

A STUDY ON BENEFICIARIES' OPINIONS REGARDING PRADHAN MANTRA JAN DHAN YOJNA (PMJDY) SCHEME: WITH SPECIAL REFERENCE TO FINTEC TECHNOLOGY (MOBILE BANKING) IN CENTER GUJARAT REGION

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ABSTRACT

Financial inclusion in the formal financial system of the under banked population could lead to improvement of their financial circumstances and living standards, empowering them to create financial assets, generate income and build resistance to meet macroeconomic and livelihood shocks. Indian Government and RBI are making enormous efforts to bring every section of the country into the mainstream financial system ever since the Nationalization of banks in 1969 and 1980 till today's adaptation of fintech, still there is a significant disparity between the growth expectations and the ground realities. The Indian banking sector today is dealing with the issue of financial inclusion. Operating cost of providing financial inclusion and charges levied on the users are important dimensions of the process of financial inclusion. Technology is playing an important role in reducing the operating cost of providing banking services, particularly in rural and unbanked areas. There are Banking technologies that could drive the growth in financial inclusion. The present study aims to examine the impact of Banking Technology and government initiatives towards financial inclusion conducted in selected villages and city of center Gujarat Area, surveying 400 rural households through a structured questionnaire. Descriptive research illustrating the extent of adaptation of Banking technology was mixed in nature still there is a long road ahead to achieve the desired results through technological advancement. No doubt it is playing a significant role and is working in a positive direction as the government is also pushing towards digitalization.

Key Words: Fintec, Mobile Banking, PMJDY, Financial Inclusion, Rural Population, Banking Technology.

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Introduction

"Financial inclusion is the delivery of banking services at an affordable cost ('no frills' accounts,) to the vast sections of disadvantaged and low-income groups. Unrestrained access to public goods and services is the sine qua non of an open and efficient society. As banking services are a public good, it is essential that the availability of banking and payment services to the entire population without discrimination is the prime objective of the public policy. According to the World Bank report "Financial inclusion, or broad access to financial services, is defined as an absence of price or non-price barriers in the use of financial services." India is growing towards rapid financial sector expansion in terms of the strong growth of existing financial services businesses and new entities emerging in the market. The sector comprises commercial banks, insurance firms, non-banking financial corporations, co-operatives, pension funds, mutual funds, and other smaller financial entities. The banking mechanism has allowed new entities such as payments banks to be created recently thereby adding to the types of entities operating in the sector. Though, the financial sector in India is primarily a banking sector with commercial banks accounting for more than 64 percent of the total assets held by the financial arrangement.

Review of Literature

Here, in article only few reviews are considered and details reviews to justify the subject.

Olayinka O. Adegbite, Charles L. Machethe (2020)ⁱ analyzed a mixed method review from secondary sources (Global Findex Databases 2011, 2014, 2017, Nigeria CGAP Smallholder Household Survey 2016 and literature) to investigate the trend in FIGG in smallholder agriculture in Nigeria. The causes and effects of FIGG on sustainable development were also identified and the strategies to bridge the gap and found that the FIGG in smallholder agriculture was 12% in 2016 while considering the whole population; it increased from 7% in 2011 to 20% in 2014 and 24% in 2017. The causes of FIGG were ascribed to socioeconomic, socio-cultural, institutional, legal, and regulatory factors which affect the demand and supply of formal financial services and FIGG in smallholder agriculture has interlinked negative effects like high cost on agricultural productivity, income inequality, food insecurity, limited market access and poverty which retards sustainable development.

Laura Cabeza-García, Esther B. Del Briob, and Mery Luz Oscanoa-Victorious (2019)ⁱⁱ Investigate the effects of female financial inclusion on inclusive economic development through women's participation in the financial system as the inequality gap decreases, increases both physical and social wellbeing. In this research an instrumental variable analysis is conducted on a sample

of 91 countries, comprising both developed and emerging countries, using data from the GlobalFindex (2015) database and the World Bank Databank, and the results effectively provide evidence attesting to the fact that greater financial inclusion of women, measured as access to a bank account and access to credit cards, has a positive effect on economic development.

