

Title :

Users perception and experience of using e-banking apps

Group members (Group - 13):

Het Patel - 202101162

Ashish Parmar - 202101174

Param Patel - 202101178

Jyot Patel - 202101235

Methodology:

Study design

1. How did you design the experiment?

Designed questions :

We have designed a series of questions to evaluate the user experience of e-banking applications. These questions encompass both qualitative and quantitative aspects, enabling a comprehensive analysis of various parameters. These questions cover different aspects, like how easy the app is to use and how satisfied people are with it. We also included some questions where people can write their own thoughts, so we can learn more about what they like or what could be better about the apps.

Data collection :

The Google Form survey was circulated among the target audience. The survey platform automatically compiled and organized the responses for analysis, facilitating efficient data management. We also conducted user interviews, where we talked directly to people. This helped us get more detailed information about specific apps that users were familiar with. By combining these methods, we aimed to gather both quantitative data (numbers and ratings) and qualitative data (more detailed opinions and experiences) to better understand how people interact with e-banking apps.

Interpretation of the data and analysis :

Interpreting the data from the Google Form, we can understand qualitative measurements such as which app most users prefer, common reasons for using the

app, and the age group where most users belong. Additionally, through user interviews, we can analyze how easy it is to use the app, identify any issues users face, and assess overall user satisfaction. This combined approach allows us to gain valuable insights into user preferences, experiences, and areas for improvement in e-banking apps.

2. Who were the participants?

Majority participants were between 18 and 30 years old. They included both those who currently use online payment apps and those who do not. Additionally, we included users who had previously used online payment apps.

3. How many participants?

We have collected around 75+ Google Form responses, and we have interviewed 20 people in person.

4. What are the demographics of participants?

We have taken surveys from almost all the age groups (majority 18 to 30 years), and profession-wise, if we look at them, the majority of them are college students, followed by other job persons.

Experiment / Study conducted :

1. What was the experiment?

The experiment used both qualitative and quantitative methods to understand how people use e-banking apps and websites.

Google form survey:

- A Google Form survey was created to gather quantitative data from a larger sample size.
- The survey consisted of structured questions covering various aspects such as user satisfaction, ease of use, features preferences, and security concerns related to e-banking apps and websites.
- The quantitative data collected from the survey allowed for statistical analysis and provided complementary insights to the qualitative findings from the interviews.

User Interviews:

- The design included semi-structured interviews with 20 participants.
- Interviews were conducted either in person or remotely.
- Qualitative data obtained from these interviews offered valuable insights into users' experiences and preferences.
- Participants provided specific feedback on features or issues within the e-banking apps they commonly used.
- The interviews helped us gain deeper insights beyond what quantitative data alone could provide.

2. What was the hypothesis?

The hypothesis is that user satisfaction with E-banking apps is influenced by factors like ease of use, security, and regulatory compliance.

3. What was studied?

To comprehensively analyze the usage patterns of e-banking apps, we conducted two distinct study techniques: survey for quantitative analysis and user interview for qualitative analysis.

i) Survey - Quantitative Analysis:

Question	Type	Options
Age group	Single Choice	Below 18 18-25 26-35 36-45 above 45
Do you use e-banking apps/websites ?	Single Choice	Yes, No
How frequently do you use them?	Single Choice	Daily Weekly Monthly Rarely Never

Do you prefer online transactions over cheque/cash/ATM ?	Single Choice	Yes, No
I needed to learn a lot of things before I could get going with the e-banking apps/websites.	Scale	1-5 Strongly Disagree - Strongly Agree
What applications/websites do you use?	Multiple Choice	Google Pay Phone Pe Paytm Bhim UPI Net-banking
What are the preferences of apps?	Preference	1 - 3 Most used - Least used
For what purposes do you use them?	Multiple Choice	Sending/receiving money to friends and family Bill payments (utilities, rent, etc.) In-store payments (QR code, NFC) Online shopping Other
What features do you find most useful in your e-banking apps?	Multiple Choice	User-friendly interface Fast and secure transactions Variety of payment options Transaction history and tracking Rewards and cashback programs Budgeting tools and insights Other
How easy is it to find the features you need in the e-banking apps you use?	Scale	1-5 Very Difficult - Very Easy

