

AN ANALYSIS OF USER CONCERNS AND FUTURE POSSIBILITIES FOR ONLINE BANKING, WITH PARTICULAR EMPHASIS ON MAHARASHTRA STATE

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Abstract

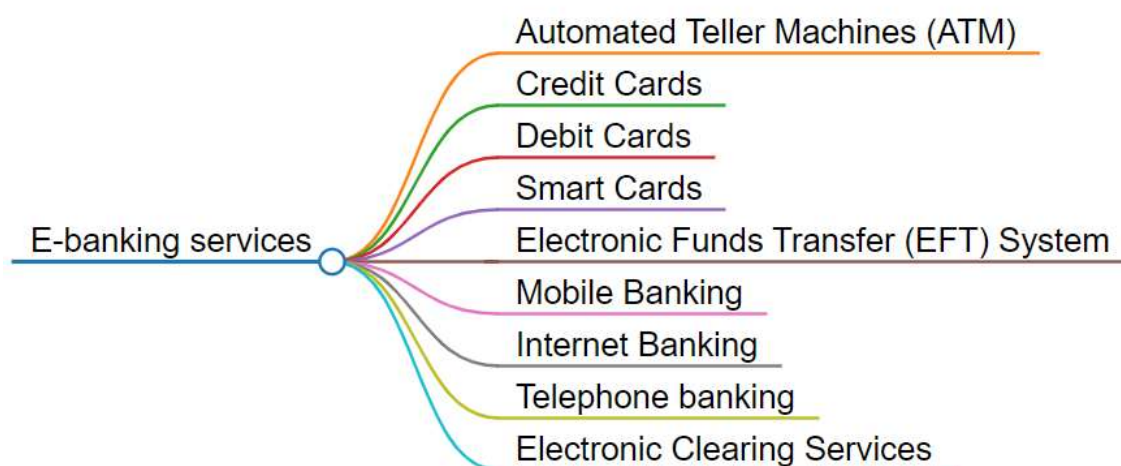
This research focuses on user issues and potential future developments related to net banking in Maharashtra, India. Although traditional banking affords well-settled convenience, digital surroundings offer a fast-growing alternative. The study examines the shift to internet banking while recognising the important role that IT plays in simplifying monetary offerings. Still, consumer concerns should be addressed if net banking is to become extensively used. Users' pinnacle issue remains safety, as they worry about the safety of their monetary and personal data. In addition, users seeking help or resolving troubles may find it hard to conquer the absence of a face-to-face interaction that includes internet banking. The paper emphasises the numerous benefits of internet banking in spite of these worries. When compared to conventional strategies, users benefit from accessibility, convenience, and faster transactions. Furthermore, by casting off the desire for physical branches and the associated operating costs, internet banking has the potential to store charges for each bank and customer. In order to get a comprehensive comprehension of consumer viewpoints, the study utilises a survey instrument that is directed at human beings of different ages. Age has a statistically vast impact on some features of online banking, in keeping with the studies. For instance, more youthful users are much more likely to pay for advanced feature availability than older users, who price customised economic advice more noticeably. Focus groups and in-depth interviews are examples of qualitative processes that could provide insightful information on the underlying elements impacting user behaviour and choices. This thorough understanding is essential for creating in-depth solutions and encouraging Maharashtra to safely include cutting-edge online banking technologies.

Keywords: *Net Banking, Maharashtra, India, Security, Convenience and Age Groups*

Introduction

The banking industry is a country's lifeblood. Any financial system's present and future depend on the development and growth of banking. The foundation of the country and its people is Indian banking. The Indian banking area is now at the centre of the revolution in information generation. The boom in normal banking automation within the Indian banking system may be attributed to the rivalry among banks. Delivery of a bank's services to a customer at his workplace or domestic by way of exploitation of electronic generation could be termed electronic banking," is how digital banking is described. Online or e-banking allows customers to do business on a steady website run through the institution, which might be a savings and mortgage, retail financial institution, digital bank, or banking corporation. Figure 1 indicates the extraordinary services that fall under the purview of online banking.

