

IMPACT OF INNOVATION ON DIGITAL TRANSFORMATION OF FOREIGN BANKS IN INDIA

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Abstract

This research paper investigates the impact of innovation on the digital transformation of foreign banks operating in India, with a specific focus on employees' perceptions towards the use of innovative methods. The study adopts a quantitative approach and employs Likert scale-based questionnaires to collect data from 216 respondents employed in various foreign banks across India. The objectives of the study are twofold: (1) to examine the influence of innovation on digital transformation in the banking sector; and (2) to understand employees' perceptions towards the implementation of innovative methods in digital transformation initiatives. The hypotheses are formulated and tested using one-sample t-tests, revealing significant positive impacts of innovation on digital transformation efforts and positive perceptions among employees towards the use of innovative methods. The findings underscore the importance of continuous innovation in driving digital transformation within the banking sector, highlighting the need for strategic initiatives aimed at fostering a supportive work environment and enhancing operational efficiency and customer experience.

Keywords: Innovation, digital transformation, foreign banks, employees' perceptions, quantitative research, Likert scale, banking sector, India, one-sample t-test, strategic initiatives.

Introduction

Innovation is a fundamental element in the development of the worldwide banking industry, triggering significant changes in how operations are carried out, services are provided, and customers are engaged. In the Indian banking sector, foreign banks have played a crucial role in driving innovation and leading a digital transformation that has fundamentally changed old banking practices and redefined client demands. This introduction explores the crucial role that innovation plays in driving the digital transformation of international banks operating in the Indian market. The Indian banking system exemplifies a dynamic fusion of conventional traditions and modern technologies. Traditionally, the banking industry in India has been marked by a wide range of public sector banks, private sector banks, and foreign banks, each making distinct contributions to the financial ecosystem. Historically, public sector banks

have been the main players in the market. However, the liberalisation policies of the 1990s allowed international banks to enter the market, which brought new energy for innovation and competitiveness. The global digital revolution has brought forth a new era of banking characterised by increased client expectations and the need for advanced technology capabilities. In a world that is becoming more linked, where ease and accessibility are extremely important, the digital transformation of banks has become necessary for their existence rather than an optional approach. Foreign banks in India have quickly acknowledged this significant change and have deliberately utilised innovation to strengthen their position in the market and improve client interaction. Innovation plays a crucial role in propelling the digital transformation efforts of international banks in India. Foreign banks have utilised innovation, such as sophisticated analytics, artificial intelligence, blockchain technology, and smart mobile applications, to improve operational efficiency, enhance customer experiences, and gain a competitive advantage in the market. These advancements have surpassed the limitations of traditional banking, making it easier to conduct transactions, provide customised services, and make decisions in real-time. The core of the digital transformation process is around a persistent emphasis on customer-centric innovation. Foreign banks have been at the forefront of developing innovative methods of providing services to its tech-savvy customers. These methods include tailored encounters, seamless transactions, and the use of many channels for client engagement. Banks have utilised big data analytics and machine learning algorithms to get comprehensive understanding of client behaviour, allowing them to customise products and predict demands in advance. Although innovation has played a crucial role in advancing the digital transformation agenda, international banks operating in India have faced the challenge of dealing with a complicated regulatory environment that is marked by strict compliance standards and data localization laws. Although facing regulatory obstacles, banks have persevered in developing new ideas and solutions, while adhering to regulatory guidelines. This has led to the cultivation of a culture that promotes responsible innovation and risk management. This research aims to thoroughly investigate the influence of innovation on the digitalization process of international banks in India. The study intends to analyse the factors that drive, hinder, and result from innovation-led digital activities in the banking sector. It seeks to provide valuable insights into the changing dynamics of the industry and offer strategic suggestions for achieving long-term development and sustainability. The study aims to explore the complexities of innovation in banking and its impact on the wider financial ecosystem using a

combination of empirical analysis and qualitative research methods. To summarise, the digitalization of foreign banks in India represents a significant change in approach, fueled by innovative practices. The significance of innovation in setting future trajectories in the digital-first landscape of banks is of utmost importance. Foreign banks have the potential to achieve continuous development and significance in the digital era by combining their technology expertise, focus on client needs, and adherence to regulations.

Review of Literature

Magomaeva and Galazova (2021) explore the crucial impact of banking innovations on the digital transformation of the banking industry, providing valuable insights that are relevant to international banks operating in India. The authors analyse the development of the Russian banking system in response to digitalization, providing insight into the various effects of banking innovations on organisational dynamics and profitability. Their analysis highlights the mutually beneficial connection between digitization and banking innovation, emphasising the importance of technological progress in improving the effectiveness and profitability of banking operations. Magomaeva and Galazova emphasise the significant impact of the digital transformation phenomenon on foreign banks in India, as they navigate the landscape of innovation-driven digital change. They highlight how global trends such as digitalization and fintech converge, highlighting the systemic and transformative nature of this transformation. The authors' identification of three fundamental approaches to digital transformation offers a conceptual framework that aligns with the need for innovation-driven digital strategies adopted by foreign banks aiming to strengthen their market presence and competitiveness in India's rapidly changing banking environment.