How satisfied are you with the user interface and user experience of the e-banking apps/websites you use?	Single Choice	Very satisfied Satisfied Neutral Dissatisfied
What improvements would you like to see in your e-banking platform?	Multiple Choice	Enhanced Security measures Better user interface Faster transaction processing improved customer services more features
How often do you encounter technical issues while using your e-banking platform?	Single Choice	Frequently Occasionally Rarely Never Not Sure
Any other comments or suggestions regarding your e-banking user experience?	Text	User Input

Why don't you use e-banking apps or websites?	Multiple Choice	Difficulty in understanding how to use it Lack of trust in online banking security Concerns about privacy and data protection Other
Have you had any experiences with e-banking apps or websites in the past?	Single Choice	Yes, No
Why are you not using them currently?	Text	User Input

How do you pay your bills?	Single Choice	Cash Check Debit Card/Credit Card Other
Any other comments or suggestions ?	Text	User Input

ii) Interviews - Qualitative Analysis:

No.	Questions
1.	What is your name?
2.	What is your age?
3.	How frequently do you use e-banking apps, and which ones do you use the most?
4.	What are the primary reasons you choose to use e-banking apps instead of traditional banking methods?
5.	Can you describe your overall experience with e-banking apps in terms of ease of use and navigation?
6.	What features or functionalities do you find most useful or beneficial in e-banking apps?
7.	Have you encountered any challenges or frustrations while using e-banking apps? If so, please explain.
8.	Do you prefer online transactions over cheque/cash/ATM ?
9.	How satisfied are you with the security measures implemented in the e-banking apps you use?
10.	Have you ever switched or considered switching e-banking apps? If yes, what motivated this decision?
11.	Are you aware of any rewards/offers offered by the app? Which type of rewards/offers do you like?

12.	Do you have any concerns about privacy or data security when using e-banking apps? If so, what are they?
13.	How do you feel about the customer support provided by e-banking apps? Is there anything you think could be improved in this area?
14.	Have you ever participated in surveys or provided feedback to e-banking app providers? If yes, what was your experience like?
15.	Any improvements you would like to see in the app?

iii) Rating Scale Used:

In the experiment, a rating scale was utilized to assess various aspects of user experiences with e-banking apps. Specifically, a Likert scale ranging from 1 to 5 was employed for questions related to satisfaction levels, ease of use, and the frequency of encountering technical issues, As we have mentioned in the above table of survey form.

iv) User Requirements:

Users want e-banking apps/websites to be easy to use, secure, and have reliable customer support. They expect features like QR code payments and bill management. Younger users appreciate rewards programs. Overall, users seek a convenient and secure banking experience with access to essential features and support.

Findings :

1. Based on User Interview:

- **How frequently do you use e-banking apps, and which ones do you use the most?**

In response we found that most of the students are using E-banking apps on a daily basis. And some of the other people use E banking for shopping and bill payment purposes are using it monthly or weekly bases.

- **What are the primary reasons you choose to use e-banking apps instead of traditional banking methods** - We got the most responses like it's very convenient to use and they can do transactions fast and secure compared to traditional banking methods. Also bill payments become easy using e-banking apps.
- **Can you describe your overall experience with e-banking apps in terms of ease of use and navigation** - The layout of these apps typically organizes essential banking functions such as checking balances, transferring funds to friends or family, paying bills, mobile recharge, and managing accounts in a clear and intuitive manner. Some users have mentioned that for a new user, the QR option is easy to find in Paytm and Google Pay as compared to PhonePe because in Phone Pay it is located at the very top of the app, so the user has to find it. Also, Google Pay users have to scroll all the way down to check the account balance.
- **What features or functionalities do you find most useful or beneficial in e-banking apps** - The most used functionality is QR code payments to the merchant. Also people are using it for Online shopping and Bill payments, too. Some people with multiple bank accounts are using a self transfer option in order to manage their money across multiple bank accounts.
- **Have you encountered any challenges or frustrations while using e-banking apps** - In response, we got that sometimes when the bank servers are down or when the internet connection is slow, the transaction gets into processing mode (mostly this problem occurred with Google Pay users). And which is very frustrating for the user because the user has no option but to wait for the response from the app because the payment can also fail or the money can be debited.
- **Do you prefer online transactions over cheque/cash/ATM** We got nearly all **responses:** yes. And some people who are not in favor of this gave the reason that the online payment apps are still not safe; that's why they prefer cash, and for larger transactions, they prefer cheque.
- **How satisfied are you with the security measures implemented in the e-banking apps you use** - We got most responses from satisfied to very satisfied with very less neutral votes. The people who are using these apps on an almost daily basis are very much satisfied with the apps.
- **Have you ever switched or considered switching e-banking apps?** If yes, what motivated this decision-Most of the people who switched from Paytm to Google Pay said that the user interface is very good, and the rewards and activities in

