

# Overviewing The Next-Gen banking: The Open banking

Dr. Yasmin. A. Barodawala

Assistant Professor, Dr. Thakorbbhai Patel Girl's Commerce College, Vadodara, Gujarat.

Email - yasminbarodawala@gmail.com

**Abstract:** Today's financial sector is overviewing a transformative shift due to the introduction of the perception of Open Banking. This new day concept is fueled by digital revolution and the evolving customer demands. Open Banking nurtures collaboration between banks, fintech companies and other third party service providers through sharing the data securely with help of APIs. The present style of banking – "Open Banking", has the caliber to unlock a wealth of opportunities which will pave a way for enhanced consumer experience, innovation and competition. This paper discovers the concept of Open Banking, illuminating its key features, its working, the role of API, future constraints for both the financial institutions and the customers. A survey of 200 respondents is conducted to know the spread and acceptance of digital banking and also their preference to share data with the third party. The outcome of the survey surfaces that this concept is gaining more popularity in the age group between 18 to 25 as this generation appears to be more comfortable and open to the concept of Open Banking.

**Key Words:** Fintech Companies, Third- party service providers, Financial institutions, Digital Banking, API, Data sharing.

## 1. INTRODUCTION :

Banks since the beginning has served as custodians of customer data, but over since a few years, a paradigm shift has taken place where the customers are willing to share their data to the financial institutions of their choice. All the financial institutions in order to serve their customers in the best possible manner have introduced several innovative models of products and business. When the data of the customer is effectively used it not only benefits the customers, in their financial planning, but also assist the financial institutions to approach their customers and provide them with a fulfilling experience.

In present times, customers are relying more on service of digital banking provided by banks. It is termed as 'doorstep banking'. The credit of its growth mainly goes to the growing Fintech system coupled with Regulatory impetus. In India an exponential increase in the online payment has been resulted due to the introduction of the UPI by NPCI. The onset of the Covid-19 Pandemic also has provoked the scaling up the use of digital services. Hence, now people are gradually decreasing their visit to their bank and have accepted the online services for less complex functions as payments, card applications, investment management, filling their TDS forms, account related services and so on. Thus API based banking has become a gateway to create value offerings through data exchange. It forms as a base for easy and secure mechanism of sharing customer information which has led to the creation of numerous products and services that are more transformed and customer oriented. Across the globe all the financial institutions are eyeing to capture the customer's data and use it more effectively. This has led to the concept of Open Banking which is in its evolving stage (Araluze GK & Plaza N, 2022) and holds multifold potentials for the benefit of one and all.

Open banking, however, is professed differently in countries and across jurisdiction (Carrière-Swallow, Haksar, & Patnam, February 2021).Some countries like Australia and UK have created a regulatory driven and well defined framework for Open Banking while others like India, have a more market-driven approach for it. The bottom line is to provide customers the option to have a control over sharing their information to their respective banks.

## **2. LITERATURE SURVEY:**

(Mutambik, 2023) the author emphasizes that open banking is related to fintech sector and this study explores the relationship between the use of fintech app and the customer experience. The various factors that results in the loyalty by the customers for the brands that support open banking are considered. A model is built up with six factors that determines the intentions of the consumers and their level of loyalty towards the app that offers open banking. A survey was conducted amongst the respective users in Saudi Arabia. The outcome of the study declares that all the six factors, viz. usage ease, value perception, support quality, risk, reliability and innovation, all have an effect on the customer experience and later on the level of their loyalty.

(Fang & Zhu, 2023) the study is an attempt to find out what influence does the regulations of open banking has on the loans given by traditional banks in the territory of BRICS, that is, Brazil, Russia, china, South Africa and India. Data at individual level as well as bank level are used to conduct the analysis. The inference so drawn reveals that the advent of open banking has significantly reduced the lending of loans on the part of the traditional banks. Likewise, the customers also showed the decreased inclination to borrow loan from these banks due to the involvement of the presence of open banking. Thus a very meaningful result has been surfaced from the present study that open banking influences both, the demand and supply section for the consumer loans from these conventional banks. Also, this paper highlights the distinctive role that is played by open banking in taking forward the financial inclusion in the emerging markets of the world.

