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A STUDY ON AWARENESS AND USAGE OF E-BANKING SERVICES AMONG INDIVIDUALS OF MUMBAI

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ABSTRACT
Electronic banking (e-banking) has transformed the traditional banking system by enabling customers to access banking services through digital platforms such as the internet, mobile applications, and ATMs. This research analyses the extent of awareness and usage of e-banking services among people residing in Mumbai, a major financial and urban center in India. The main purpose of this study is to evaluate awareness levels of e-banking services and to determine the factors affecting their acceptance and use. The study relies on primary data obtained from 60 participants using a structured questionnaire. Descriptive analysis was used to interpret the responses. The results show that most respondents are familiar with e-banking services, including fund transfers, bill payments, and balance enquiry facilities.However, despite high awareness levels, regular usage is affected by concerns related to security, privacy, and lack of technical knowledge among certain sections of users. The study highlights that age, digital literacy, and trust in banking technology play a significant role in influencing e-banking adoption. The study concludes that banks need to emphasize customer education, enhance security measures, and conduct awareness initiatives to promote e-banking usage to enhance customer confidence and promote wider adoption of e-banking services, thereby supporting digital financial inclusion.

***Keywords** : E-banking, Awareness, Digital Banking, Financial Inclusion, online banking services, Mumbai.*

INTRODUCTION
Electronic banking (e-banking), also known as internet or digital banking, refers to the use of information technology to deliver banking products and services through electronic channels. Earlier, customers had to visit bank branches for most transactions, but technological advancements now allow banking through computers, smartphones, ATMs, and other digital devices. This transformation has brought major changes in banking operations as well as customer engagement.

E-banking enables customers to carry out multiple financial transactions including fund transfers, bill payments, and balance enquiries, online purchases, and account management in a fast and convenient manner. It integrates information technology with financial services, thereby improving efficiency, reducing transaction time, and enhancing customer satisfaction. However, the adoption of such innovations is often gradual. According to Rogers' Diffusion of Innovation theory, new technologies take time to gain widespread acceptance, especially in developing countries.

In India, ICICI Bank introduced e-banking services during the mid-1990s, followed by other public, private, and foreign banks. Today, increased competition and customer demand for "anytime, anywhere banking" have encouraged banks to adopt advanced digital technologies such as mobile banking, biometric security, artificial intelligence, and chatbots.

Mumbai, being the financial capital of India, provides an ideal setting to study awareness of e-banking services. Understanding awareness levels is important for promoting digital literacy, building customer trust, and encouraging effective use of e-banking facilities.

OBJECTIVES OF THE STUDY

The main objectives of the present study include:
- To assess the level of awareness about various e-banking services among individuals in Mumbai.
- To analyze the influence of demographic factors (age, gender, education) on the awareness and usage of e-banking services
- To examine the extent and frequency of usage of different e-banking services by individuals in Mumbai.
- To identify the key challenges and barriers faced by users while accessing e-banking services.

SCOPE OF THE STUDY
The present study is geographically limited to individuals residing in Mumbai city, which represents a metropolitan and technologically advanced urban population. It focuses on bank customers who are either potential or existing users of e-banking services, covering respondents from different age groups, genders, occupations, education levels. The scope of the study includes a wide range of e-banking services such as

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Internet Banking, Mobile Banking, UPI, ATMs, Debit/Credit card transactions, online bill payments, NEFT, RTGS, and Mobile Wallets. The time frame considered is 2015–2024, a period that highlights the significant growth of digital banking, particularly after demonetization in 2016 and during the COVID-19 pandemic in 2020–21, when digital adoption accelerated and reshaped banking practices.

RESEARCH METHODOLOGY OF THE STUDY

1) Study Methods:

The study follows a mixed research approach by using both qualitative and quantitative methodsto examine user perceptions and experiences with e banking services. Data was collected through surveys, via Google Forms. Responses were collected from individuals residing in Mumbai.

2) Primary Data:

Primary data was gathered by conducting a survey among 60 respondents., focusing on their direct interactions and opinions about e banking functionalities. The survey gathered insights into user satisfaction, trust, and the overall effectiveness of online banking services.

3) Secondary Data:

Secondary data for this study was gathered from books, journals, magazines, and research articles related to e-banking services and customer experience. These sources offered conceptual support and essential background information for the analysis and interpretation of primary data.

