

## IMPACT OF DIGITIZATION ON BANKING PRACTICES; A CASE STUDY OF KALYAN JANATA SAHAKARI BANK

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### ABSTRACT

Co-operative banks are an important segment of the overall banking structure. As in India, as far as digitalisation is concerned, cooperative banks are still lagging. The technological development has changed the approach of the people towards banking transactions. Nowadays, people prefer to complete banking transactions without physically going to the bank. There are digital banking options such as E-Banking, M-Banking which has made life easy and comfortable both for the banking customers and bank staff.

The pandemic affected the business as well. All the economic activities have been closed down in a host of countries. Generation of income and consequently the purchasing power of citizens fell drastically within a short span of time. 'Urban co-operative banks appear to have been particularly impacted by the second wave of Covid-19.' The RBI said in its financial stability report.

Under such circumstances, there was a need to develop information technology tools for the cooperative banks. But due to the impact of the second wave of Covid-19, the same has not been done to that level as it was expected by the cooperative banking customers. As compared to the same, private and foreign banks have offered better options to their customers for digital banking.

It also affected the quality of banking services offered by UCB's in India. Most of the services due to lockdown and Covid-19 protocols were being offered through online mode and customers' entry were being restricted in the bank. This gave rise to upgrading online (E-banking) services which was a big challenge for most of UCB's in the said region as these are still struggling and competing with private and foreign banks for the same.

The present study talks about such issues and challenges faced by Urban co-operative banks especially in case of KJSB (Kalyan Janata Sahakari Bank) during Covid-19 phases and an analysis based on the opinion of the KJSB staff on the digital banking services offered during the phases of pandemic.

**Keywords:** Co-operative banks, Covid-19, RBI, Banking services, KJSB

### Introduction

India along with different parts of the world is being affected drastically due to the impact of Covid-19 (A virus from corona family was identified first during November – 2019 in China – According to the sources). According to various studies, it has been proved that the virus has impacted the lives of major sections of the society, but it created opportunities for few new trends too in the society.

For example, digital banking options as offered by various banks. It includes the banking services through online mode and covers E-Banking, M-Banking options. All types of banks such as Government, Private or foreign were successful in offering multiple digital banking options for their customers. In the same line, cooperative banks in India were also supposed to offer to be in the competition. Various cooperative banks have tried to upgrade their digital banking options and to be at par with other banks. But few succeeded. The reasons for their failures can be: -

1. **Limited capital base:** Most of the cooperative banks operating in India have limited capital base which is coming from the banking customers converted into shareholders by subscribing in the share capital of the bank. But this subscription is very nominal. Therefore, cooperative banks find it difficult to upgrade their digital banking technologies.
2. **Untrained staff:** The banking staff working in cooperative banks are mostly untrained. Due to limited training sessions and low qualifications/experience, it seems difficult for the cooperative banking staff to cope with the technological development and offer the same nature of banking services digitally to their customers.
3. **Uneducated customer base:** in case of cooperative banks, mostly the customers are less educated or technologically sound. As most of the customers who can understand and use digital options prefer to

have their bank accounts in government, private or foreign banks. Only those customers who are unable to open their bank accounts in such banks due to some reasons are coming to cooperative banks. Thus, such customers are very much comfortable with the traditional banking options.

4. **Flexible banking hours:** Some of the cooperative banks offer flexible working hours such as during evening time or on Sundays. Therefore, it is easy for the customers to go to the bank and complete their banking transactions rather than opting for digital banking options as available through bank websites or mobile applications. Such customers can visit the bank during their comfort time.

With the start of this pandemic from early days of the year 2020, the banks started operating as per the standing instructions of the Government of India. For the purpose of study, the pandemic phases are grouped as per following: -

First phase – March- 2020 to July- 2020(1<sup>st</sup> Wave of Covid-19)

Second phase – August - 2020 to Feb - 2021

Third Phase – March - 2021 to June – 2021(2<sup>nd</sup> Wave of Covid-19)

Fourth Phase – July 2021 to December – 2021

Fifth Phase – January -2022 to till date. (3<sup>rd</sup> Wave of Covid-19)

During the above different phases of the Covid-19 pandemic, the banking services in general and specifically in the case of co-operative banks have got affected drastically. For this purpose, the case study of Kalyan Janata Sahakari Bank (KJSB) is being taken for the study purpose.

The people who were having their accounts in this bank were not getting the opportunity to physically visit the bank to do their banking transactions. Due to the Covid-19 protocols and other safety measures, the customers were allowed to visit the bank in limited numbers and also through a token/coupon system.

Following were certain general observations made during these phases with respect to the working and operating of co-operative banks under study.

1. The banks were operating for a limited number of hours during the official working time and allowing a limited number of customers to physically visit the bank after following all the necessary Covid-19 protocols.
2. The banks under study were encouraging their customers to go for online banking options through its web portal or m-banking applications.
3. Certain services like passbook printing and customer inquiry were being restricted during the 1<sup>st</sup> and 3<sup>rd</sup> Phase as mentioned above due to the 1<sup>st</sup> and 2<sup>nd</sup> wave of the pandemic.
4. The retail customers approaching these banks were supposed to wait in a long queue because the gate keeper was allowing only 4-5 customers to go inside at one time and once 4-5 customers were coming out then another lot used to enter.
5. In banks also, generally half the total strength of staff were allowed to report on duty on one day and therefore, so many services which were specifically handled were not being provided by the bank.