(Liao, Guan, Cheng, & Yuan, 2022) the authors stress that using open banking is preferred by present day financial institutions to bring about innovation in their services and attract customers. Open banking allows access to financial data of customers by the third party service providers. But this set up instills questions about trust and privacy for data sharing. Many countries have adopted this concept but Taiwan is yet to integrate it. Hence this study has developed a framework, called the BIMAC, taking into the positive points of traditional banking and block chain technology. It shall ensure security control and will enable online services like opening bank accounts, integrated payouts, data revocation or authorization. The analysis prove that this new framework attracts less cost and is also reliable.

(Anna Eugenia, 2018) opines that there is tough competition in banking industry and hence there is a shift from traditional, vertical and conventional models to open banking models that gives the banks an opportunity to gain better advantage over earning more revenue. The sharing of customer's information to the third party can be merely for compliance purpose and can go as far as opening of bank accounts and also inclusion of new services. The economies of scale are created by innovation and production. The study is an exploration of the evolution of the fintech and the technology of finance one of such example is the platform of open data sharing through open banking.

(Gozman, Hedman, & Olsen, 2018) proclaims that banks have accepted and implemented open banking in order to increase and better their customer's satisfaction regarding the services offered by them. Data of the customers shared through open banking medium enables the customers to compare the banking services easily. However, this initiative has posed queries regarding opportunities and challenges, which has been studied in depth. Using interview method five such open banking initiatives, related to APIs and their management, are studied in the present research work.

## **3. OBJECTIVE OF THE STUDY :**

1. To understand the notion of Open banking.
2. To study about its working, role of API and its future in India.
3. To assess the Customer's preference to share data via Open Banking

## **4. METHOD OF ANALYSIS:**

To gauge the level of customer's preference regarding accepting open banking to share their data to third party, a survey was conducted, comprising of 200 respondents. Thus primary data and secondary data is included in the present study. Secondary data is collected from published and unpublished works. Samples were selected using random sampling technique. The survey was designed to collect data for different aspects of Open Banking and to assess the customer's inclination towards the concept of open banking in India. The questionnaire was developed after referring past research works on Open Banking and was adapted in context of Indian customers.

## **5. LIMITATIONS TO THE STUDY:**

The present study aims on surfacing the concept of Open Banking in Indian Context. Though it being a wide and vast concept everything related to Open Banking is not covered here. This limits its usefulness. Also the study has

included a small size of samples that is 200 respondents and has drawn conclusion on the responses so received from them. This can form a bias opinion in the conclusions so presented in this study.

### 6. THE CONCEPT OF OPEN BANKING :

Open Banking is a term that deals with financial services and covers the use of open Application Programming Interfaces (APIs) that facilitate the third party developer to build application around a financial institution (Brodsky & Oakes, July 2017). The main purpose of the existence of Open Banking is to offer a greater flexibility and transparency for account holder. It is done so by allowing data to be shared more easily between various financial companies that provide numerous financial products and services.

In traditional banking model, the data of the customer is exclusively held by the bank. The data accessibility is limited. Open banking changes this set up. Here the customer is given a choice to share his/her financial information with the third- party provider, which could be other bank or a fintech company. This information sharing is done securely through standardized APIs.