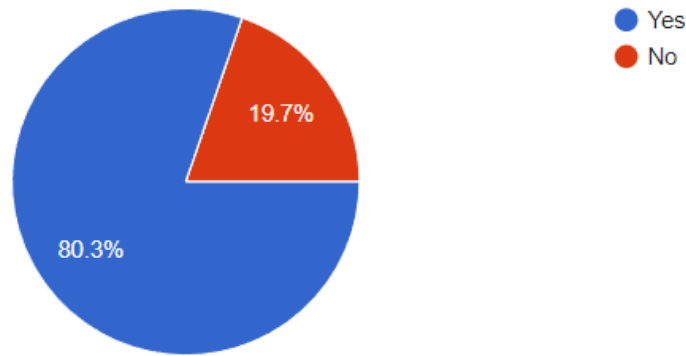
Google Pay are very good, such that users liked to use them. And the QR code scanner on Google Pay is also very efficient, with auto zoom and flash light features.

- **Are you aware of any rewards/offers offered by the app?** Which type of rewards/offers do you like-From responses, most people with age below 25 are like and use the rewards/offers on a regular basis, whereas older people generally aren't aware of it or aren't interested much in it.
- **Do you have any concerns about privacy or data security when using e-banking apps?** If so, what are they-Most of the interviewees weren't concerned about privacy or data security but also a significant number of interviewees have concerns on paytm wallet closing incident.
- **How do you feel about the customer support provided by e-banking apps?** Is there anything you think could be improved in this area-All the apps have customer support service available. But one user has specifically mentioned that the google pay customer support was not really responding and eventually he has to give up on his money. On the improvement side they have to give quick support to the user by reducing the waiting periods.
- **Any improvements you would like to see in the app** - Special customer service for people who got scammed for all the apps. Ai assistive technology for the newly joined user. The paytm users have explicitly mentioned that the app should have a simpler interface and they should not have this many options and also there should not be ads. A feature should be implemented to allow users the option to update payment notes details for a limited duration. There should be a larger timer period for requested payments and split requests in google pay.

2. Based on the Survey (Google Form):

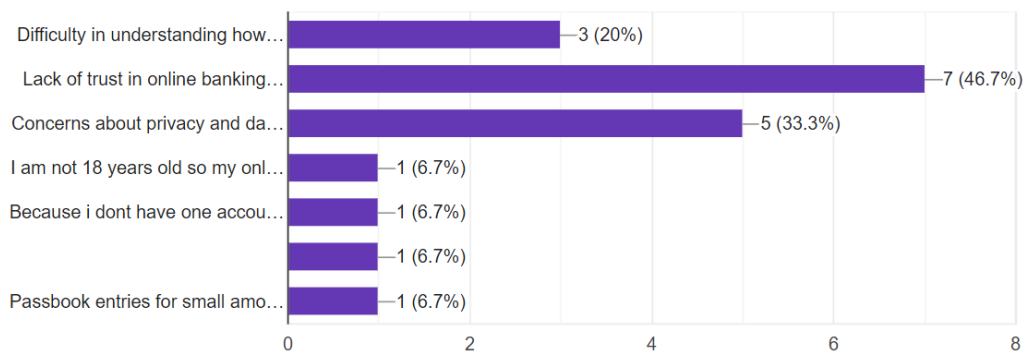
- **Do you Use E-banking Apps/Websites?**

Most of the users use online E-banking Apps or websites. That depicts the interest of users towards digitalization.



