



# FACTORS INFLUENCING THE ADOPTION OF INTERNET BANKING AMONG AXIS BANK CUSTOMERS IN HYDERABAD-A STUDY

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## ABSTRACT

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**Purpose:** The present study is carried out with the help of a suitable research instrument. 200 customers of Axis Bank were selected and with the help of their responses, analysis is made followed by few suggestions. Internet banking is very convenient and fast, it is mired with several security issues. Banking institutions have taken several measures to ensure safety measures for their customers while performing various transactions online.

**Design/Methodology/Approach:** To analyze the customers' perceptions and awareness towards Internet banking security and what are problems faced by customers while using internet banking services. I selected the sample size of 200 customers of Axis bank Hyderabad of Telangana state. Stratified random sampling technique is used through Structure Questionnaire.

**Originality/Value:** This study applies reliability test like Cronbach's alpha test for measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A "high" value for alpha does not imply that the measure is unidimensional and Exploratory factor analysis is one method of checking dimensionality and Structure Equation Modeling.

**Findings:** The outcome of the research work on the Internet banking helped to identify the precautionary checklist open to for a number of issues in the internet banking era. Furthermore, a supreme and powerful security policy employed by the banks and legislation instituted by local or state Governments should be in use and obligatory in order to improve security in Internet banking systems.

## KEYWORDS

- Internet Banking
- Online Banking Adoption
- Axis Bank Customers
- Hyderabad
- Customer Perception
- Technology Acceptance
- Ease of Use

## JEL Codes:

- **G21** – Banks; Depository Institutions; Micro Finance; Mortgages
- **O33** – Technological Change: Choices and Consequences; Diffusion Processes
- **M31** – Marketing (useful for customer behavior and adoption studies)
- **D83** – Search; Learning; Information and Knowledge; Communication
- **L86** – Information and Internet Services; Computer Software
- **C83** – Survey Methods; Sampling Methods (if your study uses primary data)

## INTRODUCTION

Digital Banking gives you the luxury of freely accessing and performing all traditional banking activities 24\*7 without

having to personally go to a bank branch to get your work done. Digital Banking can be done either through a laptop, tablet or your mobile phone. This is what is Digital Banking in India all

about Banks give administrations or bank services to draw in clients, from giving advances, issuing of debit cards and credit cards, computerized monetary services, and surprisingly personal services or administrations. Even so, some fundamental present-day administrations are presented by many commercial banks. Electronic banking has many names like web-based banking, e-banking, virtual banking, or web banking, and online banking. It is just the utilization of telecommunications networks and electronic networks for conveying different financial services and products. Through e-banking, a client can acquire his record and manage numerous exchanges utilising his cell phone or personal computer. India has third largest internet population in the world after China and United States and presents unmatched developmental prospect for the internet segment in coming years. The banking sector is one of the major beneficiaries of the Internet revolution and the growth of banking technology products have been remarkably increasing. The prevalent gain of Internet banking is that people can pay out the services sitting at home. without visiting the branch. This helps customers to complete their transactions in the fraction of time, thus saving both time and effort. Internet banking system proves to be very versatile in completing transactions like balance inquiry, withdrawal, deposits, viewing the bank statement, and record of recent transaction. Considering all the advantages, security of the financial information of customers is a very major concern of all banks.

### Classification of Internet Banking

#### Classification:1

This is the essential degree of administrations or services that banks offer through their sites. Through this assistance, the bank offers data, information regarding its services and products to clients. Further, a few banks might respond to an inquiry through email as well.

#### Classification:2

In this category, banks permit their clients to submit directions or applications for various administrations, check their record balance, and so on. Be that as it may, banks don't allow their clients to do any fund-based exchanges with respect to their records or accounts.

#### Classification:3

In the third category, banks permit their clients to work or operate their records or accounts for bill payments, purchase and redeem securities and fund transfers, and so on Most conventional banks offer e-banking administrations as an extra technique for offering support. Further, many new banks convey banking administrations principally through the other electronic conveyance channels or web. Likewise, a few banks are 'internet only' banks with no actual branch anyplace in the country.