### Literature Review

Jindal , Sharma, (2020) using the descriptive approach through a questionnaire targeting consumers in the city of Bulandshahr in India, looked at evaluating the role of online banking services in fighting the Covid-19 pandemic, the results of study showed that online banking has an important role in fighting the Corona pandemic and that people who use online banking services feel more secure under the conditions of the spread of the virus. Thus, technology has not only gone beyond the daily need, but has become a need for life and a sense of security, and online banking services are required by every banking institution to preserve people's lives.

Shihadeh. (2020) analyzed the relationship between consumer behaviour and the use of online banking services in daily life, by collecting information from World Bank's 2014 Global Findex Database, and found that the use of online banking services is linked to several factors: the educational level of individuals, age, gender, income level. And that the use of online banking services is still low in the countries of the MENAP region, and that individuals who have a high level of education are more likely to use online banking services.

Kushnir , Hevorhyan, (2020) on Ukrainian banks using the descriptive approach, which found that banks forced to work in uncertain conditions and to organize ways and procedures for working with customers under difficult conditions during the imposed quarantine period, and banks must provide remote services to customers, which in turn is an appropriate solution and safe for both the bank and its customers. Ramya T J (2016) in her study "A

Study on Customer Satisfaction towards Private Banks with special reference to Mysuru City " The banking industry has an incredible growth in the Indian market. The doorway of new technology has made a lot of changes in the Indian banking sector.

Dauda , Lee, (2015) analysed the adoption of the technology approach for customers and its impact on the development of online banking services in Nigerian banks by a random utility model using discrete choice models. What this study found was that banks, to achieve a competitive advantage, should provide smart and practical online banking services.

Rahi (2015) research findings show customers are more loyal towards those banks who are facilitating internet banking services. Also, a good brand image builds relationships between banks and customers and enhances the customer loyalty toward the bank. He also concluded that those banks that are giving the internet banking services to their customers, loyalty of those customers are more towards the banks.

Mathur (2014) in his article "Customer's Trends towards Public and Private Sector Banks". Now 'Anywhere Banking' and 'Anytime Banking' have turned into a reality. Banking activities have increased enormously with a clear change in way of life and techniques especially in the field of lending, from wholesale to retail character. Nirmaljeet Virk and Prabhjot Kaur Mahal (2012) carried out a study on customer satisfaction in public and private banks of India. Private Bank managers maintain better personal relationships with customers than the public bank managers and this factor determines the customers' satisfaction to a large extent.

Joseph , Shani (2008) in their book entitled, "Changing Role of Banks – A Global Perspective" have discussed the attitude of the customers towards banking services like time taken for opening saving account, time spent for depositing cash and withdrawal, satisfaction of customers and problems of customers. Aurora and Malhotra (1997) studied the level of customer satisfaction and marketing strategies in both private and public sector banks in India. It revealed six factors of customer satisfaction in public sector banks viz, routine operations, price, situational environmental technology and interaction.

## Research Methodology

### Statement of Problem

The Pandemic has affected almost every segment and every industry drastically but the effect on banking services is partially good and partially bad. Through online banking services. Both the customers and the banks have got another option of providing the banking services but the same is with so many challenges. Certain banks like foreign banks, private banks were able to face the challenges and made online banking an easy option. But this is not the case with co-operative banks.

The present study talks about the initiatives and steps taken by KJSB with regard to Digitization of its Banking services and its impact on retail banking as per the opinion of the KJSB Bank staff of few branches within KDMC (Kalyan-Dombivli Region) region.

### Objectives of the study

- To understand and explore the various Digital Banking services as offered by Urban Co-operative Banks in general.
- To evaluate the nature of banking services offered during different phases of pandemic.
- To analyse the alternative digital banking options offered by KJSB (Kalyan Janata Sahakari Bank)
- To offer suggestions based on findings of the study.

### ➤ Hypothesis

On the basis of above-mentioned objectives, the present study aims to test the

Following hypothesis:

Hypothesis - 1

H0: There are no significant preferences for Digital banking services for the banking staff of the bank under study.

H1: There are significant preferences for Digital banking services for the Banking staff of the bank under study.

Hypothesis - 2

H0: The digital banking services as offered by KJSB have not impacted positively on the lives of mean staff of the banks under study.

H1: The digital banking services as offered by KJSB have impacted positively on the lives of mean staff of the bank under study.

- Research Design
  - For the purpose of Research, Data is collected through
    - a) Primary Data source
    - b) Secondary Data source
  - For the purpose of study and analysis the banking staff including clerks, Cashiers, Managers, Peons etc. of selected branches of KJSB are being covered under the survey.
    - Primary Data source - 25 Bank Staff from 4 Branches namely 1. Kalyan-west (Adharwadi Branch) 2. Kalyan -west (Bail Bazar Branch) 3. Kalyan – East (Netivali Branch) 4. Kalyan – East (Malang Road Branch), are being selected based on ‘Convenience Sampling’ technique. Responses are collected through structured questionnaires consisting of close ended multiple-choice questions.
    - For Secondary data source- Annual Reports, Minutes of Meetings of KJSB- Kalyan Janata Sahakari Bank, Web Resources, Research Publications, Text books & reference books are being used.
    - The Data collected from respondents are tabulated and analysed through charts/graphs.
    - The collected data is also analysed by using a statistical diagram & T-Test(Paired samples for means).