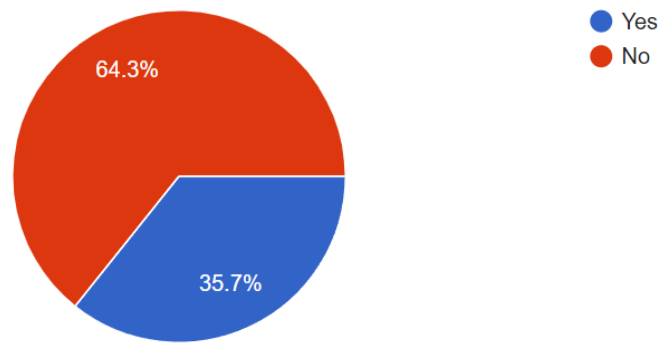
- **Why do you not use e-banking apps or websites?**

Participants who had selected the option that I was not using the apps for them have been asked this question. We have provided some options to select, which are shown in the below chart. So we have got the majority of responses on difficulty in understanding how to use e-banking apps and websites. Lack of trust in online banking security.



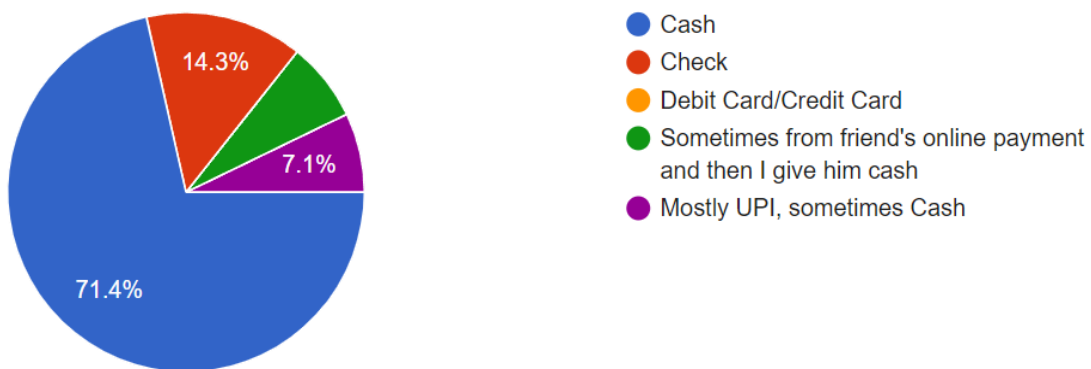
- **Have you had any experiences with e-banking apps or websites in the past?**

If the user is not using these apps, then for them, we have asked this question. So most of them didn't have experience.



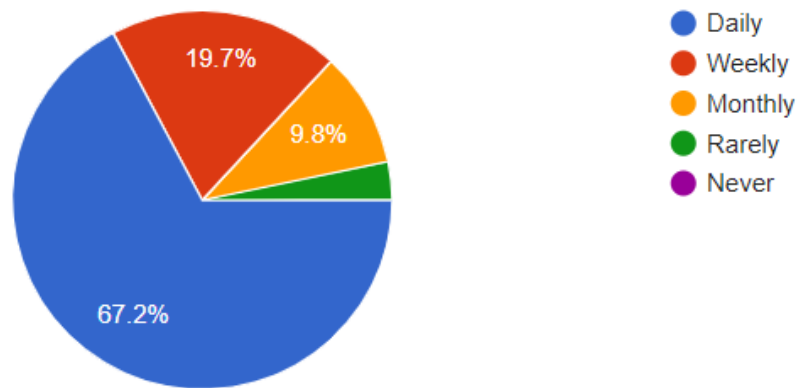
- **How do you pay your bills?**

This question is asked to those users who are not using E-banking apps or websites.