### Classification of Internet Banking Sites

- **Transactional Websites:** These sites permit clients to go through with exchanges on the bank's site. Further, these exchanges can go from a plain retail account balance request to huge business-to-business liquid assets transfers. The accompanying table records some normal wholesale and retail e-banking administrations presented by financial institutions and by banks.

- **Informational Websites:** These sites offer general data regarding the bank and its services and products to the clients.
- **Wholesale services by banks:** Include Account management, Cash management, small business loan applications, Approvals or advances, Commercial wire transfer, Business-to-business payments, Employee benefit, and Pension administration
- **Retail services by banks:** Include Account management, Bill payment, New account opening, Consumer wire transfers, Investment and brokerage services, Loan application and approval, and Account Aggregation.

### REVIEW OF LITERATURE

- **Hamidi (2023):** studied the influence of mobile banking adoption on consumer engagement and satisfaction utilizing the customer relationship management (CRM) system, which is the most essential aspect in banking industry. CRM is also seen as a critical role for enhancing client satisfaction in mobile banking. The statistical study performed evaluated the dialogue between the bank's customer sector and their client. The statistical analysis findings have a favorable influence on consumer interactions and satisfaction.
- **Geebren (2023):** This study is the importance of consumer satisfaction in mobile eco-systems that used electronic banking services, particularly in developing nations. This entailed researching consumer satisfaction in mobile banking, with a focus on the importance of trust. To determine consumer satisfaction, structural modeling using partial least squares (PLS-SEM) methods were employed to examine the data, and trust demonstrated that customer contentment had a beneficial influence.
- **Gao (2022):** The initial trust theoretical model highlighted the facilitators and barriers to user trust in m-payment services. The links in the original trust theoretical model were assessed using partial least squares structural modeling (PLS-SEM). findings may be used in m-payment adoption research and practice in a variety of ways. In total, 52.3% of the difference in usage intention was explained by the current model.
- **Hentzen JK (2022):** This study offered a mobile technology that allows for vital involvement, as well as an explanation of how a retirement app might assist people in planning for their postretirement strategy.
- **Haleem (2021):** The available literature survey data were used to evaluate a sample of 440 Australian pension fund members. The findings show that consumers perceived financial security, financial self-efficacy, retirement planning involvement, future consequences consideration, and perceived usefulness with a mobile retirement app have direct and indirect effects on their expected engagement through their goal to adopt the app.
- **Zhu (2021):** This investigated existing technology designs, including mobile banking, used by rural communities in six Chinese regions. According to the findings, interpersonal and mass communication channels have a bigger influence than organizational communication channels. Mobile banking should be examined since it can assist alleviate the lack of access

to financial goods and financial infrastructure in rural areas.

