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Challenges and risks associated with Fintech integration in Indian Banks

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Abstract

Indian banking is shifting towards a paradigm shift due to the incorporation of Financial Technology (Fintech). Although such transformation can positively affect the level of operational efficiency, customer satisfaction, and financial inclusion, it creates complicated challenges, especially to employees. The present conceptual paper dwells on discussing the range of risks and challenges using the perspective of the employees within the framework of the Fintech integration in Indian banks. Based on a thorough investigation of scholarly and working literature, the research highlights the following dimensions, technological flexibility, job security issues, the necessity to regularly upskill, ethical issues, and corporate preparedness. The paper will end by giving strategic recommendations on how to channel the same to support the challenges by making Fintech a more human-centered transition.

Keywords: Operational efficiency, customer satisfaction, financial inclusion and fintech

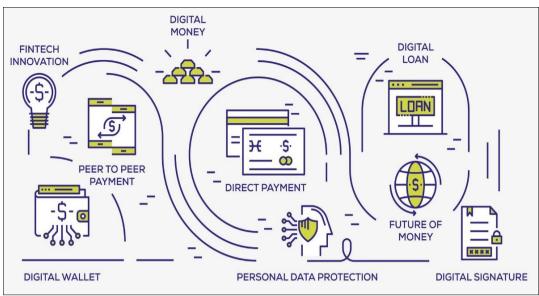
Introduction

Fintech is also changing the financial services ecosystem significantly, as newly developed technological innovations are bringing efficiency, availability, and satisfaction to customers. India is quickening its pace in embracing Fintech solutions and it is driving both, the state-owned and non-banking banks into using such technologies as blockchain to conduct safe and transparent transactions, the use of artificial intelligence (AI)-based chatbots to achieve a better customer experience, digital lending platforms to lend credit at a fastened rate, and robo-advisors that will provide automated help with investment decisions based on mountains of data. These innovations are bound to transform classical banking models to foster broad-based financial development.

Nonetheless, inclusion of Fintech into the banking process is not a smooth sail. The human factor, the experiences and thoughts of the bank employees can be counted as one of the most important, and probably the most ignored elements of this transformation. Employees are another important stakeholder in such a digital transformation as direct executors of Fintech plans. However, most of them feel anxious, resistant and mentally stressed by the rate and magnitude of changes in technology. Job displacement in a time of automation, the need to upskill, the loss of face-to-face contact with others, and ethical issues that arise when working with sensitive customer information have drawn the concern of institutions.

In addition to this, the uncertainty towards determining the roles in future, as well as the possibility of redundancy may adversely affect the morale, productivity, and the engagement of the employees. All these human-based friction may eventually become an obstacle to smooth implementation and long-term sustainability of Fintech projects. So, having an indepth knowledge of the employee outlook is not only an issue of change management, it is a business strategy. With the help of scope-based training, clear communication, ethical protection, it is crucially important to make the employees informed, involved, and supported to create a collaborative culture that can maximize the potential of Fintech adoption.

The image provides a snapshot of the Fintech Industry, highlighting its major components such as digital wallets, peer-to-peer payments, direct payments, and digital money. It also emphasizes innovations like digital loans, personal data protection, and digital signatures, which are transforming the way financial transactions are conducted. These technologies collectively represent the future of money, driving a secure, fast, and efficient digital financial ecosystem.



Source: https://theunitedindian.com

Fig 1: Fintech Industry

2. Research Objective

To assess the challenges and risks associated with Fintech integration in Indian banks.

3. Literature Review

3.1 The Trends in Fintech Adoption in India

Over the past 10 years, India has seen a blistering development of the Fintech industry because of the growth in digital infrastructure and policy encouragement. Fintech innovation has a very firm base with such government arrangements, like Digital India, Jan Dhan Yojana, the Unified Payments Interface (UPI), and India Stack. PwC (2020) found that 48 percent of the Indian financial institutions had either installed Fintech solutions or were on the way of doing it. Recent reports published by EY (2022) stress the idea that India is one of the three leading Fintech ecosystems worldwide, and the volume of transactions in digital payments reached more than 800 billion in the current FY 2021-22. The use is especially considerable in digital payments, biometric identification, machine learningpowered fraud prevention, algorithm lending, and machinepowered wealth management. Moreover, the regulatory sandbox provided by RBI and the Account Aggregator framework have stimulated safe and cross-compatible Fintech pilot testing (RBI, 2021) [13].

3.2 Emergence and resistance to technology Adaptability

The rate of technological adaptation in the banking industry has made a rift between technology and staff flexibility. According to Gupta & Singh (2019) [5], the employees who do not have a starting level of tech literacy tend to show mental and emotional opposition in relation to the transformation to the AI-based platforms, blockchain UIs, and analytical dashboards. This is congruent with the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003) [16] that highlights performance expectancy, effort expectancy, influence, and facilitating conditions as the determinants to whether an employee intends to use new technology. As Kamble et al. (2023) [6] sum up, psychological safety and peer learning are powerful mediators that affect resistance to digital tools in Indian

bank realities, particularly when it comes to middle-aged industry employees (and even more so to those that work in rural branches).