Tsindeliani et al. (2022) explore the complex dynamics of digital transformation in the financial sector, providing interesting insights that align with the wider discussion on sustainable development. The research seeks to clarify the present condition of the Russian banking system in light of the ongoing development of the digital economy. It strives to explain important standards and regulatory requirements that are necessary for creating a favourable environment for digitalization. The authors use a systematic approach based on political and legal research to identify the essential strategies and regulations for enabling the digitization of banking relationships and the enforcement of prudential requirements. Their findings highlight the worldwide pattern in which digitization and globalisation work together to promote international regulatory cooperation and legislative harmonisation, leading to the development of innovative approaches in financial market regulation and

governance. Furthermore, the research emphasises the significant impact of digitization in strengthening the efficient implementation of prudential regulations, thereby protecting the welfare of the public and guaranteeing the stability and durability of the banking industry. The study's novelty stems from its ability to identify relevant concerns related to the digitization of credit institutions and the central bank. This requires legislative interventions and regulatory upgrades to effectively handle new difficulties and optimise regulatory frameworks. Therefore, Tsindeliani et al.'s study makes a significant contribution to the existing research by outlining effective strategies for navigating the digital transformation landscape in the banking sector. This aligns with the need for innovative strategies adopted by foreign banks in India as they deal with the challenges of digital change and regulatory convergence.

Raju, Singh, and Khatter (2017) provide a thorough examination of the Aadhaar card system in India, clarifying its difficulties and influence on digital transformation. The report outlines the goals of examining the Aadhaar card and exploring its applicability and benefits in other systems, while also emphasising possible security risks linked to its adoption. Using a systematic approach based on extensive literature reviews that include research publications, media, case studies, and Supreme Court observations, the authors classify Aadhaar-related instances into three separate groups. The findings highlight the importance of the Aadhaar project in promoting digital innovation in India. The initiative aims to improve the compatibility of e-governance functions and optimise the use of Information and Communication Technology Infrastructure. The document elaborates on the Government of India's efforts to enforce the use of Aadhaar cards in different government apps and encourage transactions that are enabled by Aadhaar. This review highlights the various effects of the Aadhaar card system on digital transformation. It aligns with the wider discussion on innovation-driven initiatives in the Indian banking sector, especially in relation to foreign banks adapting to digital transformation and regulatory frameworks.

Kothari and Seetharaman (2020) explore the changing nature of the retail banking sector in the United Arab Emirates (UAE), which is undergoing a significant transition towards digital transformation. The UAE's banking sector, being a leading financial hub in the Middle East, has been actively dealing with the challenges posed by 'digital disruption,' 'digitization,' and 'digital banking.' The authors emphasise the various factors driving the digitization trend, including improved banking efficiency, customer attraction, introduction of innovative services, and enhanced analytics, all aimed at enhancing the overall customer experience.

However, organisations have difficulties in successfully implementing digitalization projects, which often hinder the achievement of their strategic goals. In light of this context, Kothari and Seetharaman aim to address a significant deficiency in existing literature by undertaking original research to clarify the factors that drive digital transformation and evaluate its effects on the retail banking sector in the UAE. Their findings highlight the crucial influence of client requirements, technology, legislation, business processes, and skills and competences in influencing the paths of digital transformation inside retail banks. The study enhances the understanding of these crucial factors, contributing to the establishment of a theoretical framework for digital transformation. This framework empowers retail banks to effectively navigate the competitive marketplace and achieve excellence in the digital era. This study contributes to the discussion on digital transformation in the banking sector of the UAE. It also relates to the broader conversations about innovation-driven strategies adopted by foreign banks in India as they undergo their own digital transformation processes in response to changing customer expectations and regulatory environments.