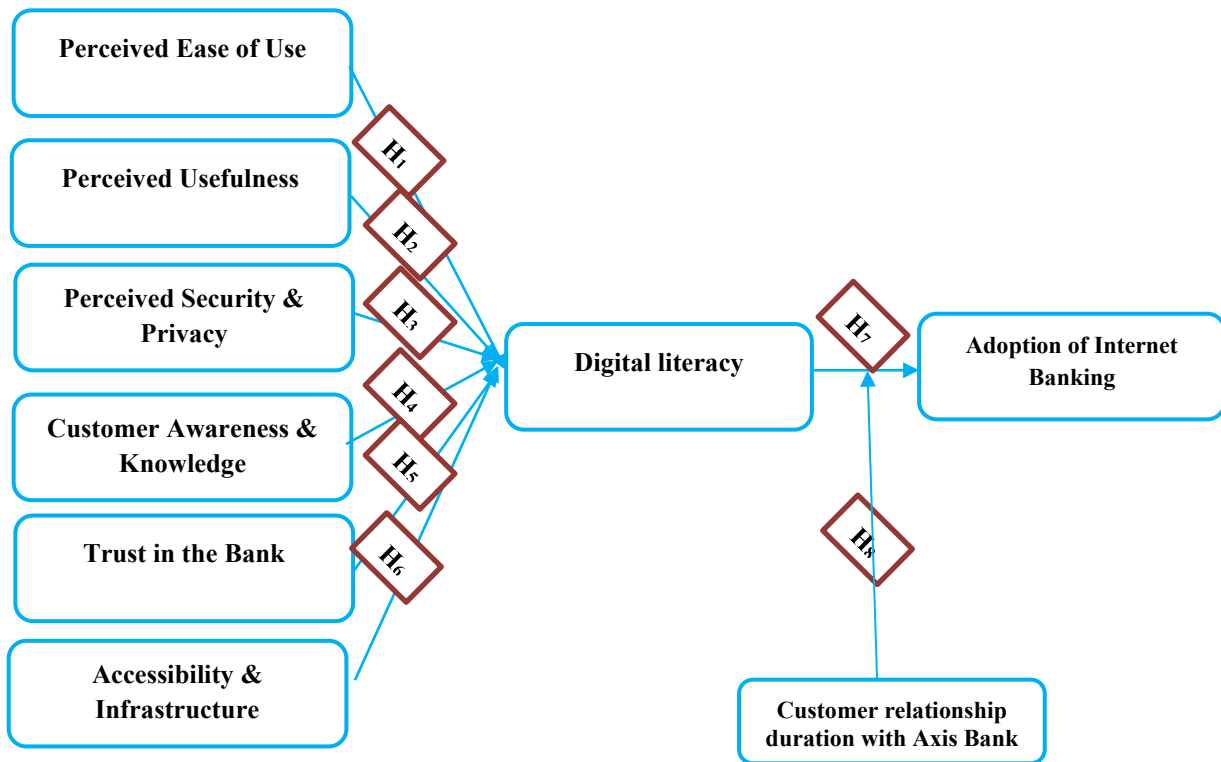
- **Afeti et al. (2020):** This paper developed a mobile payment technology for payment for micro-businesses. The study draws on the transaction cost theory and the task-technology fit (TTF) theory as the assumed lens. In total, 20 micro-businesses based on qualitative data were analyzed and the research findings denote those micro-businesses adoption of mobile payments results in strategic and operational benefits.
- **Alamoudi et al. (2020):** This Proposed that the mobile technology acceptance lookalike was changed as we investigated consumers’ acceptance of mobile shopping in general stores by examining transaction convenience, usefulness, attitudes, ease of use, transaction speed, optimism, and personal innovativeness. A total of 351 respondents completed the questionnaire evaluation. Consumers are willing to use mobile shopping channels if the system is clear and straightforward to use.
- **Jebarajakirthy et al. (2019):** This study used a comprehensive moderated mediation framework to

evaluate the influence of online convenience aspects on mobile banking uptake. Covariance based structural equation modeling and the process macro are utilized to test these predictions. This study examines how convenience characteristics influence mobile banking adoption intentions.

- **Abdinoor et al. (2019):** This studied the adoption of mobile financial services in Tanzania with the use of a technology acceptance model. To select the sample from data collection, a random sampling technique was used. The user and non-user of mobile financial services were included in the sample. Zhang et al. (3) investigated customers’ use of mobile technology to help them with banking services and activities, as well as the variables that impact their adoption and engagement. Here, the analysis is done by the structural equation modeling technique to know the consumers’ intentions toward mobile banking. The result examines the adoption of mobile banking apps to facilitate bank consumers’ banking services.

**RESEARCH METHODOLOGY**

• **Conceptual Model:**



• **Statement of the Problem**

Mobile banking (otherwise called M-banking) is a name utilized for performing account exchanges or transactions, bill payments, credit applications, balance checks, and other financial exchanges through a mobile phone like a Personal Digital Assistant (PDA) or cell phone. Present study is focus on the banking sector has been seen a mammoth progress and the popularity with respect to the Internet banking services and its products. This

development has led to the large number of internet banking transactions, which are faster and more convenient mode of transactions, for the bank customers. Banking industry is one of the businesses that have used the full potential of IT to help with banking transactions and increase banking services and opportunities to its customers

- Research Gap**  
 Moreover, earlier studies have primarily examined perceived usefulness and ease of use, but comparatively less attention has been given to other emerging determinants such as **security concerns, trust, digital literacy, service quality, and customer awareness**—all of which play a crucial role in shaping adoption behavior in today’s digital environment. Many studies also lack updated findings reflecting recent advancements in digital banking technologies, mobile banking integration, and shifting customer expectations post-digital transformation.

