusion or easy access of banking services to all, irrespective of rich or poor is becoming a reality today. Undoubtedly digital banking platforms have materialized the concept of financial inclusion. But a major question remains; Are digital banking services ethical by all means? The philosophy of digital banking services must be strengthened through ethical behavior. In this article, we exhibit an ethical perspective on the digital revolution in the Indian banking and financial service system.

Keywords: Ethical aspects, Digital Banking, Fintech, Financial Inclusion, Privacy.

1. INTRODUCTION

We are in the midst of the digital banking revolution. The banking industry is being disrupted by the arrival of innovative digital technology and fintech in delivering banking services. The four largest U.S. companies namely, Apple, Google, Microsoft, and Amazon are dominant digital business players and provide fintech services (Milligan, 2019). The new financial technologies and digital banking services have intensified competition between large nationwide banking and local banking in China (Lu, Wu, Li, & Nguyen, 2022).

Digital banking has brought drastic changes to the Indian financial service system. The initiatives of the Government of India like Aadhaar enabled Unique Identification Number system, 'Digital India', 'Make in India', the Financial Inclusion mission (Pradhan Mantri Jan Dhan Yojana), and demonetization have boosted customers to use digital banking services. Banking ethics is morality or moral code of conduct in business activities of a bank or any financial institution. Ethics is an essential aspect of the existence, survival, and success of the banking or financial service system.

2. The Growth of Digital Banking

Artificial Intelligence (AI) was conceptualized as a branch of Computer Science in the year 1955, as an "Intelligent Machine" that shows cognitive abilities of the human mind in its performance like learning and solving problems. Banks are using AI in facilitating their functions such as Chatbot for customer engagement or services, Robo Advisory Services for understanding the financial health of customers, Predictive Analytics, Cyber Security, Credit Scoring for direct lending to customers, etc. (Dumasia, 2021) described artificial Intelligence applications in credit analysis strengthen financial inclusion and access to bank loans to traditionally underserved borrowers. But AI-based algorithm in loan application processing is not free from concern due to potential biases and ethical, and legal aspects (Sadok, Sakka, & Maknouzi, 2022).

Digital banking services play a pivotal role in building new customer relationships. Demographic factors like population changes play a vital role in the growth of the banking business and economies of scale. The report of the National Institute of Population and Social Security Research, Japan revealed that the population in Japan is expected to drop by 16 percent from the year 2010 to 2040. The size of the population has an important role in the banking business like any other business. A reduction in potential customers leads to a reduced size of the market in the banking business. Rural banks and traditional banks must adopt and operate in track with modern or digital banking services; otherwise, they cannot survive in the future. The fintech firms have already stepped up in the banking service sector that provides instant account opening, money transfer and deposits, payment of bills, and other banking functions through mobile phones. The digitalization of regional rural banks is essential to fulfilling customer needs in the digital era. Many rural banks have resource limitations and the absence of expertise is a decisive factor. Digital banking has many benefits like revenue growth, cost reduction, enhancing new customer segments, penetrating more into existing customers, providing new products and services, building a new value chain, and reducing the cost of branch network system, administration, and governance expenditures (Yanagawa, 2019). In Industry 4.0 environment, financial activities are happening in microseconds with the advent of smartphones or mobile apps and fintech services.

3. Digital Banking: An Ethical Perspective

Banking ethics is not merely a concept in the modern banking business. Banking ethics refers to a specialized set of rules, procedures, and ethical standards that should be reflected in all banking activities (Fetiniuc & Luchian, 2014). Professional ethics is a vital element in the successful operations of any business organization. It is a contributing factor that affects the stability of the bank. The absence of professional ethics in banks creates the problem of ‘systemic harms’ which leads to the failure of banks. For instance, the financial crisis of 2008 is a real outcome of ‘systemic harms’ which create instability in the banking sector and the world economy. Many people lost their jobs and homes as a result of subprime mortgages. Moreover, the world economy suffered huge crises and instability due to irresponsible business practices, attempts at short-term gains, and a lack of professional ethics among many players in the financial system (Herzog, 2019).