3.3 Role Redefinition and Job Security

Automation with the use of Fintech, especially via Robotic Process Automation (RPA) and Natural Language Processing (NLP), is reshaping job description in the banking industry. Analyzing data on firms in the financial sector, Rai et al. (2021) [12] arrived at the conclusion that clerical and transactional jobs are not growing and that more than 30 percent of routine work at Indian banks will be automated by 2023. According to McKinsey or Company (2022), approximately forty percent of conventional backoffice banking roles are expected to be computerized in the global economy by the year 2030, and India is not an exception. This has presented a lot of fear to the employees regarding redundancy of their jobs, lack of upward mobility, and re-definition of their career. This means that it is extremely important to re-deploy the employees in positions where their efforts may be needed because of humancentered abilities, including empathy, complex decisionmaking, and problem-solving (Chatterjee & Chavan, 2022)

3.4 Training Gaps and Skill Gaps

The Fintech transformation is revealing significant mismatch in the banking talent of India. Data analytics, AI/ML, block chain compliance, digital KYC and cyber security are now taking critical skills. Nevertheless, just 27 percent of staff at banking establishments stated they were sufficiently prepared to work in the digital sphere (KPMG, 2021). The majority of the corporate training initiatives remain thoroughly treatment-oriented and not job-specific or aware of the technological tool level of maturity. World Economic Forum (2020) has proposed constant, modular, and practical reskilling approaches to futurize workforce. NASSCOM-FICCI (2023) [10] also points out the fact that this skill-set imbalance can be effectively countered through micro-credentialing, as the digital boot camp, and industry-academia accord.

3.5 Ethical Data and Cyber security Issues

Thanks to the increased application of cloud computing, artificial intelligence, and digital interface, employees in the banking sector are currently directly processing inferior access to huge volumes of sensitive information about customers. This raises new ethical obstacles. According to NASSCOM, (2020), there was increasing employee worry on data misuse, algorithmic bias, digital surveillance, and unwarranted profiling. Uncertainties have been further escalated by lack of an in-depth data privacy law in India until recently in Digital Personal Data Protection Act (2023). There is also the experience of stress when employees are not sure what their liability is in case of data breaches or violations of regulations (Sen & Menon, 2023) [14]. To enable this, organizations need to consider data ethics training, audit report transparency, and ethical AI governance policies to instill confidence in the employees and the stakeholders in the regulatory compliance.

3.6 Change management and Organizational Culture

Fintech is more successful when the internal organizational culture supports the process of changing and adopting the new process. According to Bhatt (2022) [2], open communication, inclusiveness to the employees in making a decision, and high transformational leadership contribute to

successful establishment of trust and reduced resistance. Accenture (2022) discovered that banks possessing agile, digital inclusive culture recorded a success rate of integrating Fintech solutions that was 35 percent higher than their counterparts with top-to-bottom organizational structure. Moreover, Singh and Dey (2023) [15] state that an internal Fintech champion, change agents, and crossfunctional task forces can facilitate adaptation when the pros and cons of using technology are identified, and agility and responsiveness are achieved through an inclusive and participatory rather than native and enforced process. Cyclic reviews of the employees, gamified upskilling programs, and rewards to innovators is paramount in defining good behavior changes.

4. Conceptual Framework

The introduction of Fintech in companies and especially in banking and financial services has brought a lot of changes in the roles, responsibilities and dynamics of all employees. Where the Fintech delivers efficiency and innovation in its operations, there are also issues that it brings along the human aspect. Comprehending these challenges on critical dimensions assists in organizations having more inclusive, resilient, and adaptive approaches in the process of digital transformation.

Table 1: Dimension and Challenges

Dimension	Challenges
Technological	Many employees struggle with digital illiteracy, making it difficult to adopt new tools. Resistance to change is
Adaptability	common due to fear of the unknown, and low self-efficacy can undermine confidence in handling digital tasks.
Job Security	Automation and AI-driven solutions can create redundancy fears, leading to career uncertainty and role
	ambiguity, where job expectations and future roles are unclear.
Skill Development	Existing training programs are often inadequate, with generic modules that fail to address specific needs. The
	lack of customization reduces effectiveness and engagement.
Ethical Responsibilities	Employees face challenges related to data misuse risks, especially when not adequately trained. Cybersecurity
	awareness remains low due to insufficient ethical training.
Organizational Support	Poor communication, weak leadership, and exclusion from strategic planning result in employees feeling
	unsupported and disconnected from Fintech initiatives.

5. Discussion

Most people tend to look at the banking sector transformation (caused by financial technology (Fintech)) through the prism of technology. Yet this view disregards the more complicated and in-depth human aspect of the change. The issue of Fintech transformation is more than a technological change; it is more of a human dilemma which is going to impact employees at various psychological and professional levels. Mid-career professionals specifically are under huge stress and change fatigue when they have to forget about their way of doing the banking job and learn a completely new approach to their jobs completely. Such reluctance to change is usually due to fear, fear of being redundant, fear of not being competent to deal with the new technologies, and fear of lack of professional identity.