- To evaluate how perceived usefulness affects customers’ adoption of internet banking services.
- To analyze the role of security and privacy concerns in shaping customers’ internet banking usage behavior.

**Hypothesis of the Study:**

- H<sub>01</sub>: Perceived ease of use has no significant impact on the adoption of internet banking among Axis Bank customers in Hyderabad.
- H<sub>11</sub>: Perceived ease of use has a significant positive impact on the adoption of internet banking among Axis Bank customers in Hyderabad.
- H<sub>02</sub>: Perceived usefulness does not significantly influence the adoption of internet banking among Axis Bank customers.
- H<sub>12</sub>: Perceived usefulness significantly influences the adoption of internet banking among Axis Bank customers.

**Objectives of the Study**

- To identify the key factors that influence the adoption of internet banking among Axis Bank customers in Hyderabad.
- To examine the impact of perceived ease of use on customers’ willingness to adopt internet banking.

**ANALYSIS & INTERPRETATION**

**Table 1: Socio-Economic Profile of Internet banking customers, Hyderabad, Telangana.**

SI No	Category	Specification of Respondents		Number of Respondents	Percentage of Respondents (%)
		Male	Female		
01	<b>Age Specification</b>				
	10-20	10	05	15	7.5
	21-30	25	15	40	20
	31-40	15	18	33	16.5
	41-50	14	10	24	12
	51-60	36	22	58	29
	61- Above	20	10	30	15
<b>Total</b>		<b>120</b>	<b>80</b>	<b>200</b>	<b>100</b>
02See	<b>Gender</b>				
	Male	58	72	130	65
	Female	42	28	70	35
<b>Total</b>		<b>100</b>	<b>100</b>	<b>200</b>	<b>100</b>
03	<b>Qualifications</b>				
	SSC	4	6	10	2
	Intermediate	12	8	20	10
	Graduation	40	30	70	35
	Post Graduation	38	30	68	34
	Professional Degree	8	4	12	6
	PhD	12	8	20	10
<b>Total</b>		<b>114</b>	<b>86</b>	<b>200</b>	<b>100</b>
04	<b>Occupation</b>				
	Agriculture	13	10	23	11.5
	Business	27	20	47	23.5
	Consultancy	8	4	12	6
	Government Job	17	4	21	10.5
	Private Job	16	20	36	18
	Retired Employees	4	0	4	2
	Politician	7	10	17	8.5
	Student	32	8	40	20
<b>Total</b>		<b>124</b>	<b>76</b>	<b>200</b>	<b>100</b>

05	<b>Income Specification</b>				
	Below 10,000	20	15	35	15.5
	10,000-20,000	13	10	23	11.5
	20,000-30,000	18	15	33	16.5
	30,000-40,000	14	10	24	12
	40,000-50,000	33	20	53	26.5
	50,000-1,00,000	6	8	14	7
	1,00,000 and above	10	8	18	9
<b>Total</b>		<b>114</b>	<b>86</b>	<b>200</b>	<b>100</b>
06	<b>Marital Status</b>				
	Single	86	22	108	54
	Married	50	42	92	46
	Others	0	0	0	0
<b>Total</b>		<b>166</b>	<b>34</b>	<b>200</b>	<b>100</b>
07	<b>Size of a Family</b>				
	Up to 2	36	20	56	26
	02-04	18	20	38	19
	04-06	14	20	34	16
	06-10	40	32	72	36
<b>Total</b>		<b>108</b>	<b>92</b>	<b>200</b>	<b>200</b>
08	<b>Account Type</b>				
	Current Account	23	10	33	16.5
	Savings Account	50	27	77	38.5
	Deposit Account	30	14	44	22
	Loan Account	30	16	46	23
<b>Total</b>		<b>133</b>	<b>67</b>	<b>200</b>	<b>100</b>

**Interpretation**

Above Table shows that the socio-economic profile of the selected Internet banking users in Hyderabad region of Telangana state. In this profile include Age, Gender, Qualification, Occupation, Salary, Type of Account, Marital

and Family members. 16.5 % of customers are age between 31-40 age group holders. 35% of people are graduated. 23.5% are doing business. 54% are married people. 36% are big family sized. 38.5% are having Saving bank account.