Financial technology, popularly known as Fintech has transformed the Indian banking and financial service system since 2008. It redesigned the Indian financial services system in a new way and transformed the traditional banking service system into a modern banking service system. Banking services such as loan, deposits, payment services, and remittance has seen a sea change due to digitalization. Recently, there has been huge growth in mobile banking, usage of debit and credit cards, UPI, RTGS, NEFT, IMPS, and other digital platforms. The demonetization policy of the Government of India in November 2016 and advocating digital transactions also boosted the digital banking services (Sayed & Sayed, 2020).

The ethical behavior of employees and banking services will foster public confidence in the banking system. Banking ethics is closely connected with moral and ethical relations, legal norms, and legislation in the banking sector. It is designed to build a standard of behavior in the banking system and to prevent any kind of disruptions in financial services. From an ethical banking perspective, ‘Corporate banking ethics’ and ‘Bank etiquette’ are two aspects of the modern banking system. ‘Corporate banking ethics’ means a set of ethical standards or codes for the conduct of business in a bank and its long-term existence as a legal entity. ‘Bank etiquette’ means rules of conduct of the personnel working in a bank (Fetiniuc & Luchian, 2014).

Banking ethics is inherently related to the economic ethics, norms, and conduct of banking personnel. The ethical behavior of banks promotes the competitive advantage of the firm, reputation, and image, retaining qualified and honest employees, optimizing human resources, expanding of customer base and profitability, and enhancing social responsibility practices. The corporate culture of a commercial bank has a significant role in building values of the bank, relationships with employees, relationships with customers, training and development policy, and innovation in banking services. Banking ethics build strong corporate culture, and good corporate governance and prevent moral hazard problems. In classical economics, human beings are rational and respond positively to material benefits. People use shared normative concepts to predict others’ behavior and coordinate actions. Hence the company wants to express values, loyalty, commitment, and culture in its activities (Connell, 2017).

(Bagus & Howden, 2013) described money as an economy’s liquid asset and facilitating monetary transactions is the prime role of the banking and financial services system. The practice of holding fractional reserves in banks and practicing maturity transformation facilitates banks’ liquidity and profitability. Short-term deposits with low-interest rates and financial loans for a longer duration for a high-interest rate are also an ethical predicament in the modern banking system. (Kandpal & Mehrotra, 2019) discussed the growth of digital banking services and fintech startups in providing various banking services. But poverty, lack of financial awareness, and difficulty in getting loans to poor households are continuing major hindrances to effective financial inclusion. Security concerns, and privacy issues in digital banking services are other challenges to the system. However, the digital revolution has brought substantial changes and progress in delivering banking services to people.

4. Fintech and Financial Services

A thriving fintech service in the banking sector has a significant impact on niche market lending such as personal loans, small business credits, and mortgages. Traditional banking concept is being dramatically changed by way of digitalization and technology innovation. Nowadays, bank mobile app provides instant customer service and substitutes the role of a traditional sales executive of the bank (Milligan, 2019). The recent innovation and development of Fintech facilitate broader access to the use of financial services. The innovation of Fintech has made a substantial contribution to upgrading and improving financial services and more effective financial inclusion (Hollanders, 2020). Since 2008, after the global recession, and the arrival of fintech services, banks are concentrating more on the use of innovative financial technology in banking services (Dobre, 2019). The Non-financial industry and telecommunication or mobile network firms are wading into banking services popularly known as fintech startups, which has also increased competition in the banking industry (Yanagawa, 2019). The influence of perception on the risk and benefits of the use of fintech services must also be analyzed. The perceived risk and perceived benefit are two latent variables that determine the acceptance and usage of fintech services. Moreover, demographic variables such as the age of the user, income range, region, time of use, and state of security have also influenced the continuous interaction of fintech services (Mascarenhas, Perpetuo, Barrote, & Perides, 2020).