Murugan (2021) conducts a detailed analysis of the worldwide banking industry, specifically exploring the convergence of digitization and advancements in financial services. In the face of increasing competition and changing client preferences, the banking industry is experiencing a significant transition. This transformation is marked by the rise of new competitors, shifts in customer behaviour, and a high demand for innovative products. India's financial industry is notable for its variety and quick growth, which has been supported by government reforms focused on liberalisation and regulatory improvement. The Indian Government, in partnership with the Reserve Bank of India (RBI), has enacted many initiatives to foster financial inclusion, specifically targeting micro, small, and medium companies (MSMEs). In addition, the progress in technology has facilitated the widespread availability of mobile and online banking services. Many banks have also introduced contactless credit and debit cards that utilise near field communication (NFC) technology. The spread of digital banking services highlights both the worldwide transformation of the banking industry and the adoption of innovation-driven tactics by international banks in India. Foreign banks in India must utilise digitization and financial service innovation to satisfy the changing demands and expectations of clients, while still following regulatory frameworks and industry norms. Murugan's thoughts provide essential perspectives for comprehending the dynamics of digital transformation in the global banking industry,

offering strategic guidance for international banks aiming to strengthen their market presence and competitiveness in India's dynamic banking environment.

Osei, Cherkasova, and Oware (2023) conduct a thorough bibliometric analysis to clarify the conceptual basis of research on digital banking transformation (DBT). In light of the widespread digitalization that is impacting every aspect of life, this study aims to analyse the field of DBT research and identify new and developing trends. The authors utilise bibliometric and network analytic approaches to examine 268 articles from 1989 to 2022. Their findings highlight the prevalence of research emanating from nations such as the UK, USA, Germany, and China, with a significant emphasis on developed economies. China and India are significant contributions from rising nations, emphasising the global importance of DBT research. Furthermore, the report highlights important theoretical foundations and upcoming areas of research, focusing particularly on FinTech, blockchain, mobile financial services applications, artificial intelligence, mobile banking service platforms, and sustainable business models. The path of development highlighted here emphasises the changing nature of digital banking, which is defined by the growing significance of cutting-edge technologies and their influence on banking processes and client interactions. The authors emphasise the want for more investigation in these domains, especially considering the increasing prevalence of blockchain technology and digital currencies. This highlights the urgent need for continuous academic examination and exploration in the subject of DBT. This review offers valuable insights into the intellectual landscape of DBT research and provides strategic considerations for foreign banks operating in India. It helps them navigate the complexities of digital transformation and innovation-driven strategies in the dynamic banking sector landscape.

Thippeswami's essay discusses the digital efforts implemented by the State Bank of India (SBI), a well-known government-owned bank, with the goal of transforming its operations and enhancing customer experiences. SBI has successfully linked banking services with lifestyle and financial products through platforms such as YONO, SBI Buddy, and e-Smart SME. This integration allows users to have personalised and smooth experiences without any difficulties. Partnerships with Digi Locker and the integration of a virtual assistant have enhanced the capabilities of clients and strengthened support services. SBI's adoption of digital technology highlights its dedication to innovation and effectiveness, establishing it as a pioneer in the banking sector. SBI showcases the power of digital transformation in

enhancing customer focus and operational efficiency in the banking industry, establishing a standard for other banks to follow.

Mavlutova et al. (2022) contribute to the discussion on how digital transformation promotes sustainable growth in the banking industry. The text discusses the growing number of studies that investigate the effects of digital technologies on different parts of the economy. It highlights the need to comprehend the factors and relationships that drive the influence of digital transformation on sustainable growth in the financial sector. The study investigates the impact of digital transformation on financial sector sustainable development by examining the role of innovative technologies such as digital payments. This is done through a systematic literature review, secondary data analysis, and expert interviews. The study focuses on how digital transformation enhances financial inclusion and operational efficiency. The authors utilise text analytics, bibliometric analysis, and network mapping to examine and identify research gaps in the digital transformation agenda within the banking industry. Statistical techniques, such as correlation and regression analysis, are employed to examine data on the dynamics of digital payments in the European Union. Additionally, organised expert interviews are conducted to confirm study findings and emphasise important concerns in the digital transformation of the financial sector in the Baltic nations. The research primarily examines the economic aspect of sustainable development, with a specific focus on indicators such as financial inclusion and the extent of digital payments. However, it gives less consideration to the social aspect, specifically regarding financial inclusion through digital payments. The findings highlight the current patterns in digital transformation and the diverse utilisation of digital technology in the EU and Baltic countries to advance the sustainable growth of financial institutions. The analysis highlights a substantial increase in the frequency and magnitude of digital payments in the EU, which is directly linked to enhancements in financial inclusion and operational efficiency in financial institutions. These insights provide essential information for professionals in the financial industry, enabling them to make informed decisions and strategically prepare for digital transformation in order to achieve sustainable growth goals.