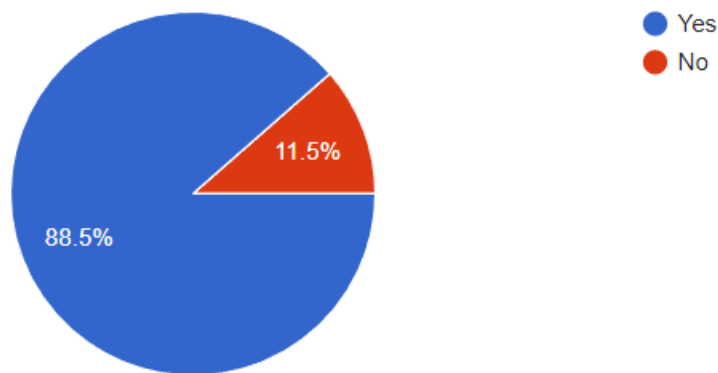
- **How frequently do you use E-banking apps/websites?**

We asked users how often they use e-banking apps, providing options such as daily, weekly, and monthly. The majority of respondents reported using the apps daily.



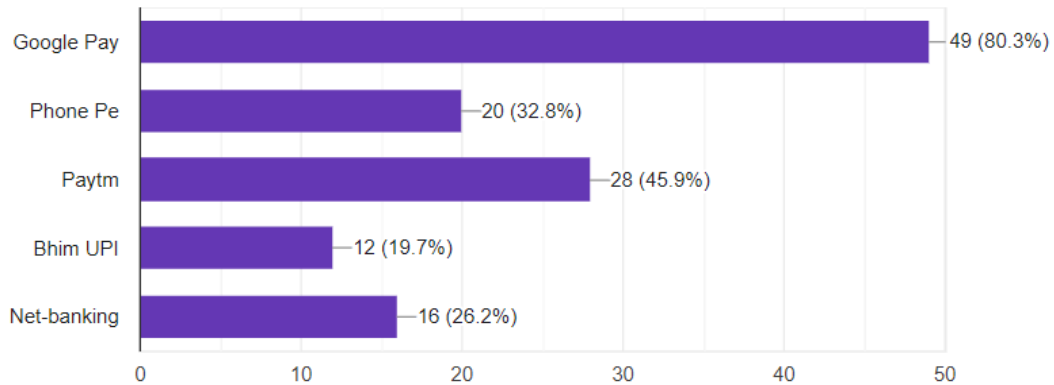
- **Do you prefer online transactions over cheque/cash/ATM ?**

Most of the respondents are preferring online transactions due to their convenience, speed, and time-saving benefits.



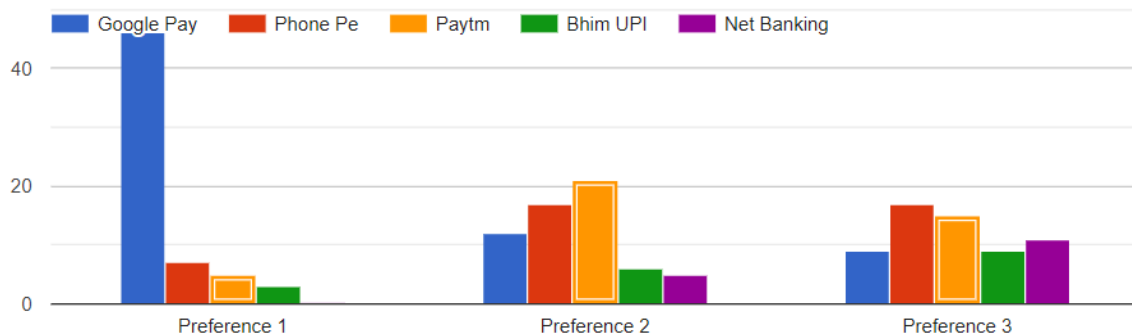
- **What applications/websites do you use?**

We asked users which e-banking applications or websites they use, provided options such as Google Pay, PhonePe, Paytm, BHIM UPI, and net-banking. The majority of respondents reported using Google Pay and Paytm.