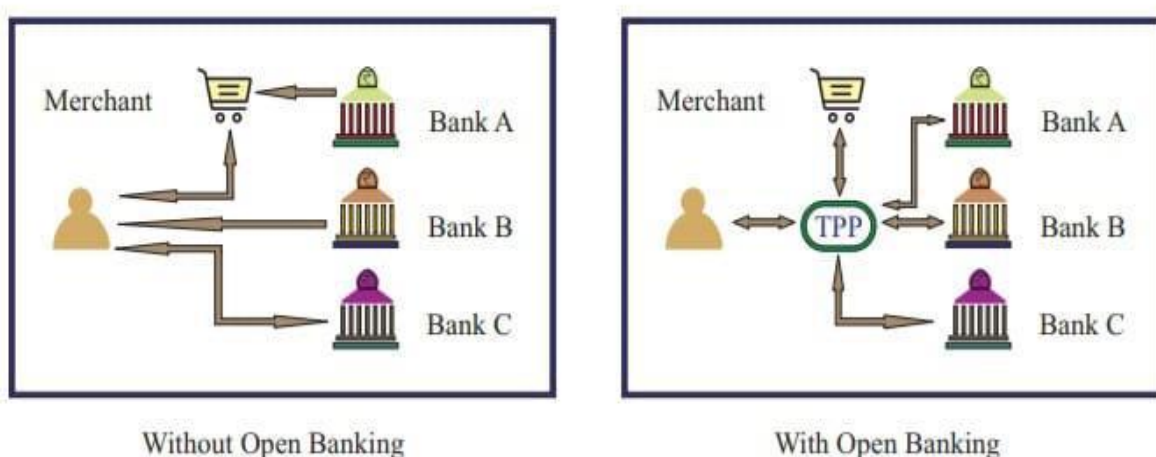


Chart 1: The concept of Open Banking

Note: TPP- Third Party Provider

### 7. KEY FEATURES OF OPEN BANKING INCLUDE:

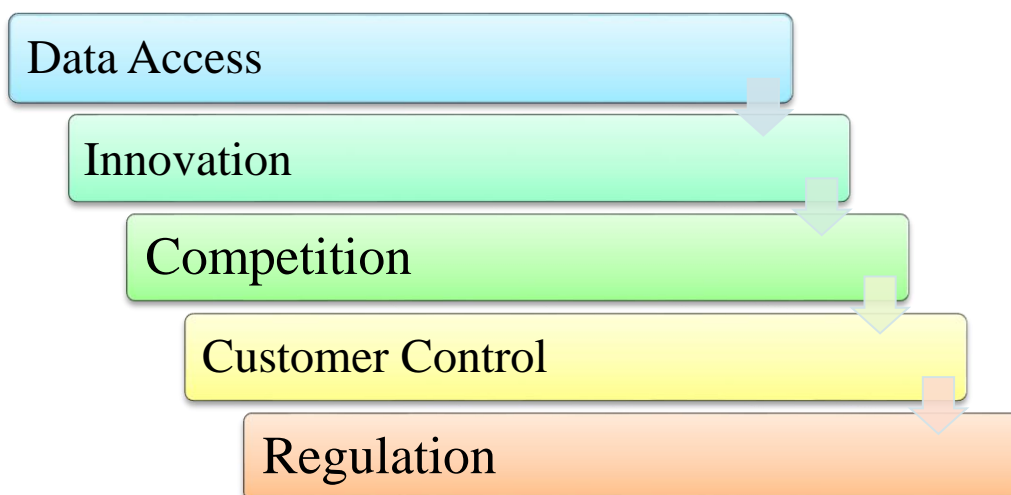


Figure 1: Key features of Open Banking

### 8. WORKING OF OPEN BANKING :

A step by step overview of the working of Open banking is showcased in the chart 2:

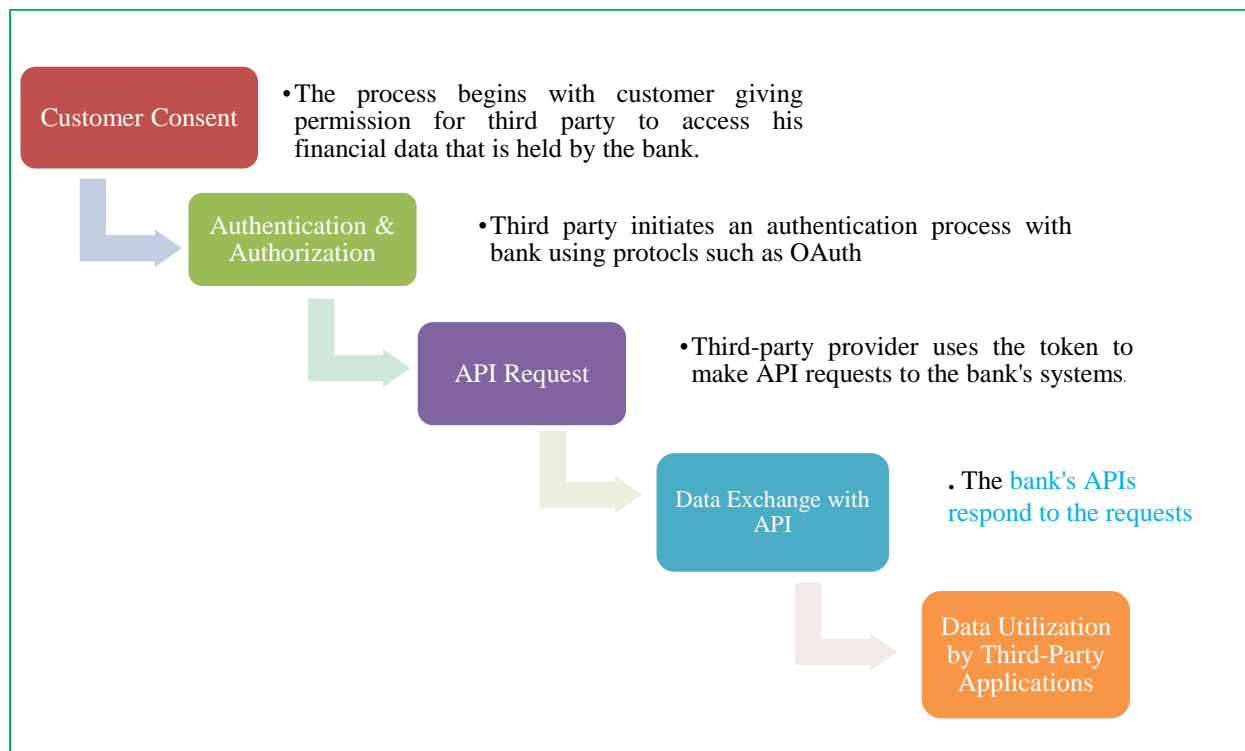


Chart 2: Working of Open Banking

The above mentioned are the major steps. It is then followed by: -

- Real time updates (the most current financial information of the account holder is pushed to the third party provider)
- Customer Interface and control (the customer interacts with the bank as well as the third party through the user interfaces)
- Security measures (through encryption a secure authentication the integrity of customer data is taken care of)
- Compliances (the bank complies with the regulations related to open banking)
- Continuous Improvement and Feedback (from customers, bank, third party and other stakeholders).

### 9. ROLE OF API :

- API (Application Programming Interface) play a vital role in the working of the open banking. It forms the communication bridge between the software applications and systems to communicate, share data and interact with each other. APIs ensure the exchange of financial information between banks and third party providers in a secure and standardized manner (Brodsky & Oakes, July 2017). APIs are the foundation of open banking. Some of the key roles of API in open banking is mentioned below:
  - Data access and sharing
  - Standardization and interoperability
  - Authentication and Authorization
  - Consent Management
  - Innovation and Development
  - Real-time information
  - Instant Updates
  - Seamless customer experience
  - In complying regulatory requirements
  - Reduces Development time and cost.

### 10. API MODEL :

Table 1: Three types of API

| Model type/<br>Features | Internal | Partner /B2B | Public |
|-------------------------|----------|--------------|--------|
|                         |          |              |        |

|                       |   |   |   |
|-----------------------|---|---|---|
| <b>Characteristic</b> | API is used by developers within the company                                    | API is used by Business partners, like suppliers, resellers for tighter partner combination | APIs is used by external partners and developers who are involved in building innovative applications |
| <b>Attributes</b>     | It reduces Cost<br>Increases Operational efficiency and gives Enhanced security | Reduces costs to the partner, API monetization, enables Enhanced security                   | Innovation is possible through engaging developer community, There is Extended market reach           |

## 11. KEY CONSIDERATIONS OF OPEN BANKING :

Financial institutions must assess these key considerations that serve as pillars to a successful open banking ecosystem:

### Data Sharing

Open banking is based on data sharing. It visualizes data sharing securely, by taking customer consent, to the third party for the desired outcomes. Data sharing can become an alternative source of income for the banks and other financial institutions.

### Data privacy and cybersecurity

The most important aspect is the Data Protection. The success of any financial institution all depends on their ability to win customer trust, handle reputational risk, gain market confidence by managing data in secure environment. There are number of cyber frauds and phishing attacks faced at present. Hence it is necessary for the financial institutions to pay most attention to cybersecurity measures.