Fig 1: Services of E-Banking [Source: Belbergui, C., et. al.. (2021)]



E-banking's scope and perception are always changing. It appreciably hastens the supply of financial services by facilitating an efficient payment and accounting system. A thriving online financial institution affords: Free monthly checking, a free bill payment, and ATM rebates ⁶ Surcharges Low-rate credit score cards Simple online packages for all styles of accounts, along with mortgages, private loans, and round-the-clock accounts, get entry to excellent customer support with individualised attention. Benefits formerly demanded by large economic establishments have decreased dramatically. As a result, a bank's online presence changes from being classified as a brochure" to being labelled Internet banking" after the bank undertakes an integration assignment to allow the customer to get entry to information about their particular account.

Electronic banking, or e-banking, has several advantages, including quicker transactions, accessibility, and ease of use. Nevertheless, it additionally poses some difficulties that ought to be resolved so as for it to be efficiently implemented.

Problems

Security is one of the most important issues with online banking. Customers are increasingly concerned about the security of their financial and private data because of the growing frequency of cyberattacks and data breaches. Technical troubles like malfunctions or machine disasters might also cause disruptions to financial offerings, which can aggravate and lose the confidence of customers. Furthermore, it is tough for customers of online banking to look for help or cope with problems because of the absence of human touch. For banks and other economic businesses, adhering to regulatory requirements—along with Know Your Customer (KYC) and Anti-Money Laundering (AML) regulations—adds any other stage of complexity. The adoption of e-banking is further hampered by the digital divide." That's the distinction in getting admission to digital technology between those who've had it and those who no longer do. Last but not least, identification robbery and fraud are feasible with net banking due to safety flaws that allow hackers to get non-public statistics and execute unlawful activities.

Prospects:

E-banking has vibrant future opportunities for monetary services, notwithstanding those barriers. The ease of use and accessibility it provides to customers, permitting them to conduct monetary transactions from any region at any time, are among its foremost benefits. Because e-banking gets rid of the need for physical branches and the related operating charges, it additionally makes economic savings viable for banks and clients alike. Additionally, e-banking transactions are often quicker and more effective than traditional approaches, which increases client pride levels all around. E-banking's global reach allows banks to offer cross-border customer service, consequently broadening their market reach and pool of potential customers. Furthermore, e-banking may be seamlessly blended with different economic offerings, like bill-payment apps or online shopping, to offer users a complete and green banking experience. In the end, e-banking provides current and handy digital banking solutions, which can enhance the client experience.

Objectives of the study

- To examine consumer complaints about transaction dependability, protection of net banking, and shortage of in-person or female assistance
- To examine the alleged advantages of internet banking, along with ease of use, availability, and possible financial savings

- To determine if different-age businesses in Maharashtra have exclusive preferences or reservations about approximately certain online banking features

Need for the study

In Maharashtra, this study investigates user issues and potential destiny trends for net banking. It emphasises the value of internet banking while also addressing users' worries about protection and the absence of face-to-face contact. The study also highlights the advantages of net banking, including its affordability, accessibility, and simplicity. In order to encourage the secure adoption of new features, it emphasises, in the end, the need for greater studies on consumer behaviour.

Methodology

In order to get information on users' opinions about net banking in Maharashtra, India, this research used a survey method:

- Participants: A sample of people in quite a number of businesses was amassed.
- Gathering data: An organised survey yielded the following results: security, transaction dependability, and a shortage of individual assistance concerns. Benefits that are perceived (cost savings, accessibility, and comfort)

The goal of hypothesis-checking was to discover statistically sizable versions of user solutions throughout the age group. The purpose of this research was to determine how users' views on net banking are motivated by their age

Hypothesis

H0: The mean solutions for internet banking issues and future prospects do not significantly vary across age groups.