Khandelwal (2012) explains the significant and profound effect of information technology on banking operations, leading to a fundamental change in the business. Technology plays a crucial role in driving banking innovation in the current era of globalisation and liberalisation. It allows banks to effectively address the changing needs of consumers in a highly competitive market. The use of E-banking in India brings about significant alterations

in the quality of services, decision-making by managers, operational efficiency, profitability, and productivity of banks. E-banking, which involves electronic payments and inter-bank settlements, improves customer happiness, lowers operating expenses, and boosts productivity, hence enhancing the competitiveness of Indian banks. The widespread use of E-banking services, such as internet banking, mobile banking, and phone banking, has fundamentally transformed conventional banking methods by providing clients with a wide array of services that can be accessed conveniently through their devices. The report predicts the future developments in E-banking, focusing on major trends and shorter-term events that would influence the financial services. The analysis focuses on the influence of technology improvements and changing customer preferences on E-banking services, offering valuable insights into future development paths. In conclusion, the study highlights the crucial importance of E-banking in promoting innovation and effectiveness in the Indian banking industry, setting it for continuous expansion and competitiveness in the era of digitalization.

KM (2020) explores the process of digitalizing banks in India, emphasising the crucial role of technology innovation in transforming the banking industry. Financial institutions are progressively adopting collaborations with technology businesses and making investments in or purchasing such enterprises to improve their digital capabilities. Nevertheless, there are significant discrepancies in the preparedness of market players to adjust to these developments. Technological innovation enables the integration of new users into the financial system, but it also presents concerns, such as the possibility of payment services moving to non-banking firms that are not regulated by financial authorities. The rise of online and mobile payment apps highlights a strong emphasis on enhancing customer satisfaction and integrating with the entire commercial process. These apps are often offered by non-banking organisations that do not possess banking licences. Within the framework of India's Digital India Programme, the process of digitization has emerged as a crucial catalyst for pushing change in several industries, including banking. The Indian banking sector considers digitalization to be of utmost importance, since it allows for better financial inclusion and enhanced client services. The study emphasises the substantial expansion observed in the Indian banking industry, attributing it to the implementation of digitization initiatives. Nevertheless, it also highlights the obstacles and concerns, especially in the context of rural banking, that must be resolved in order to provide fair and equal access to digital financial services. This conceptual study paper seeks to examine the problems and difficulties

associated with the digitization of rural banking. It intends to provide valuable insights for future research and strategic planning in this field.

To summarise, the literature analysis sheds light on the complex connection between innovation and digital transformation in the banking industry, with a specific emphasis on multinational banks operating in India. The literature highlights the crucial role of innovation in generating revolutionary change, from the pioneering digital activities of State Bank of India to larger trends in digitization in the global banking industry. Although current research sheds light on the general influence of innovation on digital transformation and its wider implications for the banking sector, there is a significant gap in understanding employees' perception of the use of innovative methods specifically within the context of digital transformation. This study aims to explore the human aspect of digital transformation by examining employee attitudes and perceptions towards innovation. By doing so, it seeks to provide a comprehensive understanding of the factors that influence successful digital transformation initiatives in foreign banks operating in India.

Objectives of the study

1. To study the impact of Innovation on Digital Transformation of foreign banks in India.
2. To understand the perception of the employees towards use of innovative methods in digital transformation.

Hypotheses

H1: Innovation has a positive impact on Digital Transformation of foreign banks in India.

H2: The perception of the employees towards use of innovative methods in digital transformation is positive.

Methodology

For this study, a quantitative research methodology was employed to investigate the impact of innovation on digital transformation in foreign banks operating in India and to understand employees' perceptions of innovative methods in digital transformation. Data collection was conducted through structured surveys distributed to 216 employees working in various foreign banks across the state of Maharashtra. The survey questionnaire consisted of items designed to measure the level of innovation and digital transformation within the banks, as well as employees' perceptions of these initiatives. A Likert scale was used to assess respondents' agreement with statements related to innovation, digital transformation, and employee perceptions. The data collected were analysed using statistical techniques,

including descriptive statistics to summarize the characteristics of the sample and inferential statistics. This quantitative approach allowed for the systematic investigation of the research objectives and hypotheses, providing empirical evidence to support the study's findings.

Data Analysis

Table 1. Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 years	15	6.9	6.9	6.9
	25-35 years	145	67.1	67.1	74.1
	35-45 years	29	13.4	13.4	87.5
	45-55 years	17	7.9	7.9	95.4
	Above 55 years	10	4.6	4.6	100.0
	Total	216	100.0	100.0	

The table provides a breakdown of respondents' ages in a survey, with a total sample size of 216 individuals. The majority of respondents fall within the age range of 25 to 35 years, comprising 67.1% of the total sample. Following this, 13.4% of respondents are aged 35 to 45 years, while 6.9% are between 18 to 25 years old. Additionally, 7.9% fall within the age range of 45 to 55 years, and 4.6% are above 55 years old. The cumulative percentages indicate that 74.1% of respondents are aged 35 years or younger, with this figure increasing to 87.5% for those aged 45 years or younger. The data illustrate a relatively younger respondent demographic, with a significant proportion falling within the 25 to 35-year age bracket, suggesting potential implications for targeted strategies or considerations in analyzing survey results.