**For Bank staff**

1. Kalyan-west (Adharwadi Branch) 08
  2. Kalyan -west (Bail Bazar Branch) 07
  3. Kalyan – East (Netivali Branch) 06
  4. Kalyan – East (Malang Road Branch) 04
- Total 25

**Scope of the study**

The study is confined to the survey on Digital Banking Services as offered by KJSB (Kalyan Janata Sahakari Bank).

The analysis is based on the responses collected from the Bank staff of the bank under study.

**Limitations of the study**

Even though reasonable care has been taken for collecting information and doing analysis, the present study is having certain limitations, too.

1. The study is confined to the KJSB (Kalyan Janata Sahakari Bank) with respect to 4 branches located in Kalyan-west and Kalyan-east region only.
2. The study is done based on the responses collected from 25 Bank staff only.

**Data Analysis & Findings**

1. Demographic Profile of the Respondents

Gender	No. of Respondents	Percentage (%)
Male	10	40.00%
Female	15	60.00%
<b>Total</b>	<b><u>25</u></b>	<b><u>100.00%</u></b>

Table 1: Gender (Source:- Primary Data)

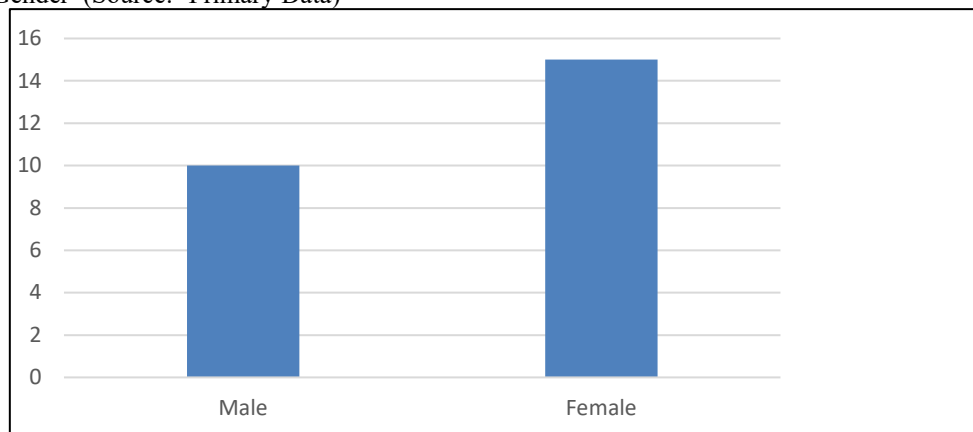


Figure 1: Gender of the Respondents

**Interpretation:** - Out of total respondents, 10 respondents (40%) are male and 15 respondents (60%) are female. Due to the nature of respondents as bank staff, no. of female staff is more as compared to the male.

Marital status	No. of Respondents	Percentage (%)
Single	09	36.00%
Married	15	60.00%
Divorced	01	04.00%
<b>Total</b>	<b><u>25</u></b>	<b><u>100.00%</u></b>

Table 2: Marital Status (Source :- Primary Data)

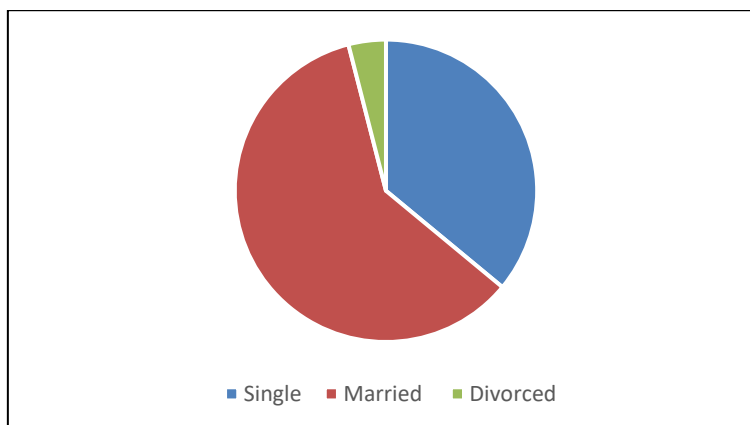


Figure 2: Marital Status of the Respondents

**Interpretation:** - Out of total respondents, 09 respondents (36%) are married, 15 respondents (60%) are unmarried and 01 respondent (04%) is divorced. No. of unmarried respondents are highest.