Dr. Soumyendra Kishore Datta and Dr. Krishna Singh (2019)ⁱⁱⁱ attempted to analyze the financial inclusion scenario across several developed or developing countries of the world, for the period 2011 and 2014 focused on developing a financial inclusion index (FII) and found its association with the value of human development index. Adding explanation of variation in observed FII. here, Principal Component Method has been applied to calculate the three-dimension indices (availability, access, and usages) and finally FII. A pooled OLS with clustered standard error regression model has been used to explain the factors influencing financial inclusion across the countries of the world.

Thai-Ha Le, Anh Tu Chuc, and Farhad Taghizadeh-Hesary (2019)^{iv} examined the trend of financial inclusion in Asia and its impact on financial efficiency and financial sustainability by taking a sample of 31 Asian countries during the period spanning from 2004 to 2016. using principal component analysis (PCA) based on normalized variables Composite indicators for the three financial dimensions are constructed and found that the trends are fluctuating across countries and there was no clear pattern in several cases. the second analysis to find the impact of financial inclusion on financial efficiency and sustainability is analyzed using Feasible Generalized Least Squares (FGLS) and the estimation results indicate that growing financial inclusion negatively affected financial efficiency but it favorably influences financial sustainability.

Research Methodology

The research was undertaken by the research to understand the effect of technological aspects of banking on low-income group customers with a structured questionnaire. As the literature studied here has shown emphasize on technology and fintec (Mobile Banking) as the future of financial inclusion.

The Problem Area

As earlier discussed financial inclusion is a very wide aspect. For this study purpose, the government schemes Pradhan Mantra Jan Dhan Yojna is taken and those who are using banking through mobile their/ respondents / beneficiaries primary survey done through structured questionnaire. This kind

survey is much needed that how effectively people using and paying for their daily needs. For that this study is very useful.

Significances of the Study

While doing a study on financial inclusion and specially governmentsschemes reaches to all area of the country and get the benefits of it idea available for the same.

Research Gap

This kind of study in this selected region is not done by anyone till date

Research Design

Descriptive type

Objectives of the Study

1. To study the role of banking technology in financial inclusion.
2. To know the bank account holding and PMJDY among low-income individuals.
3. To identify the usage and satisfaction of services provided by the bank.
4. To find out the use of mobile banking and various reason.
5. To study the frequency of mobile banking usage.

Universe of the Study and Sample Design

Keeping in view the limitation of time, efforts and cost it is not possible to study all beneficiaries of using Government Schemes and Fintec in Financial Inclusion hence, a structured questionnaire through goggle survey sheet sent to the users and their replies secured in excel sheet. Researcher has received around 400 responses.

Sampling collection method

The convenient sampling method.

Sampling collection Area

sampling collecting 400 respondents from a rural household fromselected villages which are center Gujarat Area.

Sampling collection time period

Year 2021 to 2022

Research Instrument

A structured questionnaire is used for data collection from the beneficiaries of using GovernmentSchemes and Fintec in Financial Inclusion.

Collection of Data

Primary Data

- The Primary data is collected through questionnaires from 400 beneficiaries of using Government Schemes and Fintec in Financial Inclusion.
- The questionnaire is prepared and present personally in all English languages for the beneficiaries to collect the required information.

Secondary Data

The secondary data is collected from various sources like Books, journals, Website data etc.

Hypotheses

Hypothesis testing is a predictive statement capable of being tested by scientific methods.

Hypotheses of study are mention as under:

Table No. 1: Hypotheses

Hypothesis No.	Particulars
1 $H_0 =$	There would be no significant difference in the scheme of PMJDY bank accountholders' responses towards various services they are aware of and using.
2 $H_0 =$	There would be no significant difference in the scheme of PMJDY bank accountholders' responses towards their satisfaction level rate.
3 $H_0 =$	There would be no significant difference in the Respondents' response towards frequently use of mobile banking.
4 $H_0 =$	There would be no significant difference in the beneficiaries' numbers or growth at rural and urban area of PMJDY schemes.