4) Sample Unit:

The sample unit consists of 60 respondents who have used e-banking services. These respondents were selected to obtain a diverse range of feedback, ensuring that the data reflects different user experiences and perceptions related to e-banking.

5) Sample Size:

Selecting a suitable sample size was necessary to maintain the reliability of the study results. Very small or very large sample sizes were avoided, as they may have influenced the accuracy of the results. A sample size of 60 respondents was found to be suitable since the study focused on individuals living in Mumbai.

6) Sampling Techniques:

Convenience sampling was used in this study because it enabled easy respondent access, faster data collection, simplicity, and lower cost. The selected sampling method and research approach were suitable and consistent with the objectives of the study, ensuring reliable and accurate research outcomes. Hypotheses of the study

Hypothesis:

Hypothesis 1:

H_0 (Null Hypothesis): There is no significant relationship between age and awareness of e-banking services among individuals in Mumbai.

H_1 (Alternative Hypothesis): There is a significant relationship between age and awareness of ebanking services among individuals in Mumbai.

Hypothesis 2:

H_0: Gender does not significantly influence the usage of e-banking services in Mumbai.

H_1: Gender significantly influences the usage of e-banking services in Mumbai.

Hypothesis 3:

H_0: There is no significant association between educational qualification and the frequency of e-banking usage.

H_1: There exists a significant association between educational qualification and the frequency of e-banking usage.

REVIEW OF LITERATURE

Arathy Saboo, Gayathri P. & Sujith T. S. (2023) The study found that e-service quality factors such as security and responsiveness play a major role in determining customer satisfaction in digital banking.It emphasized improving IT infrastructure and service efficiency.

Gupta and Rao (2023) The research identified convenience and speed as major drivers of e-banking adoption, while privacy and service issues reduced customer confidence. Transparent policies were suggested to improve satisfaction.

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DATA INTERPRETATION AND ANALYSIS

Using a structured questionnaire, responses from 60 individuals were collected to understand their perceptions of e-banking services. The Analysis is as follows: Gender -wise Differences

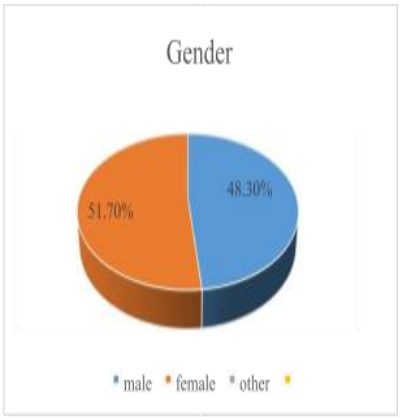

Chart 1.1 - Gender -wise Differences

Out of 60 respondents, 51.7% are females and 48.3% are males, showing an almost equal gender representation and ensuring unbiased results.

Age-wise Analysis

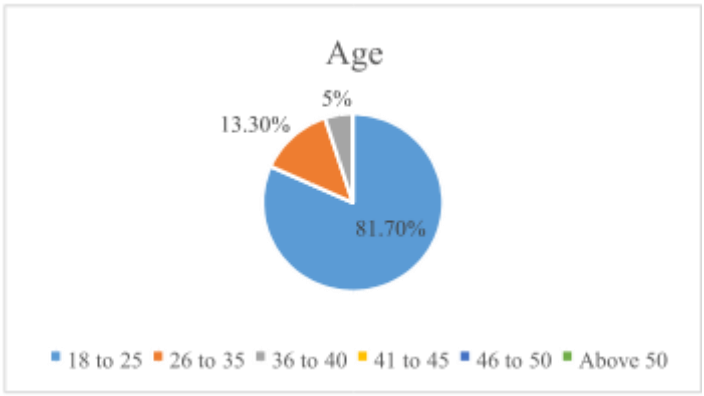

Chart 1.2 -Age-wise Analysis

The majority of respondents (81.7%) were aged 18–25, followed by 13.3% aged 26–35 and 5% aged 46–50, indicating that the study primarily reflects younger individuals' views.