### Partnerships

Open banking functioning depends on the interoperability all the parties concerned. It means that they should have the capability to not only leverage the products, services and data but also innovate it for serve the customers better. For the purpose of making the partnership between parties a success it is advisable to follow certain standards regarding APIs, customer experience, security and operations.

### Regulatory compliance

In any ecosystem be it regulatory- driven or market- driven, like in India, it is mandatory to comply with the existing rule, regulations and the laws. It also preferred that global level practices are also kept in mind.

### Customer experience

Open banking provides customers greater control over their data. It also improves banking experience as a whole. Keeping the customer at the center would assist the financial institutions to increase the adoption and build trust.

## 12. FUTURE OF OPEN BANKING IN INDIA :

As to this day, predicting the future of Open Banking in India is inherently uncertain, however based on the trends and developments seen in the past years, several potential aspects, can be pointed out, that could shape it. They are as follows:

1. Clarity by Regulatory Authority
2. Wider adoption by Traditional Banks
3. Growth of Fintech companies
4. Expansion of Account Aggregator Ecosystem
5. Diverse Financial services
6. Collaborations and partnership
7. Technological advancement
8. Enhanced customer experience
9. Focus on data security and privacy
10. Educational Initiatives.



The co-operation and the gelling up all these entities and elements will unfold how Open Banking will spread and prosper in India in the coming days.

### 13. QUANTITATIVE RESEARCH RESULTS :

A survey was conducted to know the customer’s preference for sharing their personal financial data through the medium of Open Banking, from a set of 200 respondents. The survey included the extent of spread of digital banking as shown in table 2 and customer’s inclination to share their data in table 3 which is displayed below:

Table 2: Extent of digital banking

| Questions  | Male (%)   | Female(%)  |
|--|------------|------------|
| Prefer visiting branches for more complex products including loan applications.                    | 65         | 61         |
| Prefer visiting branches with face-to-face interaction for fund transfers (financial transactions) | 5          | 11         |
| Use digital banking for all products and services and seldom visit a bank branch                   | 30         | 28         |
| <b>Total</b>   | <b>100</b> | <b>100</b> |

