

## International Journal of Advanced Research in Science, Communication and Technology

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# A Study of Role of Technological Advancement in Private Banking Sector

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Abstract: The study examines the transformative impact of technological advancements on the private banking sector. It explores how innovations such as artificial intelligence, blockchain, and big data analytics are reshaping customer interactions, operational efficiencies, and risk management. By analyzing recent technological trends and their implementation in private banking, the study highlights the benefits of enhanced personalization, improved financial forecasting, and streamlined compliance processes. Furthermore, it assesses the challenges associated with these technologies, including data security concerns and the need for continuous regulatory adaptation. Through a comprehensive review of current practices and future trends, the study provides insights into how private banks can leverage technology to maintain a competitive edge and deliver superior client experiences

**Keywords**: Private Banking, Technological Advancement, Digital Banking, Artificial Intelligence, Blockchain, Cybersecurity, Customer experience, Banking Innovation, Data Analytics

#### I. INTRODUCTION

Technology is rapidly changing how private banks operate innovations like artificial intelligence and digital platforms are reshaping how financial services are delivered.

These changes are not just about efficiency. They are also about meeting customer expectations for personalized services and instant access to information.

The covid-19 pandemic has accelerated the shift towards digital banking, showing how crucial technology is for keeping operations running smoothly during disruptions.

Adopting new technologies comes with challenges such as data security and complying with regulations.

This study how explores these technology advancements are affecting in private banking.

By examining their impact on customer service, satisfaction, operational, efficiency and competitiveness, we aim to find ways for banks to use technology effectively.

Our goal is to provide practical recommendations that help private banks improve their services and thrive in today digital financial world.

Technology is the major parts of the banking sector which decide the quality and effectiveness of banking services. Inclusive banking services to unbanked people will be possible only with the help of innovative business practices of banking with respect to socio-economic Development.

The financial innovations are associated with the technological change and it is totally changed the banking philosophy and further it turned by competition in the banking industry.

The banking industry of India is in the midst of an information technology revolution.

A combination of regulatory and competitive reasons has led to increasing importance of total banking automation in this industry. Information technology has basically been used under different avenues in banking. One is communication and connectivity and another one is business process reengineering. Information technology enables difficult product development, better market infrastructure, implementation of reliable techniques for control of risks and helps the financial intermediaries to reach geographically distant and diversified markets.

Information technology has changed the contours of 3 major functions being performed by the banks i.e. access to liquidity, transformation of assets and then monitoring of risks. Further, information systems have a vital bearing on the efficiency of money, capital and foreign exchange markets.

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The commercial banks went for total branch automation packages for computerization.

The middle and late 90s witnessed the storm of financial reforms, deregulations, globalization etc. coupled with rapid revolution in communication technologies and evolution of novel concept of convergence' of computer and communication technologies, like internet, mobile phones etc., It changed the face of Indian banking system completely.

# II. OBJECTIVES

- To study the changing in banking scenario.
- To study the various financial innovations in banking sector.
- To study the challenges of banks in changing scenario.

#### III. RESEARCH METHODOLOGY

#### Sample Size

The employees who are working in the private banks India is selected as per the convenience and who were ready to the questionnaire. The total number of respondents is 200.

#### **Sampling Frame**

Sampling frame is the source material or device from which is a sample is drawn.

It is a list of all those within a population who can be sampled, and may include individuals. For my research purpose.

## **Sampling Method**

Research tools - Questionnaire consisting of closed ended questions.

A form containing a set of questions will be submitted to the respondents to gain statistical information.

Unstructured question in which possible answers are not suggested and the respondent chooses from the given options.

The questionnaire also contains a section which has certain factors which are related to the likert scale.

#### **Data Collection Method**

The data collected is of the primary and secondary

type-

The primary data was collected through the questionnaire study.

The secondary data was collected through website, brochures of the private banks and through the research papers.

## IV. ANALYSIS & OUTCOME

Chi-Square test statistics

H01: Consumer can choose Primary reasons for private banking services.

H0: Consumer can choose Primary reasons for private banking services.

H1: Consumer do not choose Primary reasons for private banking services.

P-value < 0.05 ->rejected

P-value > 0.05 ->accepted

# **Chi-Square Tests**

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	36.434 <sup>a</sup>	5	<.001
Likelihood Ratio	38.358	5	<.001
Linear-by-Linear	23.216	1	<.001
Association			
N of Valid Cases	193		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.26.