Education	No. of Respondents	Percentage (%)
SSC & Below	02	08.00%
Diploma	04	16.00%
Graduate only	05	20.00%
PG only	04	16.00%
CAIIB	04	16.00%
JAIIB	06	24.00%
<b>Total</b>	<b><u>25</u></b>	<b><u>100.00%</u></b>

Table 3: Education (Primary Data Source)

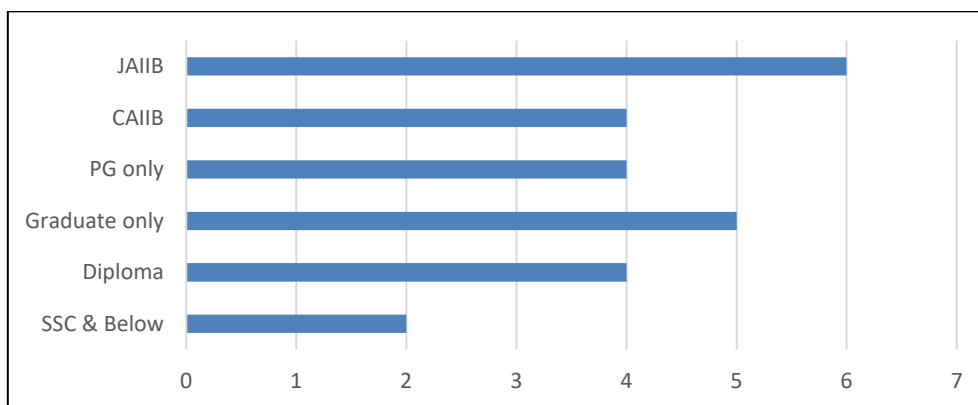


Figure 3: Education of the Respondents

**Interpretation:** - Out of total respondents, 06 respondents (24%) are qualified with JAIIB, 05 respondents (20%) are Graduate only. 04 respondents (16%) are having PG only and the same number is for CAIIB & Diploma respectively. Below SSC and equivalent are only 02 (08%)

Occupation	No. of Respondents	Percentage (%)
Cashier	07	28.00%
Clerk	05	20.00%
Reception/Inquiry	04	16.00%
Manager	04	16.00%
Peons	03	12.00%
Security Person	02	08.00%
<b>Total</b>	<b><u>25</u></b>	<b><u>100.00%</u></b>

Table 4: Position in the bank (Primary Data Source)

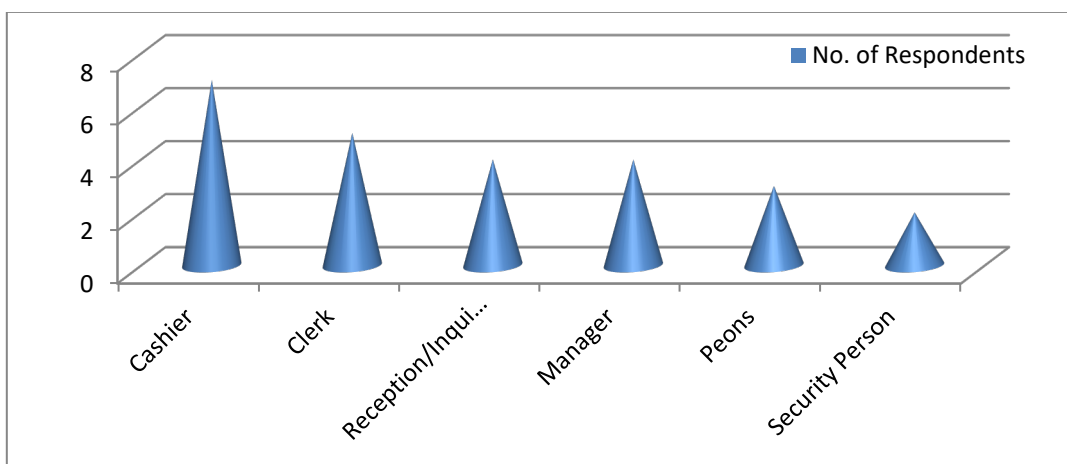


Figure 4: Position in the Bank

**Interpretation:** - Out of total respondents, 07 respondents (28%) are cashier, 05 respondents (20%) are Clerk only. 04 respondents (16%) are at reception and the same number is Manager respectively. 03 (12%) are peons and 02 (8%) are security persons.

Online banking Product	No. of Respondents	Percentage (%)
Yes	19	76.00%
No	05	20.00%
Can't Say	01	04.00%
<b>Total</b>	<b><u>25</u></b>	<b><u>100.00%</u></b>

Table 5: Provided by Bank for Digital Banking options (Source: - Primary Data)