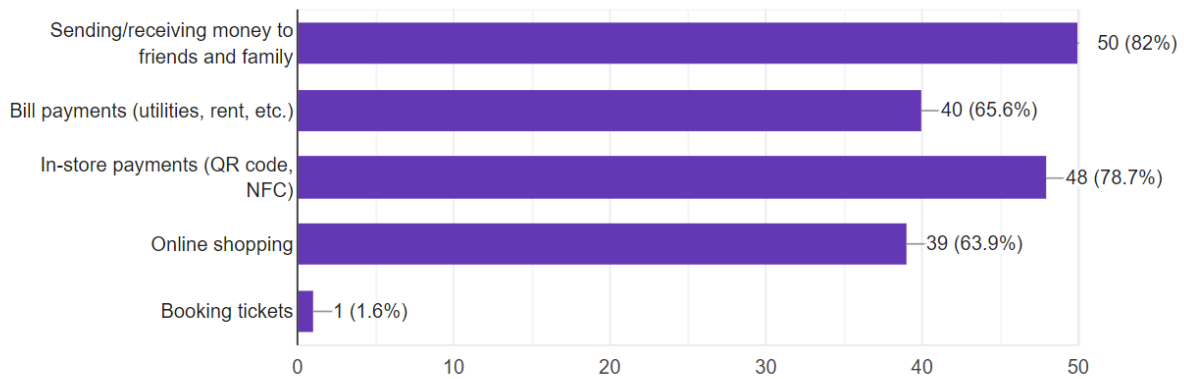
- **What are the preferences of apps?**

We have taken the first three preferences among Google Pay, PhonePe, Paytm, BHIM UPI, and net-banking. Google was the most preferred choice among participants.



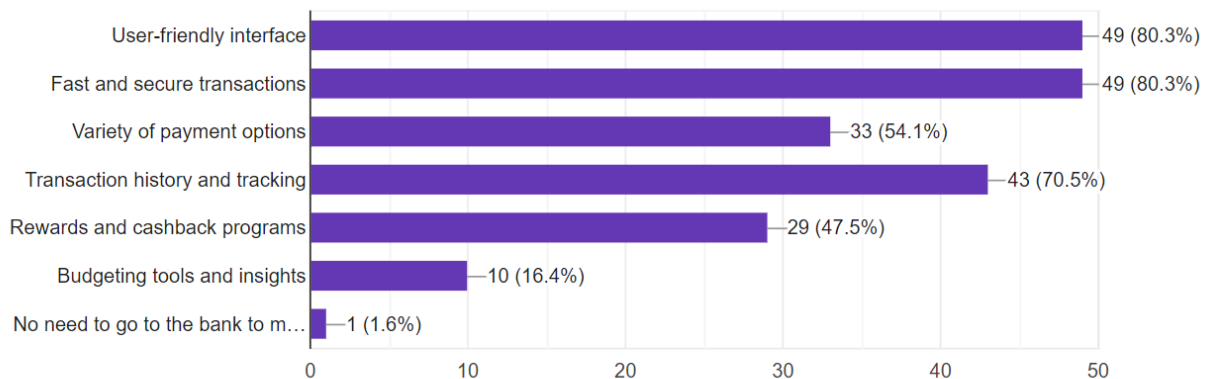
- **For what purposes do you use them ?**

When asked about the purposes for using e-banking apps, respondents were given options including sending/receiving money to friends and family, bill payments (utilities, rent, etc.), in-store payments (QR code, NFC), and online shopping. The responses were evenly distributed among all the options, indicating that users engage with e-banking apps for various purposes.



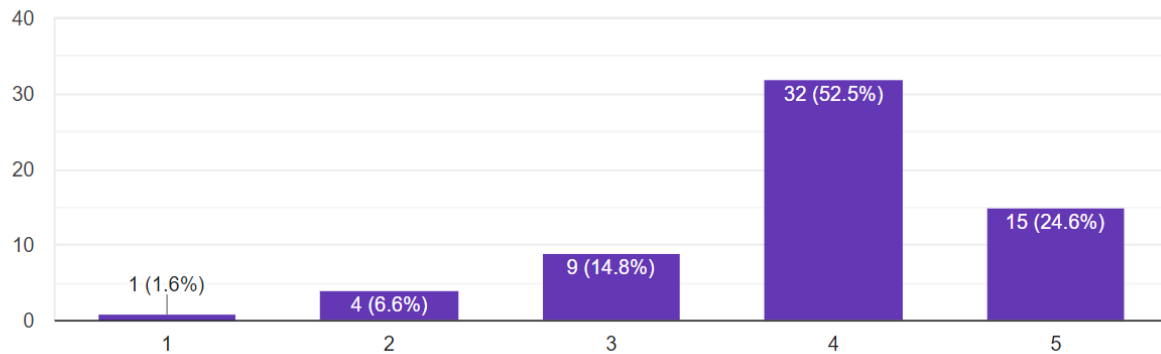
- **What features do you find most useful in your e-banking apps?**