The junior staff are more financially impulsive, but still they are not immune to pressure. Instead they are put in a very tense atmosphere of hyper-competition where there is a pressure on them to fast-track their skills input and thus giving them a feeling of anxiety and insecurity of losing jobs. Nevertheless, organizations are like to invest too much on technological infrastructure without focusing on the process of human transition. Such uncodified support, transparent communication and inclusive planning alienates workers and renders them feel threatened by the same

technologies that they are designed to improve their functions. The emerging resistance does not just indicate an unwillingness to embrace new tools but can be explained by the sense that someone is taking away the sense of job security and the uncertainty regarding the future of employment.

Additionally, there are even more challenges on account of systemic biases provided by AI in decision-making applications such as client profiling, mortgage developing, and fraud absence. The fact that employees are insufficiently trained in data ethics and ethical usage of AI prevents them in the ability to address ethical dilemmas that these technologies present. Customer privacy, bias in automated recommendations application, and whether or not automated recommendations are trustworthy are some of the questions that can be challenging to answer without a good ethical framework. Regrettably most organizations continue to use generalized modules of compliance that does not take into account the detailed and real-time choices that employees make in this digital age.

Finally, it should be stated that Fintech transformation is not only a technical change but a socio-cultural transformation that needs to be approached with human-centered approaches. In regard to the psychological aspect, it is essential to enhance communication, conduct special

training on their role, as well as integrate ethical job consciousness into the organizational state of affairs. By equally investing in advance technology and the flexibility of humans' financial institutions will be in a position to make the digital transition journey a bit smoother, more participatory, and ethically acceptable.

6. Suggestions and Strategic Implications

- Tailored Training Programs: Banks must consider developing modular training interventions, based on employee level such as: Technical training intervention on IT teams; functional training interventions on operations; ethical and legal training interventions on compliance teams.
- Participative Change Management: Invite the employees to the planning and deployment of Fintech projects at initial stages. Apply workshops, suggestion schemes and feedback loop.
- Digital Literacy Bootcamps: Arrange periodical bootcamps to close the digital gap amongst the aged or less tech-savvy workers.
- Career Path Reengineering: Add new jobs like Digital Relationship Manager, Fintech Compliance Officer or Data Ethics Officer and clean career mobility.
- Emotional Well-being Programs: Integrate mental health support and stress management programs that will embrace anxiety caused by change.
- **Ethical Governance:** Devise defined guidelines in ethical use of data and cyber-responsibility which must be certified by employees.

The incorporation into Indian Bank environment will have serious strategic implications which are not limited only to technological advances. First, it requires a new workforce strategy-organisations need to abandon the mindset of employees as passive subjects of change and embrace them as equal players behind innovation. This includes rearranging human resource policy to focus on continuous learning, digital literacy, and psychological help so that the switch could be smooth. Second, it is important to reform the presentation of leadership and change management. Honest communication, involving decision-making, and compassionate management styles are a few concepts that leaders need to adopt, as ways of controlling employee resistance and building trust in times of technological upheavals.

Third, ethics and responsible AI governance should become strategic in the organizational planning. To keep up with the recent changes under the influence of AI-driven tools becoming a central attribute of the banking activities, employees shall not only be trained to use it but also to comprehend ethical consequences of automated choices, information security, and prejudice in algorithms. In terms of strategy, financial institutions that incorporate Fintech with effective ethical standards and policies that value and focus on human beings will be able to build a competitive edge in terms of greater employee commitment, customer faith, and flexibility of operations.

Moreover, it can be tactically used to fill the gap between the legacy system and modern platforms, exploiting the idea of implementing hybrid ways of transformation that will not destroy institutional knowledge, yet add digital abilities. Lastly, collaboration with EdTech companies, Fintech startups, and universities can give banks access to exclusive skill development resources that would create an environment of innovation and flexibility. With human capital as the center of its Fintech strategy, a bank is ready to guarantee a long-term, technologically and socially viable digital development.

7. Conclusion

Although Fintech brings a revolutionary and bright future to the banking industry in India, its effective adoption cannot be measured by technological preparedness only, but by its being people-friendly too. Employees do not act as implementers of Fintech tools but are also important stakeholders and co-creators of the Fintech success. Digital initiatives highly depend on their acceptance, flexibility and moral implementation, which directly affect the sustainability and effectiveness of any long-lasting online endeavor. Nevertheless, the human nature of such transformation has been overlooked in many organizations and most of the time the employees end up acting out in resistance, psychological pressures and ethical fogs. As stated in this paper, recommending Fintech integration to achieve real results is a strategic approach-one that is dynamic in identifying, comprehending, and overcoming the problems in the mindset of employees including change fatigue, job loss fear, inadequate digital skills, and ethical dilemmas that we may encounter due to data-driven decision-making. Continuous communication, inclusive planning, and narrowly focused reskilling programs that complement various profiles of employees should be a part of a strategic plan. Furthermore, all considerations must be made to establish a culture of ethical sensitization since AI and automation tend to manipulate customer relations and financial moves.

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