Education wise Analysis

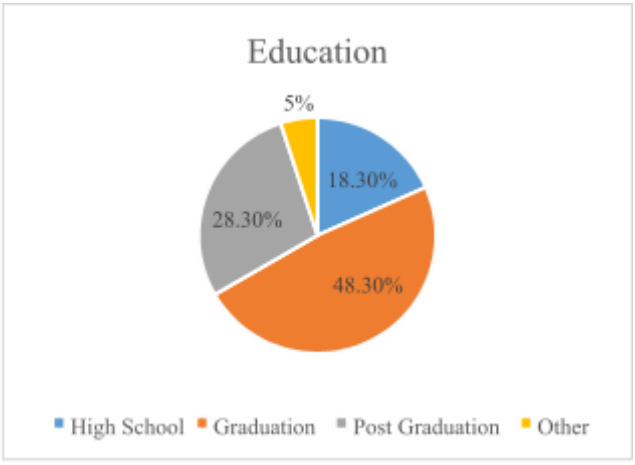

Chart 1.3 - Education wise Analysis

Out of 60 respondents, 48.3% are graduates, 28.3% are post-graduates, 18.3% have completed high school, and 5% fall under other categories, indicating that the majority of respondents are welleducated.

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Awareness of E-banking

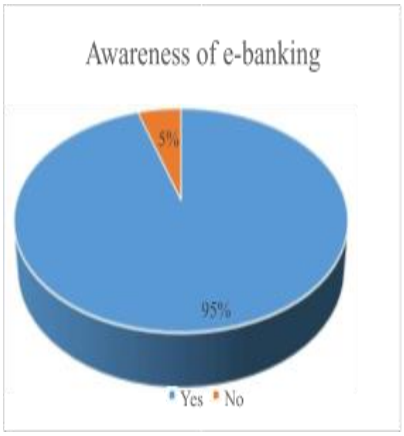

Chart 1.4 - Awareness of e-banking

Out of 60 respondents, 95% are aware of e-banking services, indicating a very high level of awareness and reflecting the widespread adoption of digital banking.

Frequency of Using E-Banking

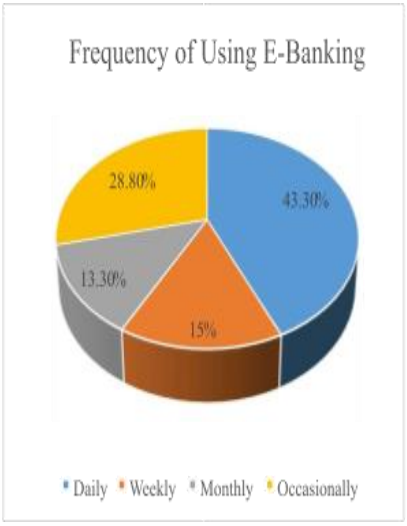

Chart 1.5 - Frequency of Using E-Banking

Out of 60 respondents, 43.3% use e-banking daily, indicating a high level of dependence on digital banking services. 28.3% of respondents use e-banking occasionally, suggesting usage based on specific needs. 15% use e-banking weekly, while 13.3% use it monthly.

Aware of e-banking services

Chart 1.6- Aware of e-banking services

The data indicates high awareness of e-banking services, with UPI/Wallets (71.7%) leading, followed by mobile banking and ATM services (68.3% each), while awareness of phone banking (41.7%) and credit cards (40%) is comparatively lower, showing greater recognition of digital and mobile-based services.

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Purpose of Using E-Banking Services

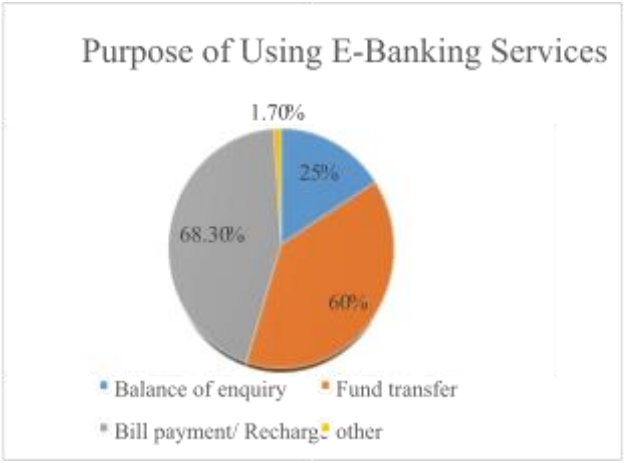

Chart 1.7- Purpose of Using E-Banking Services
The main purpose of using e-banking is bill payments and mobile recharges (68.3%), followed by fund transfers (60%), while balance enquiries (25%) and other uses are less common.