Limitations of the Study

Every social science research study has its limitation

- 1.) Lacks proper response from respondents.
- 2.) Higher cost in data collection
- 3.) The research study is conducted in the selected area.
- 4.) The samples received for the research study are 400 only

Data Analysis and Presentation

Data analysis is done manually. All data collected through a structured questionnaire. Data are presented by using tables, charts, selected region and categories wise, hypothesis formulating, calculation test, testing of hypotheses, and Interpretation of Result. Hypotheses tested at a significant level of 5% And Applicable Require Degree of Freedom. As par suitability of collected data for this study various statistical tests applied for hypotheses testing.

Data analysis and interpretation

According to the questionnaire, the collected data are analyzed in a given pattern. First, data transferred into table form. According to hypotheses, various applicable tests were applied for the study. After hypotheses testing appropriate interpretation was given. Also, findings and suggestions are given in the last chapter.

Table No 2: Classification of respondent on basis of gender

Gender	Frequency	Percentage
Male	252	63%
Female	148	37%
Total	400	100%

Table No 3: Classification of respondent on basis of education

Education	Frequency	Percentage
Illiterate	80	20%
SSC or Low	124	31%
HSC	80	20%
Graduate	100	25%
Postgraduate	16	4%
Total	400	100%

Table No 4: Classification of respondent on basis of Annual Income

Annual Income	Frequency	Percentage
<100000	184	46%
100000-200000	108	27%
200000-300000	68	17%
>300000	40	10%
Total	400	100%

Table No 5: Classification of respondent on basis of landholding

Land Holding	Frequency	Percentage
Yes	220	55%
No	180	45%
Total	400	100%

Table No 6: on Respondents response towards having bank in their village

Bank in Village	Frequency	Percentage
Yes	384	94%
No	16	6%
Total	400	100%

Table No 7: on Respondent responses towards having an Account in the bank

Account in bank	Frequency	Percentage
Yes	316	79%
No	84	21%
Total	400	100%

Table No 8: Respondent response towards their bank account in types of bank

Type of bank	Frequency	Percentage
Public Sector	130	41%
Private Sector	85	27%
Micro Finance	13	4%
Cooperative	75	24%
Community	13	4%
Total	316	100%

Table No 9: Respondent response towards type of bank account

Account	Frequency	Percentage
Current account	38	12%
Saving account	218	69%
Fixed account	47	15%
Loan account	13	4%
Total	316	100%

Table No 10: On Respondent response towards zero balance a/c with your bank (PMJDY)

Zero balance account	Frequency	Percentage
Yes	167	53%
No	149	47%
Total	316	100%

Table No 11: on Respondent response towards frequently visit to bank

Bank visit	Frequency	Percentage
Daily	9	3%
Weekly	98	31%
Monthly	158	50%
Yearly	51	16%
Total	316	100%

Hypothesis testing

Hypothesis No. 1: H_0 = There would be no significant difference in the scheme of PMJDY bank account holders' responses towards various services they are aware of and using.

Table No 12: PMJDY bank account holders' responses towards various services they are aware of and using.

Services	Aware	Using	Unaware	Total
Loan	169	133	14	316
Mobile banking	195	88	33	316
Debit card	182	100	34	316
Credit card	178	108	30	316
Deposit of cash	167	134	15	316
Withdrawal of cash	156	148	12	316
Cheque book	162	125	29	316
Over draft	186	80	50	316
Insurance	177	111	28	316
Kisan CC	216	66	34	316
ATM	214	22	80	316

Hypothesis testing result reveal that the beneficiaries of PMJDY account holders experience with various services received that are not par and different with satisfactions they have with the services like Loan, Mobile banking, Debit card, Credit card, Deposit of cash, Withdrawal of cash, Cheque book, over draft, Insurance, Kisan CC and ATM facilities. Here the most important thing is that when government providing services to beneficiaries it should be at par. here researcher from the study recommend to provide services at par to all the categories including Male & female, in all the areas including rural and urban, to all the persons weather educated or not. All deserve equal facilities a satisfaction with same services provider.