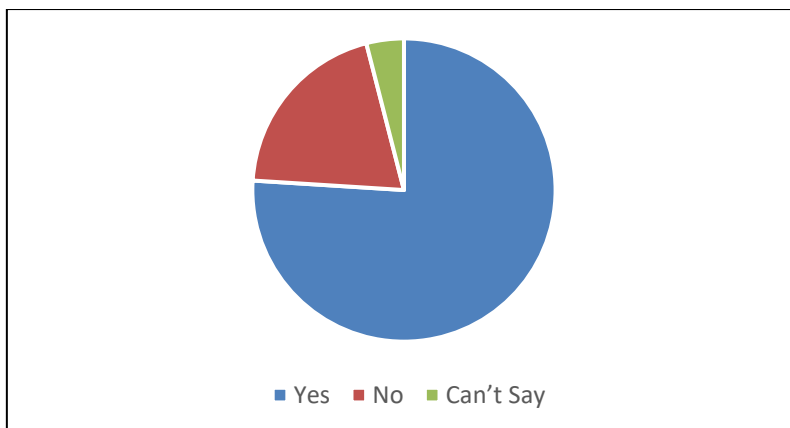


Figure 5: Whether Training is provided by Bank for Digital Banking options

**Interpretation:** - Out of total respondents, 19 respondents (76%) are trained for digital banking options, 05 respondents (20%) are untrained for the same. 01 respondent (4%) is unable to say whether training is provided by the bank or not as he is security person and probably training may not be required in his case but he is not sure because it's a small cooperative bank.

Response Type	No. of Respondents	Percentage (%)
Yes	13	52.00%
No	12	48.00%
<b>Total</b>	<b>25</b>	<b>100.00%</b>

Table 6: Do you prefer customers to go for digital banking options? (Source:- Primary Data)

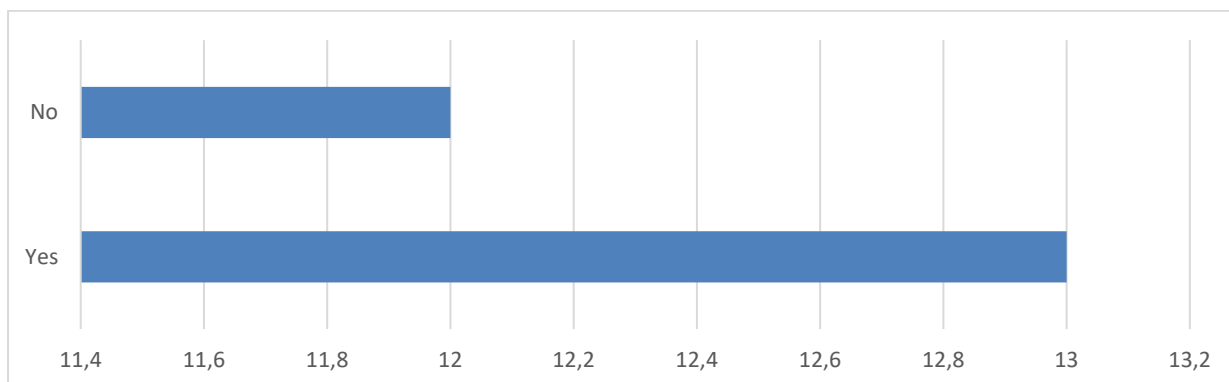


Figure 6: Do you prefer customers to go for digital banking options?

**Interpretation:** - Out of total respondents, 13 respondents (52%) are in favour of the opinion that customers should go for digital banking options. 12 respondents (48%) feel they should be using the traditional banking options only.

Awareness about	No. of Respondents	Percentage (%)
E-Statements	06	24.00%
Mobile Alerts	05	20.00%
Both	12	48.00%
Don't Know	02	08.00%
<b>Total</b>	<b>25</b>	<b>100.00%</b>

Table 7: Do you feel the customers have awareness on E-statements/Mobile Alerts for transactions (Source: - Primary Data)

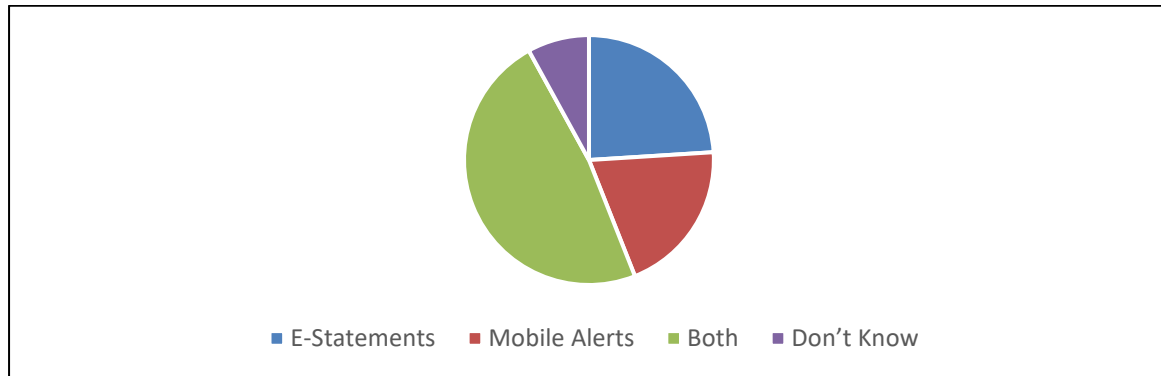


Figure 7: Do you feel the customers have awareness on E-statements/Mobile Alerts for transactions

**Interpretation:** - Out of total respondents, 06 respondents (24%) are in favour of the E-statements and 05 respondents (20%) are in favour of Mobile Alerts. 12 respondents (48%) are in favour of both the options of digital banking. 02 respondents (8%) are not having any idea or any opinion regarding the E-statements or Mobile alert option is known to the customers.