Table 2. Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	122	56.5	56.5	56.5
	Female	94	43.5	43.5	100.0
	Total	216	100.0	100.0	

Table 2 presents the distribution of respondents based on gender in a survey, with a total sample size of 216 individuals. The majority of respondents identified as male, accounting for 56.5% of the total sample, while 43.5% identified as female. The cumulative percentages indicate that 56.5% of respondents are male, with the remaining 43.5% identifying as female.

This gender distribution provides valuable insights into the composition of the survey sample, which can inform subsequent analyses and interpretations of the survey findings.

Table 3. Innovation initiatives implemented by our bank have significantly improved our digital banking services.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	4.6	4.6	4.6
	Disagree	12	5.6	5.6	10.2
	Neutral	8	3.7	3.7	13.9
	Agree	38	17.6	17.6	31.5
	Strongly Agree	148	68.5	68.5	100.0
	Total	216	100.0	100.0	

Table 3 presents the responses of respondents regarding the impact of innovation initiatives implemented by their bank on digital banking services. The majority of respondents strongly agree that these innovation initiatives have significantly improved digital banking services, comprising 68.5% of the total sample. Additionally, 17.6% of respondents agree with this statement. In contrast, a smaller proportion of respondents either disagree or strongly disagree, with 5.6% and 4.6% respectively. Furthermore, a small percentage of respondents (3.7%) indicated a neutral stance. The cumulative percentages indicate that the overwhelming majority of respondents (approximately 96.1%) either agree or strongly agree with the statement, highlighting a positive perception of the impact of innovation initiatives on digital banking services within the bank.

Table 4. The introduction of innovative technologies in our bank has enhanced our overall efficiency and productivity.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	22	10.2	10.2	10.2
	Disagree	16	7.4	7.4	17.6
	Neutral	4	1.9	1.9	19.4
	Agree	39	18.1	18.1	37.5
	Strongly Agree	135	62.5	62.5	100.0
	Total	216	100.0	100.0	

Table 4 displays respondents' perceptions regarding the impact of the introduction of innovative technologies on the overall efficiency and productivity of their bank. The data indicate that the majority of respondents strongly agree (62.5%) that the introduction of innovative technologies has significantly enhanced efficiency and productivity. Additionally, 18.1% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 7.4% and 10.2%, respectively. A very small percentage (1.9%) of respondents indicated a neutral stance. Cumulative percentages show that the overwhelming majority of respondents (approximately 80.6%) either agree or strongly agree with the statement, reflecting a positive perception of the impact of innovative technologies on the bank's efficiency and productivity.

Table 5. Our bank's commitment to innovation has resulted in a more seamless and user-friendly digital banking experience for customers.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	7.4	7.4	7.4
	Disagree	14	6.5	6.5	13.9
	Neutral	8	3.7	3.7	17.6
	Agree	28	13.0	13.0	30.6
	Strongly Agree	150	69.4	69.4	100.0
	Total	216	100.0	100.0	

Table 5 presents respondents' perceptions regarding their bank's commitment to innovation and its impact on providing a seamless and user-friendly digital banking experience for customers. The data indicate that the vast majority of respondents strongly agree (69.4%) that their bank's commitment to innovation has resulted in a more seamless and user-friendly digital banking experience. Additionally, 13.0% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.5% and 7.4%, respectively. A small percentage (3.7%) of respondents indicated a neutral stance. Cumulative percentages show that the overwhelming majority of respondents (approximately 82.4%) either agree or strongly agree with the statement, highlighting a positive perception of the impact of the bank's innovation commitment on enhancing the digital banking experience for customers.

Table 6. The adoption of innovative practices in our bank has facilitated better integration of digital channels and improved customer engagement.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	6.0	6.0	6.0
	Disagree	13	6.0	6.0	12.0
	Neutral	9	4.2	4.2	16.2
	Agree	38	17.6	17.6	33.8
	Strongly Agree	143	66.2	66.2	100.0
	Total	216	100.0	100.0	

Table 6 presents respondents' perceptions regarding the adoption of innovative practices in their bank and its impact on the integration of digital channels and customer engagement. The data reveal that the majority of respondents strongly agree (66.2%) that the adoption of innovative practices has facilitated better integration of digital channels and improved customer engagement. Additionally, 17.6% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.0% each. A small percentage (4.2%) of respondents indicated a neutral stance. Cumulative percentages show that the overwhelming majority of respondents (approximately 83.8%) either agree or strongly agree with the statement, underscoring a positive perception of the impact of innovative practices on enhancing digital channel integration and customer engagement in the bank.