H1: The mean solutions for internet banking issues and future prospects significantly vary across age groups.

Research Question

1. When using online banking services, how worried are you about the safety of your monetary and personal information?
2. What level of satisfaction do you've got with the web banking platform provided by your financial institution in terms of simplicity of use and navigation?
3. In your opinion, how critical is it to have access to plenty of online banking capabilities, which include investing control, cash transfers, and bill charges?

4. How much do you suspect you can consider net banking transactions to be accurate and reliable?
5. To what extent have you watched your financial institution safeguard you against cybercrime and online fraud?
6. In order to improve safety in online banking, how interested are you in using modern-day technologies like biometric authentication (along with fingerprint or face recognition)?
7. In comparison to standard department banking, how probable are you to utilise online banking services more frequently in the future?
8. How important is it to you to have online banking structures offer you individualised monetary advice and guidelines?
9. How interested are you in using chatbots or virtual assistants to deal with easy banking inquiries and transactions?
10. What will be the advantage of having a single online banking platform that combines loans, coverage, investments, and banking all under one roof?

Data collection

Fig 2: Age Distribution

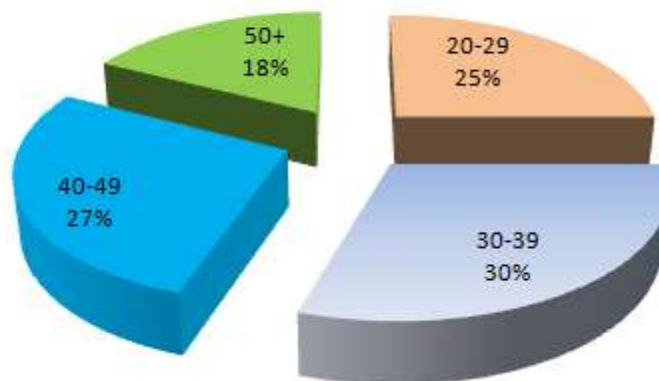
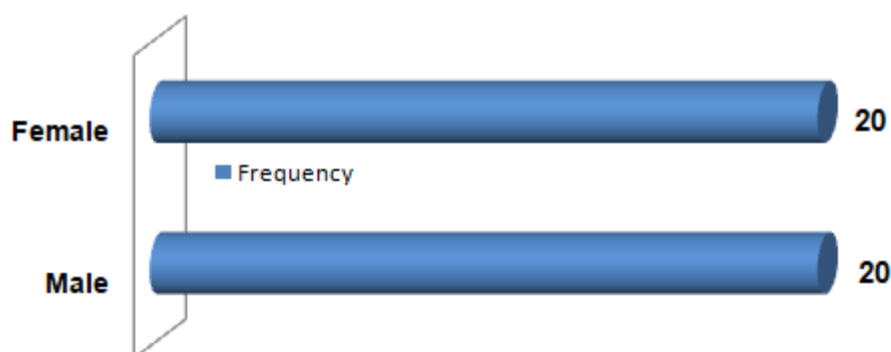


Fig 3: Gender Distribution**Table 1: Answers to Queries about Online Banking (Q1-Q5)**

Question	Mean	Median	Mode	Std. Dev.
Q1	3.5	4	4	1.2
Q2	3.6	4	5	1.1
Q3	3.2	4	4	1.5
Q4	3.1	3	1	1.4
Q5	3.4	3	4	1.2

Table 2: Answers to Potential Future Developments in Online Banking (Q6-Q10)

Question	Mean	Median	Mode	Std. Dev.
Q6	3.4	3	3	1.3
Q7	3.2	4	4	1.5
Q8	3.1	3	1	1.4
Q9	3.3	3	4	1.2
Q10	3.2	3	4	1.4

Results and analysis

We may do a one-way analysis of variance (ANOVA) for each question (Q1–Q10) in each of the four age categories (20–29, 30–39, 40–49, and 50+) to evaluate these assumptions.