Response Type	No. of Respondents	Percentage (%)
Yes	16	64.00%
No	09	36.00%
<b>Total</b>	<b>25</b>	<b>100.00%</b>

Table 8: Do you prefer to accept & process loan applications online? (Source:- Primary Data)

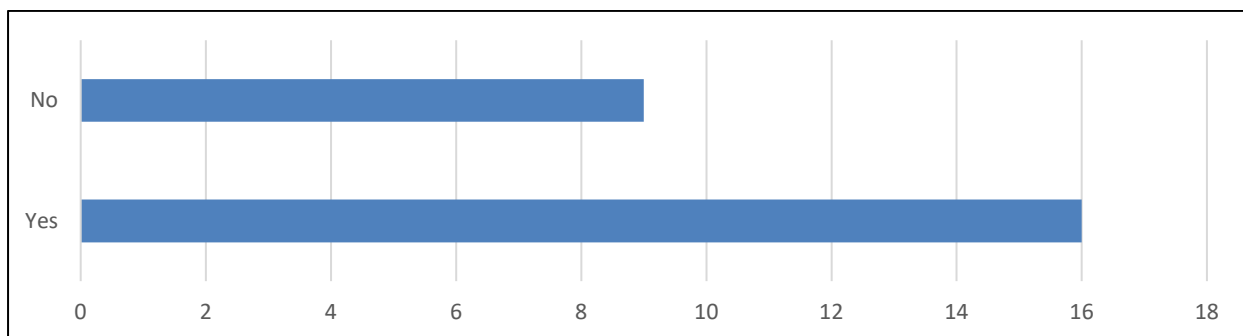


Figure 8: Do you prefer to accept & process loan applications online?

**Interpretation:** - Out of total respondents, 16 respondents (64%) prefer to accept and process loan applications through online mode. 09 respondents (36%) still prefer to accept and process loan applications through traditional mode only.

Response Type	No. of Respondents	Percentage (%)
Yes	15	60.00%
No	10	40.00%
<b>Total</b>	<b>25</b>	<b>100.00%</b>

Table 9: Would you like to offer most of the banking services through online mode to the customers? (Source: - Primary Data)



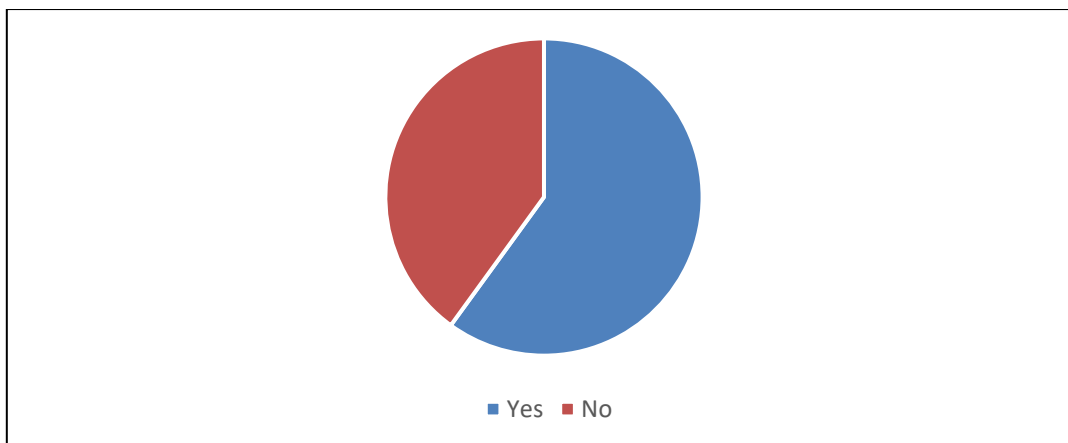


Figure 9: Would you like to offer the most of the banking services through online mode to the customers?

**Interpretation:** - Out of total respondents, 15 respondents (60%) prefer to offer most of the banking services through online mode to the customers whereas 10 respondents (40%) don't prefer to offer most of the banking services through online mode.

Response Type	No. of Respondents	Percentage (%)
Yes	17	68.00%
No	08	32.00%
<b>Total</b>	<b><u>25</u></b>	<b><u>100.00%</u></b>

Table 10: Do you prefer the customers to be only using digital options to pay or receive money? (Source: - Primary Data)