For testing of above hypothesis Kruskal-Wallis Test (*H* test) is applicable following is given calculation of the same test.

Table No 13: Kruskal-Wallis Test

	<i>Median</i>	<i>n</i>	<i>Avg. Rank</i>
Aware	178.00	11	28.00
Using	108.00	11	16.14
Unaware	30.00	11	6.86
Total	108.00	33	

H (corrected for ties)	26.420
d.f.	2
p-value	1.83E-06

P value comparison
P test value < P value
 0.00000183 < 0.05
 Hence, H_0 = Rejected
 H_1 = Accepted

Interpretation of Result

The table value of h test for 2 degree of freedom at 5% level of significance is 5.991 (H table value) and the calculated value of H is 26.420 (H calculation) which is higher than the table value, hence the result of the experiment does not support the null hypothesis. So, null hypothesis is rejected and alternative hypothesis is accepted. It means there would be no significant difference in the scheme of PMJDY bank account holders' responses towards various services they are aware of and using.

Hypothesis No. 2: H_0 = There would be no significant difference in the scheme of PMJDY bank account holders' responses towards their satisfaction level rate.

Table No. 14 Respondent response towards Satisfaction From the following and Kindly rate. (Their responses in appropriate option from the given 5 likert scale)

Statement	Highly Dissatisfied	Dis- satisfied	Neutral	Satisfied	Highly satisfied	Total
Services provided bybank	58	66	97	69	28	316
Distance to the bankCost incentives	13	87	117	82	17	316
Bank employees Attitude and behavior	17	68	137	74	20	316
Branch timing	22	55	122	96	21	316
Bank charges	16	65	129	84	22	316
Banking KYC	17	73	111	84	22	316
Quick access to loan and deposits	16	68	122	88	22	316
Availability of ATM	11	49	140	82	34	316
Insurance services	23	48	134	89	22	316
Mobile banking	20	55	136	85	20	316
Internet banking	19	43	129	94	31	316
Overall satisfaction	11	38	103	118	46	316

Table No 15: Kruskal-Wallis Test calculation

H (corrected for ties)

52.879

	<i>Median</i>	<i>n</i>	<i>Avg. Rank</i>
Highly Dissatisfied	17.00	12	9.50
Dis- satisfied	60.00	12	30.50
Neutral	125.50	12	54.17
Satisfied	84.50	12	42.17
Highly satisfied	22.00	12	16.17
Total	61.50	60	

d.f.

4

p-value

9.03E-11

P value comparison

P test value < *P value*

0.0000000000903 < 0.05

Hence, $H_0 = \text{Rejected}$

$H_1 = \text{Accepted}$

Interpretation of Result

The table value of h test for 4 degree of freedom at 5% level of significance is 9.488 (H table value) and the calculated value of H is 52.879 (H calculation) which is higher than the table value, hence the result of the experiment does not support the null hypothesis. So, null hypothesis is rejected and alternative hypothesis is accepted. It means there would be significant difference in the scheme of PMJDY bank account holders' responses towards their satisfaction level rate.

Table No 16: Respondent response towards having a mobile phone.

Particular	Frequency	Mobile phone
Yes	344	86%
No	56	14%
Total	400	100%

Table No 17: Respondent response towards use of mobile banking

Particular	Frequency	Mobile banking
Yes	252	63%
No	148	37%
Total	400	100%

Table No 18: Purpose of using Mobile Banking

Particular	No. of people use	Percentage
Time Saving	88	35%
Easy Transfer	58	23%
24*7 Service	49	19%
Impress People	14	6%
Secured Transection	29	12%
Cost effective	14	6%
Total	252	100%

Table No 19: Reasons not using Mobile Banking

Particular	No. of people not using	Percentage
Difficult to use	31	21%
Trust Issue	23	16%
Low internet connectivity	12	8%
Not finding any need	32	22%
Do not have smart phone	22	15%
Do not know how to use	23	16%
Small screen makes it difficult to view	5	3%
Total	148	100%

Hypothesis No. 3: H₀ = There would be no significant difference in the Respondents' response towards frequently use of mobile banking.