**Table 3: Internet Banking Security Awareness Level of Axis Bank Customers, Hyderabad Region, Telangana.**

SI No	Various Types of Security Used by the Axis Bank	Parameters									
		Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		NR	%	NR	%	NR	%	NR	%	NR	%
01	Security Code	69	34.5	52	26	38	28	14	12	27	13.5
02	Password protection	52	26	69	35.5	14	12	38	19	27	13.5
03	Transaction Security	68	34	53	26.5	40	20	14	12	25	12.5
04	Confidentiality	40	20	68	34	53	26.5	25	12.5	14	12
05	Authentication Security	52	26	69	35.5	14	12	38	14	27	13.5
06	Hardware Security	69	34.5	52	26	38	29	14	12	27	13.5
07	Database Security	68	34	53	26.5	40	20	14	12	25	12.5
08	Memory Protection	40	20	68	34	53	26.5	25	12.5	14	12
09	File Security	40	20	68	34	53	26.5	25	12.5	14	12
10	Other Protection	68	34	53	26.5	40	20	14	14	25	12.5

**Interpretation**

Above Table shows that the Factors Influencing the Digital Banking Facility of the selected Internet banking users in Hyderabad region of Telangana state. In the table we considered 10 factors (Security Code, Password protection, Transaction Security, Confidentiality, Authentication Security,

Hardware Security, Database Security, Memory Protection, File Security, Other Protection) influencing the Digital banking facility used by the customers using 5 factors scaling like Strongly Agree, Agree, Neutral, disagree and strongly agree. In this table 26% Perceived Ease of Use and 34.5% Popularity of Banks.

**Table 6: Usage of Internet Banking Services, Hyderabad Region, Telangana.**

SI No	Usage of Internet Banking Services	Parameters									
		Strongly Agree		Agree		Neutral		Disagree		Strongly Disagree	
		NR	%	NR	%	NR	%	NR	%	NR	%
01	Environmentally Friendly	68	34	53	26.5	40	20	14	12	25	12.5
02	Unlimited Transfer with No Cost	40	20	68	34	53	26.5	25	12.5	14	12
03	Secured Transaction	52	26	69	35.5	14	12	38	14	27	13.5
04	Quick Settlement	68	34	53	26.5	40	20	14	12	25	12.5
05	Electronic Fund Transfer	40	20	68	34	53	26.5	25	12.5	14	12
06	Electronic Clearing Services	52	26	69	35.5	14	12	38	14	27	13.5
07	Electronic Payment Services	52	26	69	35.5	14	12	38	14	27	13.5
08	National Electronic Fund Transfer	69	34.5	52	26	38	28	14	12	27	13.5
09	Real Time Gross Settlement	52	26	69	35.5	14	12	38	19	27	13.5
10	Core Banking System	69	34.5	52	26	38	28	14	12	27	13.5

**Interpretation**

Above Table shows that the Factors Influencing the Digital Banking Facility of the selected Internet banking users in Hyderabad region of Telangana state. In the table we considered 10 factors (Environmentally Friendly, Unlimited Transfer with No Cost, Secured Transaction, Quick Settlement, Electronic Fund Transfer, Electronic Clearing Services, Electronic Payment Services, National Electronic Fund Transfer, Real Time Gross Settlement, Core Banking System) influencing the Digital banking facility used by the customers using 5 factors scaling like Strongly Agree, Agree, Neutral, disagree and strongly agree.

**CONCLUSION**

This study based on Ranga Reddy District of Telangana state. Future study can also be focused on larger sample scale from different district even from different divisional secretariat division of Telangana. This study 10 factors as the influencing factors of the customer adoption. Further, other factors can be added to the conceptual model will provide more clarifying power to the study. Perceived Risk, Perceived Security drawn a moderate positive relationship which sometime detriment the growth of internet banking among customers. People who are using internet banking still think that it wouldn't secured and it might have some risk factor.