Table 7. The investment in innovation by our bank has contributed to staying competitive in the rapidly evolving digital banking landscape.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	6.0	6.0	6.0
	Disagree	13	6.0	6.0	12.0
	Neutral	9	4.2	4.2	16.2
	Agree	25	11.6	11.6	27.8
	Strongly Agree	156	72.2	72.2	100.0
	Total	216	100.0	100.0	

Table 7 displays respondents' perceptions regarding the investment in innovation by their bank and its contribution to staying competitive in the rapidly evolving digital banking landscape. The data illustrate that the majority of respondents strongly agree (72.2%) that the

investment in innovation has contributed to staying competitive in the digital banking landscape. Additionally, 11.6% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.0% each. A small percentage (4.2%) of respondents indicated a neutral stance. Cumulative percentages indicate that the overwhelming majority of respondents (approximately 83.8%) either agree or strongly agree with the statement, emphasizing a positive perception of the impact of investment in innovation on maintaining competitiveness in the digital banking sector.

Table 8. I believe that innovative methods used in digital transformation positively impact my day-to-day work experience.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	21	9.7	9.7	9.7
	Disagree	13	6.0	6.0	15.7
	Neutral	9	4.2	4.2	19.9
	Agree	55	25.5	25.5	45.4
	Strongly Agree	118	54.6	54.6	100.0
	Total	216	100.0	100.0	

Table 8 presents respondents' beliefs regarding the impact of innovative methods used in digital transformation on their day-to-day work experience. The data show that the majority of respondents strongly agree (54.6%) that innovative methods positively impact their day-to-day work experience. Additionally, 25.5% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.0% and 9.7%, respectively. A small percentage (4.2%) of respondents indicated a neutral stance. Cumulative percentages indicate that the majority of respondents (approximately 80.1%) either agree or strongly agree with the statement, emphasizing a positive perception of the impact of innovative methods on enhancing their work experience in the context of digital transformation.

Table 9. The training and support provided for implementing innovative methods in digital transformation are adequate.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	9.3	9.3	9.3
	Disagree	13	6.0	6.0	15.3

	Neutral	6	2.8	2.8	18.1
	Agree	27	12.5	12.5	30.6
	Strongly Agree	150	69.4	69.4	100.0
	Total	216	100.0	100.0	

Table 9 depicts respondents' perceptions regarding the adequacy of training and support provided for implementing innovative methods in digital transformation. The data indicate that the vast majority of respondents strongly agree (69.4%) that the training and support provided are adequate for implementing innovative methods. Additionally, 12.5% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.0% and 9.3%, respectively. A very small percentage (2.8%) of respondents indicated a neutral stance. Cumulative percentages show that the overwhelming majority of respondents (approximately 81.9%) either agree or strongly agree with the statement, highlighting a positive perception of the adequacy of training and support for implementing innovative methods in digital transformation efforts within the bank.

Table 10. I feel empowered to contribute to the success of digital transformation initiatives through the use of innovative methods.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	5.1	5.1	5.1
	Disagree	21	9.7	9.7	14.8
	Neutral	16	7.4	7.4	22.2
	Agree	67	31.0	31.0	53.2
	Strongly Agree	101	46.8	46.8	100.0
	Total	216	100.0	100.0	

Table 10 presents respondents' feelings of empowerment to contribute to the success of digital transformation initiatives through the use of innovative methods. The data illustrate that a significant majority of respondents strongly agree (46.8%) that they feel empowered to contribute to the success of digital transformation initiatives. Additionally, 31.0% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 9.7% and 5.1%, respectively. A moderate percentage (7.4%) of respondents indicated a neutral stance. Cumulative percentages indicate that the majority of respondents (approximately 84.2%) either agree or strongly agree with the statement, highlighting a positive perception of empowerment to contribute to the success of

digital transformation initiatives through the use of innovative methods among employees in the bank.

Table 11. The communication regarding the implementation of innovative methods in digital transformation is clear and effective.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	15	6.9	6.9	6.9
	Disagree	15	6.9	6.9	13.9
	Neutral	12	5.6	5.6	19.4
	Agree	43	19.9	19.9	39.4
	Strongly Agree	131	60.6	60.6	100.0
	Total	216	100.0	100.0	

Table 11 illustrates respondents' perceptions regarding the clarity and effectiveness of communication regarding the implementation of innovative methods in digital transformation. The data reveal that the majority of respondents strongly agree (60.6%) that communication regarding the implementation of innovative methods is clear and effective. Additionally, 19.9% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.9% each. A moderate percentage (5.6%) of respondents indicated a neutral stance. Cumulative percentages indicate that the overwhelming majority of respondents (approximately 80.5%) either agree or strongly agree with the statement, emphasizing a positive perception of the clarity and effectiveness of communication regarding the implementation of innovative methods in digital transformation within the bank.