(Dobre, 2019) discussed the use of fintech companies in facilitating financial activities. Digital banking plays a predominant role in our lives. The payment of day-to-day expenses of individuals like transportation expenses, food and accommodation expenses, educational expenses, health expense, borrowing and meeting personal obligations, payment of tax, and so on has been facilitated by the use of digital banking. Undoubtedly for any money transactions and payments, fintech and digital banking services play a major role. Digital transactions or digital money also provide transparency in financial transactions with the help of blockchain technologies. Digital money is divisible and easy for micropayments. Digital money also provides security to financial transactions There is a social impact of digital transactions like generation and distribution of sensitive data, instant financial decisions, unable to feel the value of money, and extravagance. In fiat money value of the cash is the predominant consideration in a purchase decision. But digitalization of banking services and the arrival of fintech services offer easy credit and instant payment services that induce customers' purchasing power. (Hollanders, 2020) described the role of fintech in financial inclusion. Financial inclusion simply means the absence of financial exclusion. The realization of successful financial inclusion depends upon many factors such as commitment from public and private sector banks and other financial institutions, effective Information and Communication Technology (ICT) infrastructure, financial literacy and awareness among the people, leveraging large volume payment services like availability of digital banking services, availability of transaction account and broad network access and effective legal and regulatory framework. Digital banking services and fintech have made a drastic shift in the concept of financial inclusion.

5. Cryptocurrencies and Blockchain Technology

(Kaygın, Topcuoglu, & Ozkes, 2018) described the Bitcoin system from a business ethics perspective. In the year 2008, confidence decreased in the traditional banking system and financial institutions due to the subprime mortgage crisis on banks that occurred in the USA and consequently economic recession in the world economy. Bitcoin is a cryptocurrency that came in the year 2008. Bitcoin emerged as a digital currency system that facilitates money transfer from one point to another without any need for an account in traditional banks or financial institutions. The value of Bitcoin augmented more than twenty thousand times in the market from 2009-to 2017. The moral values of Bitcoin have been questioned in the business world due to its illegal transactions, the large volume of money transfers, tax evasion, bribery, and corruption.

The arrival of new technologies like Application Programming Interfaces (API), Big data analytics, biometric technologies, contactless technologies, Distributed Ledger Technology (DLT), Cloud Computing, Internet of things (IoT), Central Bank Digital Currency (CBDC), and Digital Wallets has brought digital transformation in financial services and facilitates financial inclusion. Cryptocurrency (Bitcoin, Ether, and so on) is a highly decentralized and immutable digital money system and is considered an alternative to traditional money or fiat money of a centralized banking system. It is an innovative and disruptive digital monetary transaction system in the modern business world. Cryptocurrency is spread at a global level and characterized by a frictionless, highly decentralized transaction system. These are operating through digital wallets secured by encryption. The liquidity level of cryptocurrencies cannot be manipulated because blockchain technology and encrypted Cryptocurrencies are generated by decentralized system software.

(Steinberg, 2019) described the impact of big data on personalized pricing. The mass collection, algorithmic and scientific analysis of data regarding individual details through the web or any digital platforms is commonly known as 'big data. The big data is sourced from one's browsing history, social media history, purchase history; web searches, a location visited traced through a Smartphone, the duration of a webpage in one's browser, and so on. Big data is very useful to firms because a firm can make a profile of targeted customers and can design marketing and advertisement activities. The company can also use it for price discrimination among consumers through big data-driven personalized pricing (BDPP). From a BDPP point of view, it can generate ethically significant social benefits, welfare, and equal distribution of resources. But from the Market Failures Approach (MFA) point of view, BDPP is unethical and the realm of business activity should not follow ethical requirements especially when we consider consumers' welfare.

6. Privacy and Ethics

Privacy protection means protecting the person and his rights, ownership, and control of personal information and details. The fraud activities like spam emails and text messages, unwanted calls, fake advertisements, and information mislead customers. The remarkable vision from the Honorable Supreme Court of India in its judgment in January 2020 held that the right to privacy is a fundamental right and an integral part of the right to life and liberty of people (Standard, 2020, January 9).