**REFERENCES**

1. S. Lichtenstein and K. Williamson, "Understanding consumer adoption of Internet banking: An interpretive study in the Australian banking context," *Journal of Electronic Commerce Research*, vol. 7, issue 2, pp. 50-66, 2006.
2. M. Al-Smadi, "Factors affecting adoption of electronic banking: An analysis of the perspectives of banks' customers," *International Journal of Business and Social Science*, vol. 3, issue 17, pp. 294-309, 2012.
3. G. Ayana, "Factors affecting adoption of electronic banking system in Ethiopian," *Journal of Management Information System and Ecommerce*, vol. 1, issue 1, 2014.
4. N. Begum and N. Jahangir, "The role of perceived usefulness, perceived ease of use, security and privacy, and customer attitude to engender customer adaptation in the context of electronic banking," *African Journal of Business Management*, vol. 2, issue 1, pp. 32-40, 2008

5. Brown, R. Hoppe, P. Muger, P. Newman, and A. Stander, "The impact of national environment on the adoption of internet banking: comparing Singapore and South Africa," *Journal of Global Information Management*, vol. 12, issue 2, pp. 1-27, 2004.
6. B. C. Lee, J. O. Yoon, and I. Lee, "Learners' acceptance of e-learning in South Korea: Theories and results," *Computers & Education*, vol. 53, issue 4, pp. 1320-1329, 2009.
7. S. Chan, "Understanding adoption and continual usage behavior towards internet banking services in Hong Kong," *Master's thesis, Lingnan University, Hong Kong*, 2001.
8. F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *JSTOR*, vol. 13, issue 3, pp. 319-340, 1989.
9. K. Eriksson, K. Kerem, and D. Nilsson, "Customer acceptance of Internet banking in Estonia," *International Journal of Bank Marketing*, vol. 23, issue: 2, pp. 200-216, 2005.
10. R. T. Frambach and N. Schillewaer, "Organizational innovation adoption: a multi-level framework of determinants and opportunities for future research," *Journal of Business Research*, vol. 55, issue 2, pp. 163 176, 2002.
11. S. R. Hiltz, K. Johnson, and M. Turoff, "Experiments in group decision making: Communication process and outcome in face-to-face versus computerized conferences," *Human Communication Research*, vol. 13, issue 2, pp. 225-252, 1986.
12. Hsi-Peng Lu, Chin-Lung Hsu, and Hsiu-Ying Hsu, "An empirical study of the effect of perceived risk upon intention to use online applications," *Information Management & Computer Security*, vol. 13, issue 2, pp. 106-120, 2005.
13. N. K. Jayasiri, K. D. Gunawardana, and P. Dharmadasa, "Adoption of internet banking in Sri Lanka: An extension to technology acceptance model," *Asia Pacific Journal of Contemporary Education and Communication Technology*, vol. 2, issue 1, pp. 179-189, 2016.
14. K. Kyu and B. Prabhakar, "Initial trust, perceived risk, and the adoption of internet banking," *ICIS '00 Proceedings of the Twenty First International Conference on Information Systems*, pp. 537-543, 2000.
15. M. S. Sohail and B. Shanmugham, "E-banking and customer preferences in Malaysia: An empirical investigation," *Information Sciences*, vol. 150, issue 3-4, pp. 207-217, 2003.
16. M. S. Clark and J. Mills, "The difference between communal and exchange relationships," *Personality and Social Psychology Bulletin*, vol. 19, issue 6, pp. 684-691, 1993.
17. D. H. McKnight and N. L. Chervany, "What trust means in e-commerce customer relationships: an interdisciplinary

- conceptual typology," *International Journal of Electronic Commerce*, vol. 6, issue 2, pp. 35-59, 2002.
18. Pinsonneault, S. Li, and D. Tomiuk, "Effect of web channel richness and web information richness on satisfaction and learning: a study of simple and complex products," *Systems information et Management*, vol. 15, issue 4, Article 5, 2010.
  19. F. Sahel and S. Tooraj, "The role of behavioral adoption theories in online banking services," *Middle-East Journal of Scientific Research*, vol. 7 issue 3, pp. 374-380, 2011.
  20. A.-G. Waleed, S. Louis, and S. Kuldeep, "Factors influencing the adoption and usage of online services in Saudi Arabia," *The Electronic Journal of Information Systems in Developing Countries*, vol. 40, issue 1, pp. 1-32, 2010.