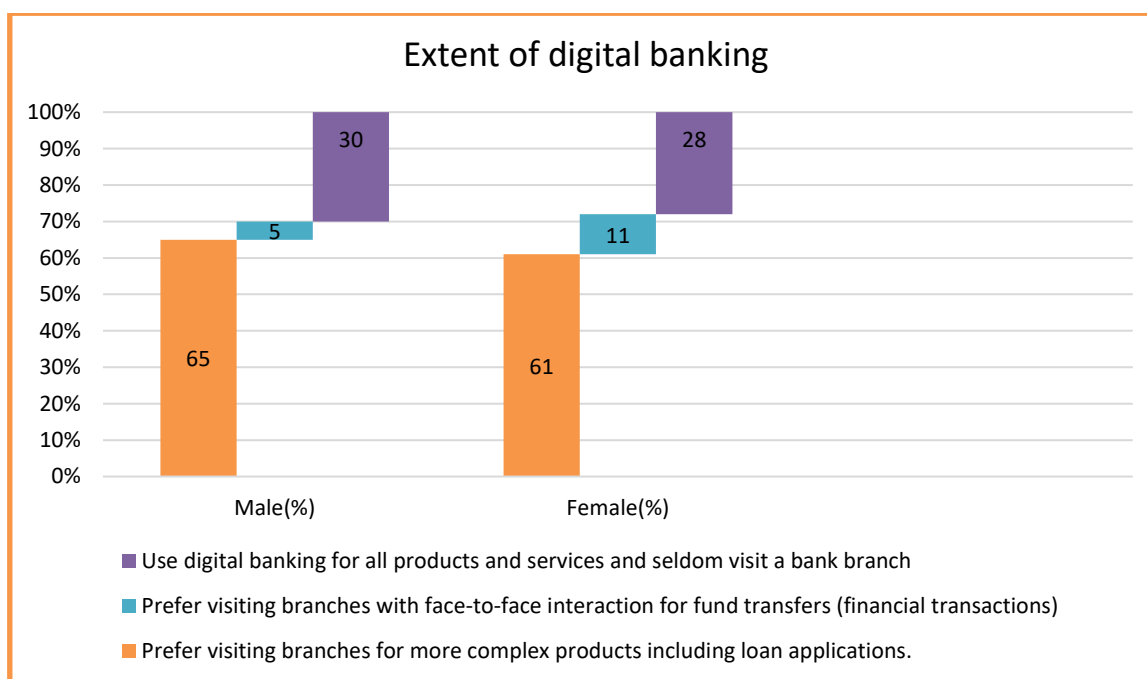


Chart 3: Extent of digital banking

**Interpretation:** The extent of digital preferred by the male and female respondents is depicted in table 2 and in chart 3. It is known that when it comes to transacting of complex nature for example as loan application, 65% of the males and 61% of females prefer to physically visit the bank and avoid dealing it online. For services like transfer of money, request for Cheque book, account balance and fund transfers they prefer online or digital banking. This is reflected by the least percent of males at 5% and females at 11% in this category of question. And while dealing with digital banking for all products and services and hardly visits the bank is registered at 30% male and 28% females.

Hence from the responses so received from the respondents we can draw a conclusion that in India still there is a majority of the population who prefer to visit the bank branch and complete their transactions which are complex and they feel fearful about the confidentially and accuracy of operations via digital banking.

For the purpose of getting the real picture of the level of acceptance of Open Banking the set of respondents were divided in 3 groups. Group 1 – aged (18 to 25 years), group 2- aged (26-35 years) and group 3 – aged (36 years and more).

Table 3: Customer’s inclination to share data via Open Banking

| Sr.no | Questions  | 1(18-25) | 2 (26-35) | 3 (36 and more) |
|-------|--|----------|-----------|-----------------|
| 1     | Willing to share Personal information for identity purposes              | 65 %     | 74 %      | 60 %            |
| 2     | Readiness to share Account information                                   | 40 %     | 35 %      | 30 %            |
| 3     | Willing to share Account details for payment initiation by third parties | 45%      | 38 %      | 43 %            |
| 4     | Share Transaction history of accounts                                    | 28 %     | 18 %      | 15 %            |

Note: The totals do not add to 100% as survey respondents were allowed to select more than one option. The graph is to be read as xx% of the total respondents of the particular section.