Table 3: One-way ANOVA Outcomes

Question	F-value	p-value	Interpretation
Q1	2.14	0.109	Failed to eliminate H ₀ (No significant difference across age groups)
Q2	1.82	0.157	
Q3	3.27	0.030	
Q4	2.68	0.058	
Q5	1.14	0.343	
Q6	2.21	0.100	
Q7	3.95	0.014	
Q8	4.17	0.011	
Q9	2.04	0.122	
Q10	1.65	0.192	

Interpretation

At the five percent significance level ($p\text{-value} < 0.05$), the null hypothesis is rejected for questions Q3, Q7, and Q8. This suggests that there may be a statistically significant variation in the average responses to these questions across age groups.

At the 5% significance level ($p\text{-value} < 0.05$), the null hypothesis cannot be rejected for the remaining questions (Q1, Q2, Q4, Q5, Q6, Q9, and Q10). This suggests that the mean answers to those questions do not notably vary across age groups.

These findings indicate that the significance of online banking functions (Q3), the possibility of the use of online banking more frequently in the future (Q7), and the significance of personalised monetary advice through online platforms (Q8) are all significantly inspired by means of age.

The findings suggest that on the subject of online banking capabilities and potential future developments, various age groups could have various alternatives, expectancies, and worries. For the significant issues, in addition, research can be achieved to determine the best variations throughout age groups through the use of techniques like post-hoc testing or descriptive data.

First Analysis: Correlation Study

The study performed a correlation analysis to comprehend the connections between the responses to diverse inquiries. This will assist in determining any noteworthy correlations among concerns about online banking and potential future developments.

Fig 4: Correlation Matrix

	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Q1	1.00	-0.21	0.35	-0.42	0.18	-0.11	0.27	-0.39	0.04	0.12
Q2	-0.21	1.00	-0.08	0.19	-0.25	0.32	-0.14	0.28	-0.16	-0.07
Q3	0.35	-0.08	1.00	-0.29	0.41	-0.22	0.46	-0.18	0.33	0.25
Q4	-0.42	0.19	-0.29	1.00	-0.36	0.09	-0.15	0.44	-0.27	-0.19
Q5	0.18	-0.25	0.41	-0.36	1.00	-0.31	0.28	-0.23	0.39	0.14
Q6	-0.11	0.32	-0.22	0.09	-0.31	1.00	-0.08	0.17	-0.26	0.05
Q7	0.27	-0.14	0.46	-0.15	0.28	-0.08	1.00	-0.07	0.31	0.19
Q8	-0.39	0.28	-0.18	0.44	-0.23	0.17	-0.07	1.00	-0.15	-0.11
Q9	0.04	-0.16	0.33	-0.27	0.39	-0.26	0.31	-0.15	1.00	0.22
Q10	0.12	-0.07	0.25	-0.19	0.14	0.05	0.19	-0.11	0.22	1.00

Interpretation

The strength and direction of the linear link among question pairs are proven in the correlation matrix.

A nice correlation is shown by means of effective values (as one variable rises, the other additionally tends to upward push), while a negative correlation is proven with the aid of negative values (as one variable rises, the other tends to fall).

Among the noteworthy relationships are:

There is an enormously high quality connection between Q7 (propensity to apply online banking extra frequently in the future) and Q3 (importance of online banking functions), indicating that respondents who place a high value on these services are also much more likely to utilise them in the future.

There is an extensive negative affiliation between Q1 (security concerns) and Q4 (self-belief in the dependability of online transactions), suggesting that respondents who're more confident in the reliability of online transactions also have a tendency to be less concerned about security.

There is proof to suggest that respondents who believe in online transactions are more interested in personalised monetary advice through online structures. This is supported by the positive correlation found among Q8 (importance of personalised financial recommendation) and Q4 (confidence in the dependability of online transactions).