Table No 20: Respondent response towards frequently use of mobile banking

Particular	Daily	Monthly	Yearly	Never	Total
Balance inquiry	26	89	41	96	252
Mobile recharge	5	90	52	105	252
DTH recharge	0	68	64	120	252
Bill payment	4	71	56	121	252
Stock payment	4	24	59	165	252
Fund transfer	5	24	62	161	252
ATM	28	60	53	111	252
Debit card Request	14	35	68	135	252
Cheque book Request	9	39	73	131	252
To book hotel	5	24	57	166	252
Flight booking	0	11	58	183	252
Bus booking	0	18	56	178	252
Making Investment	3	16	44	189	252

Table No 21: Kruskal-Wallis Test

	Median	n	Avg. Rank
Daily	5.00	13	8.00
Monthly	35.00	13	23.50
Yearly	57.00	13	28.50
Never	135.00	13	46.00
Total	56.00	52	

H (corrected for ties) 41.659
d.f. 3
p-value 4.74E-09

P value comparison

P test value < *P value*

0.00000000474 < 0.05

Hence, H₀ = Rejected

H₁ = Accepted

Interpretation of Result

The table value of h test for 4 degree of freedom at 5% level of significance is 7.815 (H table value) and the calculated value of H is 41.659 (H calculation) which is higher than the table value, hence the result of the experiment does not support the null hypothesis. So, null hypothesis is rejected and alternative hypothesis is accepted. It means there would be significant difference in the Respondents' response towards frequently use of mobile banking.

Hypothesis No. 4: H_0 = There would be no significant difference in the beneficiaries' numbers or growth at rural and urban area of PMJDY schemes.

Table No 22: Number of Beneficiaries at rural and urban area of Pradhan Mantri Jan - Dhan Yojanaas on 16/03/2022 (All figures in Crore)

Banking sector	Frequency	Number of Beneficiaries at rural/semi urban center bank branches	Number of Beneficiaries at urban metro center bank branches	Number of Total Beneficiaries
Public Sector Banks	Observed	22	13	35
	Expected	23.63	11.79	35.42
Regional Rural Banks	Observed	7	1	8
	Expected	5.49	2.74	8.23
Private Sector Banks	Observed	1	1	1
	Expected	0.87	0.43	1.30
Total	Observed	30	15	45
	Expected	29.99	14.96	44.95

Calculation of χ^2 Test

- Level of Significance = 0.05 or 5%

chi-square	1.91
df	2
p-value	.3852

P value comparison

P test value > P value

$0.3852 > 0.05$

Hence, H_0 = Accepted

H_1 = Rejected

Interpretation of Result

The table value of h test for 2 degree of freedom at 5% level of significance is 5.99 (χ^2 table value) and the calculated value of H is 1.91 (χ^2 calculation) which is lower than the table value, hence the result of the experiment is supporting the null hypothesis. So, null hypothesis is

accepted and alternative hypothesis is rejected. It means there would be no significant difference in the beneficiaries' numbers or growth at rural and urban area of PMJDY schemes.

After interpretations and analysis of above all hypotheses, following various findings and suggestions are constructed.

Conclusion

The above data illuminates the major issues on financial inclusion as most respondents were male and having a low educational level and it has been also discovered that financial literacy is low among them. About 384 respondent has a bank in their village out of it 316 has a saving bank account and there is 167 respondent who has a zero-balance account (PMJDY). The majority of them are farmers and they were having Kisan credit card and was financially inclusive thus PMJDY includes half of them in inclusion. Almost 259 respondents are using facilities provided by the bank. They are aware of services like a loan; mobile banking, debit card, credit card, and deposit of bank, withdrawal of cash, checkbook, insurance, Kisan CC, overdraft and ATM, so respondents were aware of various financial services but were using few. They were positive toward use of services like income, bank charge, employment status, etc. asking on usage of mobile phone is 86% were having mobile phone and 63% were using a mobile banking (male majority), hence there is a gap of 22% and these cover female respondents as literacy level among female is low. Mainly the respondent was using mobile banking to save time, 24*7 services, ease of using draw them to one hand stop. Whether some were not using mobile banking because they do not find any need for the same and they find difficult to use mobile banking.