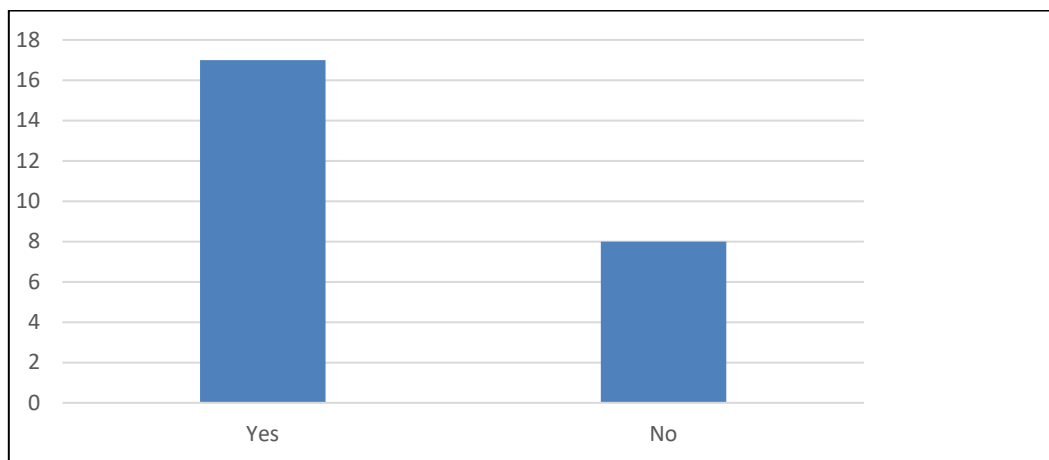


Figure 10: Do you prefer the customers should be only using digital options to pay or receive money?

**Interpretation:** - Out of total respondents, 17 respondents (68%) prefer that customers should be only using digital options to pay or receive money whereas 08 respondents (32%) prefer not to offer digital options to pay or receive money.

Examples of changing trends of banking services	Yes	No	Total
E-Banking services	12	13	25
M-Banking services	16	09	25
Customer Call Centres for Inquiries	19	06	25
E-Deposits and withdrawals	18	07	25
E-statements & sending mobile alerts	15	10	25

M-Loan Applications	16	09	25
Other banking services through online mode	14	11	25
Offering online bank account opening services	12	13	25

Table 11: Do you feel comfortable towards Digital Banking Options as offered by your bank to the customers? (Source: - Primary Data)

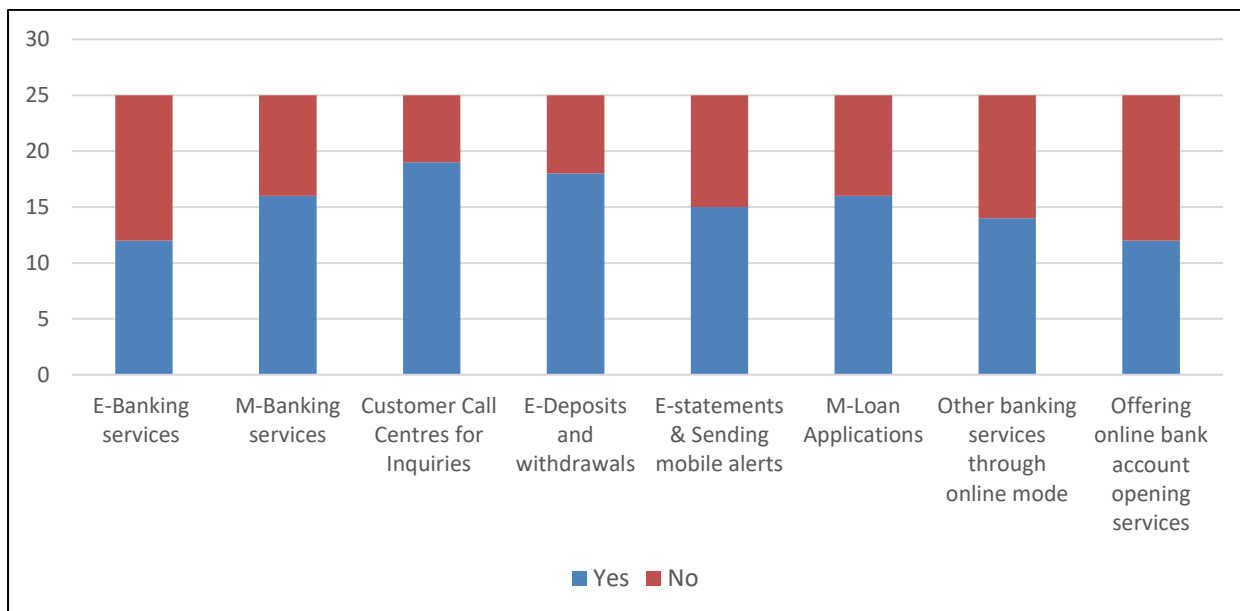


Figure 11: Do you feel comfortable towards Digital Banking Options as offered by your bank to the customers?

**Interpretation:** - Out of total respondents, 19 respondents prefer customer call centres, 18 respondents for E-deposits and e-withdrawal options, 16 respondents for M-loan applications through mobile app and 15 respondents for E-statements and mobile alerts features. 16 respondents prefer M-Banking options and 12 respondents prefer E-Banking options.

Conclusions on graphical analysis for the responses of retail bank customers under study:

1. The graphical analysis for demographic profile of the bank staff respondents shows that most of the respondents are female, married, having education level graduate with JAIIB and working on the position of Cashier.
2. More than 75% of the total bank staff have attended the training session for the digital banking options and prefer the customers using digital banking options.
3. Survey results show that 12 Bank staff out of total 25 respondents feel that customers are made aware of E-statement and M-Alert options. Majority of the bank staff out of the total respondents feel that the bank loan applications should be accepted and processed through online mode.
4. Out of total 25 respondents, 15 bank staff feel most of the banking services should be offered to the customers through online mode.
5. 17 bank staff out of the total respondents feel that the payment and deposit options should be offered to the customers through online mode.
6. The overall analysis of the survey of bank staff shows that most of the bank staff are having strong preference for the online banking services rather than traditional banking options.
7. The Analysis shows that Most of the Bank staff prefers to offer Digital Banking options such as Customer Call Centres for Inquiries and E-Deposits/AND-Withdrawals to the customers.
8. The Analysis shows that most of the bank staff don't prefer to offer other banking services such as utility services through online mode.
9. The average bank staff prefers to offer E-Banking, M-Banking, E-Account opening and E-statement/Mobile Alert options digitally to the options.
10. The Analysis shows that very few bank staff prefer to offer M-Loan applications to their customers.