(North-Samardzic, 2020) reviewed biometric technology and ethics in his research paper. There are ethical, security, and privacy concerns behind the use of biometrics in digital transactions and business purposes. Privacy is the big question today while using innovative digital technologies and platforms. Recently Facebook and iPhone launched the system of identity recognition of users. Biometric technology uses the physiological and behavioral characteristics (fingerprint, iris, face shape, voice, and others) of individuals for authentication and identity management. Biometric-based data is highly sensitive than statistical data and it is an invasion of the privacy of the individual. The 'privacy paradox' is another notable feature of using technology. Biometric information must be ethically used in the business organization. Business ethics is inherently significant in using biometric technology, and digital privacy for protecting individual rights and civil liberties.

A research study was conducted to know the factors influencing the adoption of digital wallets and mobile banking among rural customers in Maharashtra, India. The study revealed that safety, security, privacy, familiarity, trust, prestige, and speed are major factors in adopting digital wallets and mobile banking (Parakh, Ukhalkar, & Sanu, 2020). With the advancement of digital technology, the availability of banking services through digital platforms has influenced Generation Z. They easily adopt digital banking services due to their peculiar mental construct, financial needs, changing circumstances, and intrinsic digital consumer behaviorism. At the global level to achieve sustainable development goals, affordable financial products are necessary for the inclusion of poor people in the mainstream of financial inclusion (Kangwa, Mwale, & Shaikh, 2021).

(Stewart, 2019) discussed the accountability crisis of advertising and marketing in the digital age. Privacy regulation is needful to the business world. The privacy regulation Act passed by the USA (The Privacy Act of 1974), the European Union's General Data Protection Regulation (GDPR), and California's Consumer Privacy Act intended to protect the information and privacy of people. These socio-economic problems affect the credibility of media advertisers and marketers. Today, the digital world is expanding and information is a critical asset to any business organization. To resolve these issues and challenges, a comprehensive and broader dialog is needed in the industrial world. In the year 2016, United Nations acknowledge that digital financial services have a significant role in building financial inclusion and poverty reduction in the economy (Kangwa, Mwale, & Shaikh, 2021).

(Dierksmeier & Seele, 2018) discussed the ethical view on cryptocurrency and blockchain technology in financial transactions. There are many arguments regarding the 'moral goods' and 'moral evils' of cryptocurrency in the current research world. Cryptocurrency facilitates poverty reduction and financial inclusion and lower transaction cost, reduction in the printing cost of currency, reduces hyperinflation and reduces the cost of global B2B operations. The argument regarding moral evils of cryptocurrency facilitates nefarious business and consumption, shadow banking, high volatility risk, tax evasion, and lack of trust in long-term savings. The major challenge and ethical issues related to cryptocurrency lie in its use for illegal, immoral transactions and money laundering activities. The solution to ethical and legal issues of cryptocurrency is a major challenge but some suggestions are coming from different corners of the research world. The suggestions include the regulation of cryptocurrency at the global level by using the inherent role of the International Monetary Fund (IMF) in the international monetary system, bringing more transparency, building protocols to control the draft, and establishing laws at national and international levels and cooperation, and develop innovative digital technologies to monitor criminal behavior and illegal activities using cryptocurrency. Customer service, integrity, and security are essential virtues of digital banking (Milligan, 2019).

7. Conclusion

Technological innovation and digitalization have brought drastic changes in banking and financial services. The advancement of digital technologies such as cyber-physical systems, big data, blockchain technology, open banking, and others have brought substantial transformation in the delivery of financial services. The recession of the economy and banking crisis in 2008 also brought more consciousness to bank management. The arrival of fintech and mobile banking services also made a substantial shift in the banking concept. Digital banking services intensify competition and make more choices in financial services. Hence digital banking services must build more ethical practices, security systems, and consciousness. The consciousness of how digital banking practices affect the economy, society and environment is a genuine concern. Irrespective of the existence of all these concerns inside the system, the digital revolution in banking and financial services inherently facilitated financial inclusion in society.

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