Findings

- Hypothesis testing result reveal that the beneficiaries of PMJDY account holders who experience with various services received that are not par and different with satisfactions they have with the services like Loan, Mobile banking, Debit card, Credit card, Deposit of cash, Withdrawal of cash, Cheque book, over draft, Insurance, Kisan CC and ATM facilities. Here the most important thing is that when government providing services to beneficiaries it should be at par. here researcher from the study recommend to provide services at par to all the categories including Male & female, in all the areas including rural and urban, to all the persons weather educated or not. All deserve equal facilities and satisfaction with same services provider.
- Hypothesis testing result reveal that the beneficiaries of PMJDY account holders who experience with of various services satisfaction rate received that are not par and different with satisfactions they have with the various statements of facilities like Services provided by bank Distance to the bank Cost incentives, Bank employees Attitude and behavior, Branch timing, Bank charges, Banking KYC, Quick access to loan and deposits, Availability of ATM, Insurance services, Mobile banking, Internet banking and Overall satisfaction. Here the most important thing is that

when government providing various much needed facilities to beneficiaries it should be at par. here researcher from the study recommend to provide services at par to all the categories including Male & female, in all the areas including rural and urban, to all the persons whether educated or not. All deserve equal facilities and satisfaction with same services provider.

- Hypothesis testing results reveal that the beneficiaries of PMJDY account holders who experience of frequent use of mobile banking on a daily, Monthly, and yearly bases are not par and have a significant difference in comparison to other beneficiaries with reference to services of Balance inquiry Mobile recharge, DTH recharge, Bill payment, Stock payment, Fund transfer, ATM, Debit card Request, Cheque book Request, To book a hotel, Flight booking, Bus booking, Making Investment. . Here the most important thing is that when the government provides various much-needed facilities to beneficiaries it should be at par. Here, the researcher from this study recommends using mobile banking regularly. It will save their cost, time and energy. Moreover, the government would easily track all transactions, preventing tax embezzlement by any assessee. This should be adopted by all the categories including Male & female, in all the areas including rural and urban, to all the person's whether educated or not.
- Hypothesis testing results reveal that the beneficiaries of PMJDY account holders experience the same for all three formats of banks i.e. Public Sector Banks, Regional Rural Banks and Private Sector Banks with reference to rural and urban areas of the schemes. Day by day number of beneficiaries increases in a very good manner. It is proof that this scheme of government has a good response and people getting benefiting from it.

Suggestions

Few suggestions are given below details are included in thesis:

- Lack of physical and digital connectivity is posing a major hurdle in achieving financial inclusion for rural India. Technological Issue- The technological issues affecting banks from poor connectivity, networking and bandwidth problems to managing costs of maintain infrastructure especially in rural areas. By providing good network this problem should solve by the government.
- Jan Dhan Account withdrawal limit: The withdrawal limit under PMJDY is Rs 10,000 per month. Jan Dhan Account Limit: Account Holders can deposit a maximum of Rs 1, 00,000 in the account, under the scheme. This limit must increase by the Government
- Government should open and provide more branches of bank with all facilities in rural and village area.

- Jan Dhan Account holders get accidental insurance coverage of up to 2 lakhs that should be increase
- Jan Dhan Account ATM Card: The accountholders also get a Rupay debit card, with an overdraft facility of up to Rs 10,000. And that should be increase
- PMJDY Account-holders also get a life insurance cover of Rs 30,000. It will be given to the nominee in case of the death of the account holder and that also should increase by the government.
- Age limit should increase by the government for getting benefits of this schemes
- and income tax return filling persons also include in this schemes

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