We have provided several options to select from, which are shown in the below chart. By seeing the responses, we can say that the interface of the app is good, the app is providing a variety of options, and the transaction is secure.



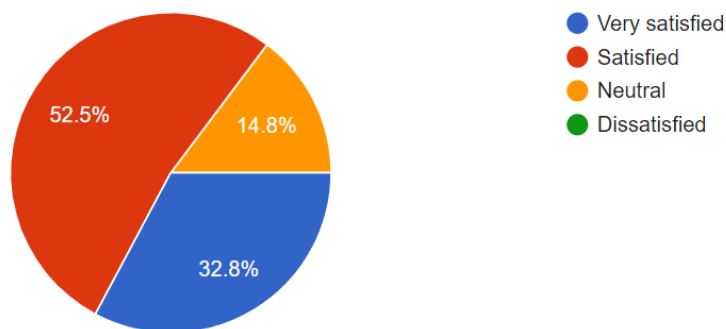
- **How easy is it to find the features you need in the e-banking apps you use?**

We provided a scale of 1 (very difficult) to 5 (very easy). The majority of respondents have responded 4. It indicates that the user finds the app easy to use.



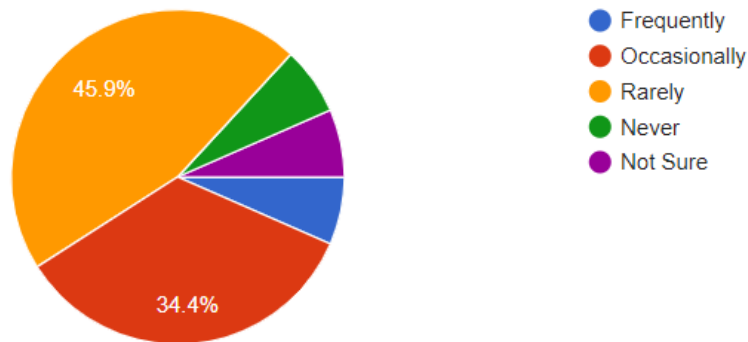
- **How satisfied are you with the user interface and user experience of the e-banking apps/websites you use?**

By looking at the responses, it appears that users are satisfied with the user interface.



- **How often do you encounter technical issues while using your e-banking platform?**

We have provided the options Frequently, Occasionally, Rarely, Never, Not Sure. The majority of users indicated experiencing technical issues occasionally or rarely, suggesting that there are relatively very few problems with the apps they use.



Conclusions :

The study on e-banking apps conducted through Google Form surveys and user interviews reveals that the majority of participants, especially students, use these platforms daily for tasks like bill payments and money transfers due to their convenience and security. While users generally find e-banking apps easy to navigate, technical issues such as transaction delays pose challenges, particularly with Google Pay. However, most users express satisfaction with the security measures implemented. Younger users are more engaged with rewards/offers, while privacy concerns exist, primarily due to incidents like Paytm wallet closures. Improvement suggestions include simpler interfaces and better customer support. Overall, the study underscores the increasing significance of e-banking apps in the digital landscape and emphasizes the importance of continuous enhancement to meet user expectations effectively.

References :

1. <https://dialnet.unirioja.es/descarga/articulo/6223054.pdf>
2. <https://www.linkedin.com/pulse/competitive-analysis-google-pay-vs-paytm-rujuta-katti#:~:text=1.,a%20preferred%20choice%20for%20many>.