Table 12. Overall, I am satisfied with the incorporation of innovative methods in our bank's digital transformation efforts.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	13	6.0	6.0	6.0
	Disagree	14	6.5	6.5	12.5
	Neutral	10	4.6	4.6	17.1
	Agree	25	11.6	11.6	28.7
	Strongly Agree	154	71.3	71.3	100.0
	Total	216	100.0	100.0	

Table 12 presents respondents' overall satisfaction with the incorporation of innovative methods in their bank's digital transformation efforts. The data indicate that the majority of respondents strongly agree (71.3%) that they are satisfied with the incorporation of innovative methods. Additionally, 11.6% of respondents agree with this statement. Conversely, a smaller proportion of respondents either disagree or strongly disagree, with 6.5% and 6.0%, respectively. A small percentage (4.6%) of respondents indicated a neutral stance. Cumulative percentages show that the overwhelming majority of respondents (approximately 82.9%) either agree or strongly agree with the statement, underscoring a positive overall satisfaction with the incorporation of innovative methods in the bank's digital transformation efforts among employees.

H1: Innovation has a positive impact on Digital Transformation of foreign banks in India.

Table 13. One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Innovation initiatives implemented by our bank have significantly improved our digital banking services.	18.694	215	.000	1.39815	1.2507	1.5456
The introduction of innovative technologies in our bank has enhanced our overall efficiency and productivity.	12.484	215	.000	1.15278	.9708	1.3348
Our bank's commitment to innovation has resulted in a more seamless and user-friendly digital banking experience for customers.	15.307	215	.000	1.30556	1.1374	1.4737

The adoption of innovative practices in our bank has facilitated better integration of digital channels and improved customer engagement.	16.445	215	.000	1.31944	1.1613	1.4776
The investment in innovation by our bank has contributed to staying competitive in the rapidly evolving digital banking landscape.	17.084	215	.000	1.37963	1.2205	1.5388

The results of the one-sample t-tests for each statement related to innovation initiatives in Table 13 provide compelling evidence supporting the hypothesis that innovation has a positive impact on the digital transformation of foreign banks in India. Firstly, the statement regarding the improvement of digital banking services through innovation initiatives yielded a significant mean difference of 1.39815 ($t(215) = 18.694, p < .001$), indicating a substantial positive impact on digital transformation. Similarly, the introduction of innovative technologies was associated with a significant mean difference of 1.15278 ($t(215) = 12.484, p < .001$), underscoring its positive effect on enhancing overall efficiency and productivity within the bank. Moreover, the statement regarding the bank's commitment to innovation resulting in a more seamless and user-friendly digital banking experience for customers yielded a substantial mean difference of 1.30556 ($t(215) = 15.307, p < .001$), further supporting the hypothesis. Additionally, the adoption of innovative practices was associated with a significant mean difference of 1.31944 ($t(215) = 16.445, p < .001$), indicating improved integration of digital channels and enhanced customer engagement. Lastly, the investment in innovation by the bank yielded a significant mean difference of 1.37963 ($t(215) = 17.084, p < .001$), highlighting its contribution to maintaining competitiveness in the rapidly evolving digital banking landscape. These results collectively provide robust support for the hypothesis that innovation has a positive impact on the digital transformation of foreign banks in India, underscoring the importance of innovative initiatives in driving digital transformation efforts within the banking sector.

H2: The perception of the employees towards use of innovative methods in digital transformation is positive.

Table 14. One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
I believe that innovative methods used in digital transformation positively impact my day-to-day work experience.	12.305	215	.000	1.09259	.9176	1.2676
The training and support provided for implementing innovative methods in digital transformation are adequate.	14.165	215	.000	1.26852	1.0920	1.4450
I feel empowered to contribute to the success of digital transformation initiatives through the use of innovative methods.	13.028	215	.000	1.04630	.8880	1.2046
The communication regarding the implementation of innovative methods in digital transformation is clear and effective.	14.300	215	.000	1.20370	1.0378	1.3696
Overall, I am satisfied with the incorporation of innovative methods in our bank's digital transformation efforts.	16.615	215	.000	1.35648	1.1956	1.5174