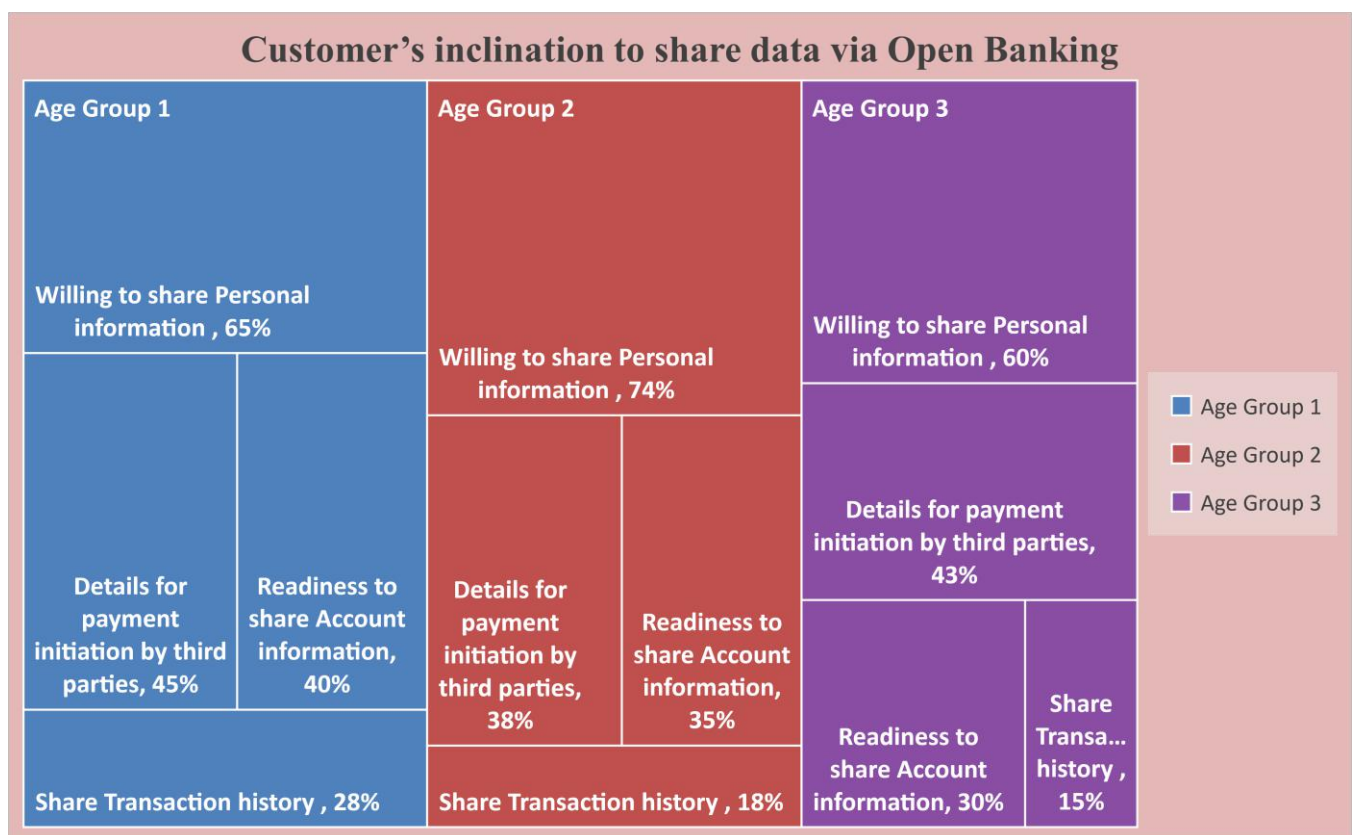


Chart 4: Graphical representation of Customer’s inclination to share data via Open Banking

**Interpretation**

1. When asked for willing to share personal information- age group 2 (26 to 35 years) gave higher positive response at 74%. Age group 1 (18 to 25 years) has shown willingness at 65% but Age Group 3 (36 years and more) has shown lower interest (60%) than other two age groups. This could be due to lack of trust in the model of Open Banking.
2. For Readiness to share Account details the maximum positive response is given by Age group 1 (18 to 25 years) at 40%. This may be because the young generation are tech savvy and do not face trust issues while dealing on online platforms.
3. When assessed for willingness to share account details for payment initiation by third parties, age group 1 (18 to 25 years) is at 45%. Once again reflecting their open mindedness for the acceptance and implementation for the concept of open banking.
4. Giving permission to share transaction history of accounts has scored highest percent of 28% by age group 1 (18 to 25 years) followed by age group 2 (26 to 35 years) at 18% and Age Group 3 (36 years and more) at 15%.

### The outcome of the survey is as follows:

The maximum customer's preference for this new way of banking is seen in Age group 1 (18 to 25 years), that is the Generation Z. Younger generation tends to be more ready to accept Open banking compared to older generations. Overall, while there may be some variations among individuals, younger generation prefer Open banking more due to their familiarity with technology, desire for convenience, and interest in innovation in the banking industry. However, it's essential to continue educating consumers of all ages about the benefits and potential risks connected with open banking to ensure widespread acceptance and adoption.

### 14. CONCLUSION :

Overall, open banking can probably revolutionize the way financial services are delivered, consumed, and regulated. It enables banks to become competitive and provide effective customer experience. It represents a transformative alteration in the financial services industry with far-reaching implications for consumers, businesses, and economies worldwide. By enabling secure and standardized access to financial data through APIs, open banking fosters innovation, competition, and financial inclusion while prioritizing data security and consumer control.

It enhances customer experiences, promotes product innovation, streamlines processes, and encourages collaboration among traditional financial institutions and fintech startups. However, realizing the full potential of open banking requires continued investment in technology, robust regulatory frameworks, and collaboration among stakeholders.

With careful implementation and ongoing refinement, open banking has the power to drive positive change, empower individuals, and shape the future of finance towards a more inclusive, competitive, and efficient ecosystem.

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