Difficulties Faced While Using E-Banking Services

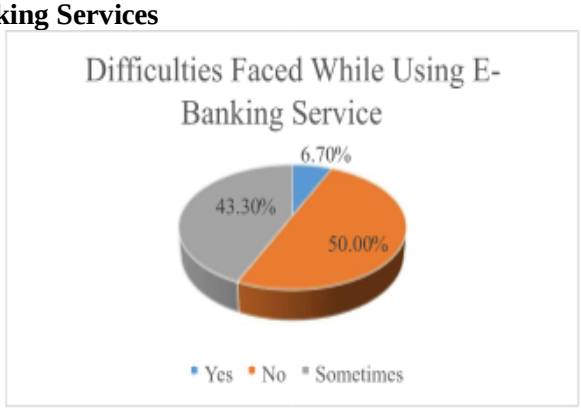

Chart 1.8 Difficulties Faced While Using E-Banking Services
Out of 60 respondents, 50% reported that they do not face any difficulty while using e-banking services. 43.3% stated that they sometimes face difficulties, while only 6.7% reported that they regularly face problems.

Following difficulties faced while using e banking services

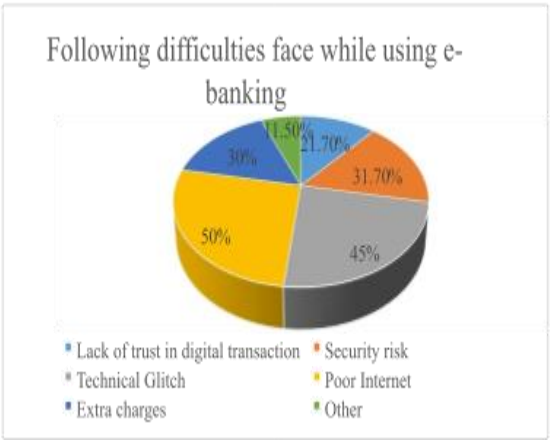

Chart 1.9- Following difficulties faced while using e-banking services
Out of 60 respondents, poor internet connectivity (50%) and technical glitches (45%) were the main problems in using e-banking, followed by security concerns (31.7%), while other issues were reported by fewer respondents.

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Perception of Safety in E-Banking

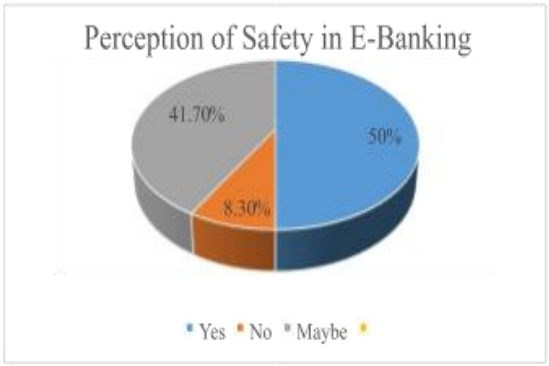

Chart 1.10- Perception of Safety in E-Banking
Out of 60 respondents, 50% believe that e-banking is safe, while 41.7% are uncertain and responded with "maybe." Only 8.3% believe that e-banking is not safe.

Overall satisfaction with e-banking service

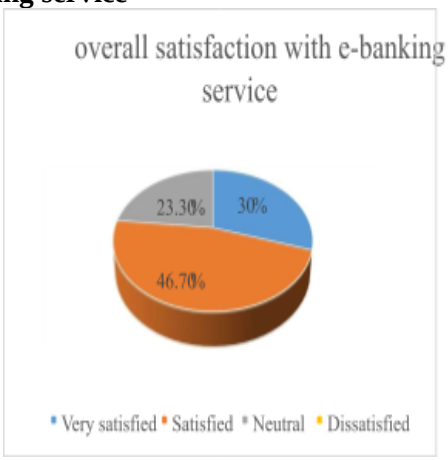

Chart 1.11- Overall satisfaction with ebanking services
Most respondents are satisfied (46.7%) or very satisfied (30%) with e-banking services, while 23.3% remain neutral and none are dissatisfied.

HYPOTHESES OF THE STUDY
Testing of Hypothesis 1

Hypothesis 1

$H0_1$: There is no significant effect of age on awareness of e-banking services.

$H1_1$: Age significantly influences awareness of e-banking services.

Observed Data (Awareness Level)

From the survey, the majority of respondents showed awareness of multiple e-banking services such as UPI, mobile banking, ATM, and debit cards.