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# **Symmetric Measures**

		Value	Approximate Significance	
Nominal Nominal	by Phi	.434	<.001	
		Cramer's V	.434	<.001
N of Valid Cases			193	

Chi-Square test statistics

H02: persons having more income level H0: persons having more income level H1: persons have less income level

P-value < 0.05 ->rejected P-value > 0.05 ->accepted

			Asymptotic Significanc
	Value		_
	varue	aı	e (2-sided)
	62.166 <sup>a</sup>	15	<.001
Likelihood Ratio	65.605	15	<.001
Linear-by-Linear	46.053	1	<.001
Association			
N of Valid Cases	190		

- a. 6 cells (25.0%) have expected count less than
- 5. The minimum expected count is 2.05.

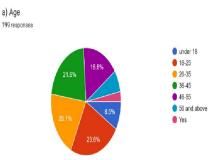


Fig no.1 show age group of respondence and here is maximum number of respondence between 18-25 age group (23.7%)









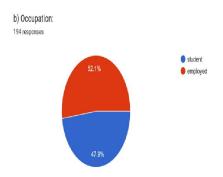
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lology | 150 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100

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**Fig no. 2** show occupation of respondence and Here is maximum number of respondence are the employeein the private banking sector (52.1%)

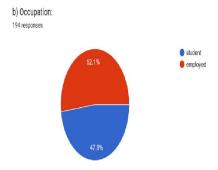


Fig no.3 show how income level of respondence and maximum number of income level of respondence between \$25000-\$50000(34.2%)

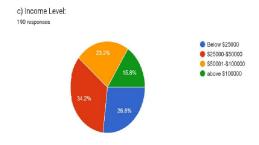


Fig no.4 show how maximum numbers of users can use private banking sector (70.1%)

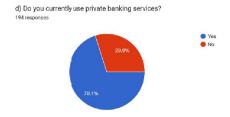


Fig no.5 show how long you have been a customer of private banking services and maximum between less than 1 year (30.4%)









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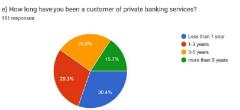


Fig no.6 show how primary reasons for choosing private banking services and the maximum can choose better interest rate (28.7%).

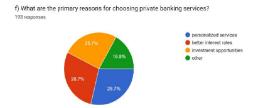


Fig no.7 show awareness and usage technological advancement and maximum are choose very aware (30.1%).

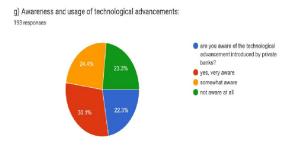


Fig no.8 show how to use of digital banking services provided by private bank and maximum respondence can choose the monthly (30.2%).

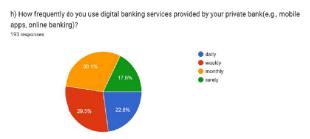


Fig no. 9 show how the technological advancement made private banking services more accessible and maximum respondence can choose moderately (29.9%).





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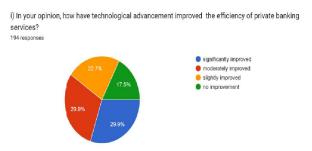
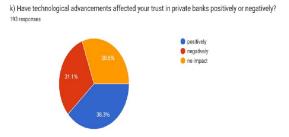
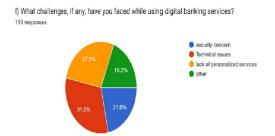


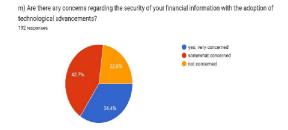
Fig no.10 show how technological advancement affected your trust in private banks positively or negatively and maximum respondence can choose positively impact (38.3%).



**Fig no. 11** show challenges you respondence can faced while using digital banking services and maximum respondence can choose technical issues (31.6%).



**Fig no.12** how the concern regarding security of the financial information with the adoption of technological advancements and maximum respondence can choose somewhat concern (42.9%).



**Fig no.13** show what technological advancements would you like to see in private banking in the future and maximum respondence can choose improved in mobile banking features (36.8%).









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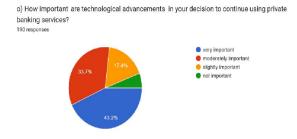
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n) What technological advancements would you like to see in private banking in the future?

194 responses

enhanced cybersecurity measures
in improved michile banking features
Ai-driven personalised
recommendations
other

**Fig no 14** show how Important are technological advancement in your decision to continue using private banking services and maximum respondence can choose the very important (43.2%).



#### V. CONCLUSION

Technological advancements have profoundly transformed the private banking sector, leading to enhanced customer experiences, improved operational efficiency, and stronger data security. The integration of AI, machine learning, data analytics, and cybersecurity technologies has enabled private banks to offer personalized services, streamline processes, and better protect sensitive information. However, these changes also present challenges, such as the need for continuous investment in technology and the management of potential cybersecurity risks.

## VI. ACKNOWLEDGMENT

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