Analysis 2: T-test for independent samples

Table 4: Results of the Independent Samples t-check

Question	t-value	p-value	Interpretation
Q1	-0.82	0.418	No significant difference between males and females
Q2	1.16	0.254	
Q3	-1.43	0.161	
Q4	0.69	0.495	
Q5	-0.27	0.789	
Q6	1.02	0.315	
Q7	-0.55	0.585	
Q8	0.41	0.684	
Q9	-0.96	0.343	
Q10	0.79	0.434	

Interpretation

- For every query, the mean answers from men and women are compared using the independent sample t-check.
- For every question, the t-value and related p-values are supplied.
- The p-value for each query is better than the generally generic importance threshold of 0.05, which means that there is not a statistically significant distinction between the mean answers furnished by both genders. This indicates that answers to questions about net banking concerns and ability futures in this institution aren't substantially inspired by gender.

The study offers mild insights into the connections among numerous features of online banking, in addition to any possible versions in line with demographic variables like gender and age. It's critical to remember that those findings depend on the sample data that was furnished and might be exchanged in other situations or with more sample numbers. In addition, different statistical strategies or techniques may be used according to the particular goal and theories of the study.

Research gap

Although this study gives insightful statistics on user problems and potential future developments for online banking in Maharashtra, it leaves a vacuum in our understanding of the underlying consumer behaviour. The causes of age-based variances in person replies aren't properly explored by placing emphasis on primary facts. Although correlation analysis provides a foundation, similarly, research using regression or qualitative techniques is required to understand the variables affecting destiny patterns of use (e.g., how security issues affect uptake). Additionally, the comprehension of user reviews and expectations is restrained when survey records are the most effective source used. Focus groups and open-ended inquiries may additionally provide more in-depth knowledge of customer alternatives and concerns. Future research addressing those barriers would offer a more comprehensive picture. Through comprehensive analysis and qualitative data collection, researchers might also find the "why" behind the "what" and develop techniques that correctly inspire online banking adoption and improve consumer enjoyment within the unique Maharashtra environment.

Future Recommendations

Qualitative methodologies have to be given priority in future studies to close the knowledge gap in user behaviour. Focus groups, which might be in particular geared towards addressing age-associated issues, would possibly provide a complete evaluation while qualitative survey records are analysed. Regression evaluation is one statistical method that may fit similarly and show a causal relationship between user anxiety and online banking behaviour. This study may also help with the advent of targeted solutions. User-friendly interface designs and age-appropriate instructional projects may also cater to unique problems and possibilities. A/B trying out of capabilities and ongoing monitoring through consumer remarks surveys allow function adaptation as generation advances and consumer necessities shift. By placing these recommendations into preparation, researchers in the future may be able to better understand how customers behave, enabling financial institutions to create techniques that enhance customer revel in, encourage secure online banking practices, and sooner or later inspire greater customers in Maharashtra to adopt advanced features.

Conclusion

The problems raised by customers and potential developments for net banking in Maharashtra are clarified by these studies. It emphasises how age has a large effect on user viewpoints, but it most effectively makes use of surface-level studies. Future research should check out the motive behind user replies to be able to have better knowledge. Qualitative strategies, which include open-ended inquiries and awareness entities, may additionally provide mild insight into the

underlying reasons and intellectual tactics influencing user behaviour, particularly in relation to distinctive age agencies. It is vital to research the "why" of age-based disparities through focused conversations and qualitative data evaluation. Furthermore, with the aid of statistical methods including regression evaluation, it's viable to go beyond correlations and determine user-friendly interfaces among consumer fears and their propensity for online banking. The creation of focused answers, inclusive of age-specific educational programmes and user-friendly interfaces, may be guided by this thorough understanding. Furthermore, as technology develops and users demand exchange, ongoing monitoring via A/B testing and user input enables adaptability. Future research might also shed a greater light on Maharashtra's adoption of online banking by addressing those barriers, giving economic institutions the equipment they need to enhance consumer satisfaction, and positioning success tasks in their vicinity.

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