Aware respondents = 41

Less aware respondents = 19

Total respondents = 60

Expected Values (Under H_0)

If age has no influence on awareness, responses would be equally distributed: Expected (Aware) = 30 Expected (Less aware) = 30 $\chi^2 = \Sigma((O - E)^2 / E)$ χ^2= ((41

- 30) ^ 2)/30 + ((19 - 30) ^ 2)/30 χ^2=

121/30 + 121/30 = 8.06

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Critical Value df = 1, α = 0.05

Critical value = 3.84

Decision
Since 8.06 > 3.84, the result is significant.

The null hypothesis (H_{01}) is rejected.

Age significantly influences awareness of e-banking services.

Testing of Hypothesis 2

Hypothesis 2

H_{02}: Gender does not have a significant impact on usage of e-banking services.

H_{12}: Gender significantly influences the usage of e-banking services.

Observed Data (Usage Frequency)

Frequent users = 36

Less frequent users = 24

Total respondents = 60

Expected Values (Under H_0)

Expected (Frequent) = 30 Expected (Less frequent) = 30 $\chi^2 = \Sigma((O - E)^2 / E)$ χ^2 = ((36 - 30) ^ 2)/30 + ((24 - 30) ^ 2)/30 χ^2 = 36/30 + 36/30 = 2.4

Critical Value at df = 1, α = 0.05

Critical value = 3.84

Decision
Since 2.4 < 3.84, the result is not significant.

The null hypothesis (H_{02}) is accepted.

Gender does not have a significant impact on e-banking usage.

Testing of Hypothesis 3

Hypothesis 3

H_{03}: Educational qualification does not have a statistically significant effect on the frequency of e-banking usage.

H_{13}: Educational qualification have a statistically significant effect on the frequency of e-banking usage.

Observed Data

High-frequency users = 43

Low-frequency users = 17

Total respondents = 60

Expected Values (Under H_0)

Expected (High frequency) = 30

Expected (Low frequency) = 30

Chi-Square Test χ^2= ((43 - 30) ^ 2)/30 +

((17 - 30) ^ 2)/30 χ^2= 169/30 + 169/30 =

11.26

Critical Value at df = 1, α = 0.05

Critical value = 3.84

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Decision

Since 11.26 > 3.84, the result is significant.

The null hypothesis (H_{03}) is rejected.

Educational qualification have a statistically significant effect onthe frequency of e-banking usage.

FINDINGS OF THE STUDY

1. The study found that awareness of e-banking services is very high, with the majority of respondents being familiar with services such as UPI, mobile banking, ATM services, and debit cards.
2. Young respondents (18–25 years) form the largest group of e-banking users, indicating higher adoption among the younger population.
3. Mobile banking and UPI applications are the most frequently used e-banking services due to their convenience and ease of use.
4. Most respondents use e-banking mainly for bill payments, mobile recharges, and fund transfers.
5. A majority of respondents do not face major difficulties while using e-banking; however, some experience issues such as poor internet connectivity and technical glitches.
6. While many respondents believe e-banking is safe, a considerable number remain uncertain, highlighting the need for improved security awareness.
7. Advertisements and word-of-mouth communication play a key role in creating awareness about ebanking services.

SUGGESTIONS

1. Banks should regularly carry out educational programmes to improve customer understanding of e-banking facilities and security features.
2. Improved internet connectivity and technical infrastructure can reduce difficulties faced by users.
3. Banks should enhance security measures to increase customer trust in e-banking platforms.
4. User interfaces of e-banking applications should be made more simple and user-friendly.
5. Customer support services should be strengthened to quickly resolve technical issues.
6. Special training sessions should be provided for elderly users to encourage wider adoption of ebanking services.

LIMITATIONS OF THE STUDY

1. The study relies on a limited sample size, which may not accurately reflect the entire population of Mumbai.
2. Data was collected using a questionnaire, so the results depend on the honesty and understanding of respondents.
3. The study focuses mainly on young respondents, which may limit the generalization of findings to older age groups.
4. Time constraints restricted a more detailed and in-depth analysis of e-banking usage behavior.

CONCLUSION

The study concludes that e-banking services are widely known and increasingly used among individuals in Mumbai, especially by younger and educated respondents. Awareness of services such as UPI, mobile banking, and ATM facilities is very high, indicating the growing adoption of digital banking. Although most participants are confident in using e-banking and do not face major difficulties, issues like poor internet connectivity, technical glitches, and security concerns still exist. The findings suggest that while e-banking has become an essential part of daily financial transactions, improvements in infrastructure, security, and customer education are necessary to enhance user confidence and encourage more frequent usage.

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