**Testing of Hypothesis-1**

H0: There are no significant preferences for Digital banking services for the banking staff of the bank under study.

H1: There are significant preferences for Digital banking services for the Banking staff of the bank under study.

Digital Banking options	Later Responses from same sample	Earlier Responses from same sample
Do you prefer to accept & process loan applications online?	10	15
Would you like to offer most of the banking services through online mode to the customers?	15	10
Do you prefer the customers to be only using digital options to pay or receive money?	17	08

Table 12: Effectiveness of awareness and relationship development activities for Digital banking services (Source Compiled by the researcher)

t-Test: Paired Two Sample for Means		
	Variable 1	Variable 2
Mean	16	9
Variance	1	1
Observations	3	3
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
Df	2	
t Stat	6.062178	
P(T<=t) one-tail	0.013074	
t Critical one-tail	2.919986	
P(T<=t) two-tail	0.026148	
t Critical two-tail	4.302653	

Table 13: Testing Results for Hypothesis 1

**Inference:** From the above analysis, it appears that p-value is less than 0.05 (the 5% significance level), therefore it can be concluded that most of the bank staff respondents have strong preference for the digital mode of banking options. And so, null hypothesis as above is rejected.

**Testing of Hypothesis-2**

H0: The digital banking services as offered by KJSB have not impacted positively on the lives of mean staff of the banks under study.

H1: The digital banking services as offered by KJSB have impacted positively on the lives of mean staff of the bank under study.

Examples of changing trends of banking services	Later Responses from same sample	Earlier Responses from same sample
E-Banking services	12	13
M-Banking services	16	09
Customer Call Centres for Inquiries	19	06

E-Deposits and withdrawals	18	07
E-statements & sending mobile alerts	15	10
M-Loan Applications	16	09
Other banking services through online mode	14	11
Offering online bank account opening services	12	13

Table 14: To check the comfort level towards changing trends of banking services  
(Source: Compiled by Researcher)

<b>t-Test: Paired Two Sample for Means</b>		
	<b>Variable 1</b>	<b>Variable 2</b>
Mean	15.25	9.75
Variance	6.5	6.5
Observations	8	8
Pearson Correlation	-1	
Hypothesized Mean Difference	0	
Df	7	
t Stat	3.050851079	
P(T<=t) one-tail	0.009280478	
t Critical one-tail	1.894578605	
P(T<=t) two-tail	0.018560956	
t Critical two-tail	2.364624252	

Table 15: Testing Results for Hypothesis 2

**Inference:** From the above analysis, it appears that the p-value is less than 0.05 (the 5% significance level), therefore it can be concluded that most of the bank staff respondents feel strongly comfortable with the digital banking options. And so, null hypothesis as above is rejected.

**Final conclusions**

1. From the above overall analysis, it can be finally concluded as most of the bank staff feel comfortable and prefer to go with online banking services.
2. Most of the bank staff prefer the options of E-deposits and E-withdrawals and opening of E-bank accounts. Also, for most of the other digital banking services.
3. Most of the bank staff prefer the online loan application & processing option.
4. As far as other banking services are concerned, most of the bank staff under this survey prefer online mode only.

**Findings**

1. It appears from the survey that the majority of the KJSB - bank staff covered under this survey prefer the online banking services rather than traditional banking services.
2. Most of the respondents prefer the services like E-deposits and E-withdrawals, E-statements and Mobile Alerts, E-loan application and processing.
3. As compared to the traditional banking services, most of the KJSB bank staff got acquainted with the online banking options during the different phases of Covid 19.
4. Due to the adoption of online banking options, various banks whether private, government, foreign including co-operative banks were being forced to upgrade their online banking infrastructure/resources.

### Suggestions

1. It is being suggested based on the survey that the co-operative banks need to develop their banking infrastructure more so as to provide best online banking options to its customers.
2. The co-operative banks need to conduct workshop/training sessions either through online mode or hybrid mode for their staff as well as customers who are still not very comfortable with online banking options.
3. The retail customers are also required to contact their bank customer care centre for any such technical problems while attempting for online banking options.
4. The co-operative banks are also being advised to upgrade their web portals and put multiple options for online banking and other allied services.
5. The banks are advised to develop online options for making payments or deposits by the retail customers from anywhere and anytime.

### Scope for further Research

1. With respect to the research on the same line, further research can be extended for Nationalised, Private or any foreign bank operating in India.
2. The present research is done as per the responses collected from few bank staff only, the same research can be further extended as per the responses of bank customers.

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