The results of the one-sample t-tests for each statement related to employees' perceptions of innovative methods in digital transformation, as shown in Table 14, provide robust evidence supporting the hypothesis that the perception of employees towards the use of innovative methods in digital transformation is positive. Firstly, the statement regarding the positive impact of innovative methods on day-to-day work experience yielded a significant mean difference of 1.09259 ($t(215) = 12.305$, $p < .001$), indicating a substantial positive perception among employees. Similarly, the adequacy of training and support for implementing innovative methods was associated with a significant mean difference of 1.26852 ($t(215) =$

14.165, $p < .001$), highlighting a positive perception of the support provided by the organization. Moreover, employees expressed feeling empowered to contribute to the success of digital transformation initiatives through the use of innovative methods, with a significant mean difference of 1.04630 ($t(215) = 13.028$, $p < .001$). Additionally, the clarity and effectiveness of communication regarding the implementation of innovative methods in digital transformation yielded a significant mean difference of 1.20370 ($t(215) = 14.300$, $p < .001$), further underscoring the positive perception among employees. Lastly, employees expressed overall satisfaction with the incorporation of innovative methods in the bank's digital transformation efforts, with a significant mean difference of 1.35648 ($t(215) = 16.615$, $p < .001$), indicating a strong positive perception. These results collectively provide robust support for the hypothesis that the perception of employees towards the use of innovative methods in digital transformation is positive, emphasizing the importance of fostering a supportive and empowering environment for employees to drive successful digital transformation initiatives within the bank.

Findings

The findings of the study revealed significant positive impacts of innovation on the digital transformation efforts of foreign banks in India. Through various innovative initiatives, such as the introduction of new technologies and practices, banks have substantially improved their digital banking services, enhanced overall efficiency and productivity, and provided a more seamless and user-friendly experience for customers. Employees perceived these innovative methods positively, expressing satisfaction with their day-to-day work experience, feeling empowered to contribute to digital transformation initiatives, and acknowledging the clarity and effectiveness of communication regarding the implementation of innovative methods. Moreover, the study highlighted the importance of adequate training and support provided by banks in implementing innovative methods, further contributing to positive perceptions among employees. Overall, the findings underscored the crucial role of innovation in driving digital transformation within the banking sector, emphasizing the need for continuous innovation to stay competitive in the rapidly evolving digital landscape.

Furthermore, the study identified a positive perception among employees towards the use of innovative methods in digital transformation, highlighting the organization's commitment to fostering a supportive and empowering environment. Employees expressed overall satisfaction with the incorporation of innovative methods in the bank's digital transformation

efforts, indicating a strong alignment between organizational strategies and employee perceptions. These findings emphasize the importance of strategic initiatives aimed at promoting innovation and digital transformation within banks, as well as the need for ongoing efforts to enhance employee training and support to ensure successful implementation. Overall, the study contributes to the understanding of the impact of innovation on digital transformation in the banking sector and provides valuable insights for organizations seeking to leverage innovative methods to drive digitalization and improve operational efficiency and customer experience.

Conclusion

In conclusion, the study underscores the significant positive impact of innovation on the digital transformation journey of foreign banks operating in India. The findings highlight the crucial role of innovative initiatives, such as the introduction of new technologies and practices, in enhancing digital banking services, improving overall efficiency and productivity, and providing a more seamless and user-friendly experience for customers. Moreover, the positive perceptions among employees towards the use of innovative methods in digital transformation emphasize the importance of fostering a supportive and empowering work environment. These insights suggest that continuous innovation is essential for banks to stay competitive in the rapidly evolving digital landscape and effectively navigate the challenges and opportunities presented by digitalization.

The implications of the study extend to both practitioners and policymakers in the banking sector. Practically, the findings underscore the importance of prioritizing innovation as a strategic imperative for driving digital transformation efforts. Banks can leverage these insights to develop and implement innovative initiatives aimed at enhancing digital banking services, improving operational efficiency, and fostering customer engagement. Moreover, the study emphasizes the need for investing in employee training and support to facilitate the successful implementation of innovative methods and ensure positive employee perceptions. Policymakers can use these findings to inform regulatory frameworks and policies aimed at promoting innovation and digitalization within the banking sector, thereby fostering a conducive environment for sustainable growth and development.

Future research in this area could explore several avenues to further enhance understanding and insights. Firstly, longitudinal studies could be conducted to examine the long-term impacts of innovation on digital transformation and organizational performance within the

banking sector. Additionally, qualitative research methods, such as interviews and focus groups, could provide deeper insights into the mechanisms underlying employee perceptions towards innovative methods in digital transformation. Furthermore, comparative studies across different geographical regions and cultural contexts could shed light on the variations in the adoption and impact of innovative practices in digital transformation efforts. Overall, future research endeavors could contribute to advancing knowledge and best practices in leveraging innovation to drive digital transformation in the banking sector.

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