



**BHARATI VIDYAPEETH**  
(Deemed to be University), Pune, India  
**Institute of Management and Entrepreneurship Development, Pune**



Erandwane, Pune- 38. Maharashtra, India  
Accredited with 'A' Grade (2017) by NAAC | Category-I University Status by UGC  
'A' Grade University Status by MHRD, Govt. of India

Bharati Vidyapeeth (Deemed to be University) Ranked 68th among Top 100 Universities by NIRF 2021, MHRD Govt. of India

Ranked among top 75 B-schools in India by NIRF 2021, Ministry of Human Resource Development, Government of India.

**RANKING**

- IMED is ranked among the Top 75 B-Schools in India by NIRF 2021, MHRD Govt. of India.
- It is for the six year continuously it is ranked in Top 75 in India.
- IMED is one of the only Two in Pune ranked in Top 75 by NIRF, MHRD, Govt. of India
- Outlook in association with ICARE (Indian Centre for Academic Rankings and Excellence) ranked IMED:
- 13th among Top 50 Institutes in West Zone  
25th among Top University – Constituent Colleges

**PROGRAMMES**

**MBA, MBA (HR)**

2 year full time programme Dual specialization : Marketing, Finance, HR, IT, IB, Banking & Insurance, Retail and Hospitality Management

**MCA**

(2 Year Full Time Programme)

**BBA/BBA (BPM) and BCA**

(3 Year Full Time Programme)

**Dr. Sachin S. Vernekar**  
Dean FMS BVDU, Director, IMED

**History:**

Established by Bharati Vidyapeeth in 1978, IMED is one of the Premier Business Schools in Western part of India.

**Salient Features :**

- Faculty with rich Academic and Industrial experience.
- Wi-Fi enabled campus with well equipped Library.
- Industry Institute Interface through National / International Seminars, Workshops, MDPs, FDPs Corporate Day, Alumni Day and Industry visits etc.
- Students from 10 Nationalities.
- Holistic development of students through Management & IT Forum Soft Skills sessions, CCEE, Foreign Language, International Management & Cultural Fest, Sports Club activities

**Placements 100%**

- Companies Participate in Placement Drive every year : more than 152
- Highest package :** MBA 54.08 LPA (International)  
18 LPA (Domestic)
- Highest package :** MCA 47.00 LPA (International) /  
Rs 8 LPA (Domestic)

**Important Dates**

Course/Entrance Examination	Last Date of Application	Date of Entrance Examination	Date of Result Declaration	Date of Counseling
MBA/MCA-B-MAT)-2021	1st March 2022	13rd March 2022	30th April 2022	5th to 9th May 2022
BBA/BCA – (BU-MAT)-2021	1st June 2022	12th June 2022	18th June 2022	27th June to 2nd July 2022



**IMED JMSR**



SR.NO	TITLE OF PAPER
1	Impact of Covid -19 on Job Security in India
2	Changing Trends in FMCG: Pre-Post Covid Era
3	A study on perception of employees towards e-recruitment.
4	A Study on Food Aggregators: Its Impact Post Covid-19
5	Footfall Measurement in SBI Branches, Pune & ways to reduce footfall
6	Web Based ICT Initiative for Indian Agriculture
7	Drop in SBI's Car Loan Market Share: An alarming Sign!
8	Customer relationship management in state bank of India – Pune branch
9	A study of the effect of different leadership styles
10	Agriculture Mobile Apps – A Helping Hand for Farmers
11	Uses of Artificial Intelligence in Human Resource
12	Buying Behaviour towards Smart-phones.

**INSTITUTE OF MANAGEMENT AND ENTREPRENEURSHIP DEVELOPMENT**

Erandwane, Pune - 411038. Maharashtra, India  
Tel. : +91 20 25425517, 25448005  
E-mail : info.imed@bharativedyapeeth.edu  
Website : www.bvuniversity.edu.in / imed.bharativedyapeeth.edu

“Creating Successful Leaders and Entrepreneurs”



**Bharati Vidyapeeth (Deemed to be University), Pune**  
**Institute of Management and Entrepreneurship Development, Pune.**  
Erandwane Campus, Paud Road, Pune - 411 038,



**Dr. Patangrao Kadam**

M.A., LL.B., Ph.D.

**Founder, Bharati Vidyapeeth, Pune**

**Founder-Chancellor,**  
Bharati Vidyapeeth  
(Deemed to be University), Pune

**The constituent units of Bharati Vidyapeeth University, Pune**

1. BVDU Medical College, Pune.
2. BVDU Dental College & Hospital, Pune
3. BVDU College of Ayurved, Pune
4. BVDU Homoeopathic Medical College, Pune
5. BVDU College of Nursing, Pune
6. BVDU Yashwantrao Mohite College of Arts, Science & Commerce, Pune.
7. BVDU New Law College, Pune
8. BVDU Social Sciences Centre (M.S.W.), Pune
9. BVDU Yashwantrao Chavan Institute of Social Science Studies & Research, Pune.
10. BVDU Centre for Research & Development in Pharmaceutical Sciences & Applied Chemistry, Pune
11. BVDU College of Physical Education, Pune.
12. BVDU Institute of Environment Education & Research, Pune
13. BVDU Institute of Management & Entrepreneurship Development, Pune
14. BVDU Poona College of Pharmacy, Pune
15. BVDU College of Engineering, Pune
16. BVDU Interactive Research School in Health Affairs (IRSHA), Pune
17. BVDU Rajiv Gandhi Institute of Information Technology & Biotechnology, Pune
18. BVDU College of Architecture, Pune
19. BVDU Abhijit Kadam Institute of Management & Social Sciences, Solapur
20. BVDU Institute of Management, Kolhapur
21. BVDU Institute of Management & Rural Development administration, Sangli
22. BVDU Institute of Management & Research, New Delhi
23. BVDU Institute of Hotel Management & Catering Technology, Pune
24. BVDU Yashwantrao Mohite Institute of Management, Malakpur-Karad
25. BVDU Medical College & Hospital, Sangli
26. BVDU Dental College & Hospital, Mumbai
27. BVDU Dental College & Hospital, Sangli
28. BVDU College of Nursing, Sangli
29. BVDU College of Nursing, Navi Mumbai

**CENTRAL OFFICE**

**PUNE**

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management and  
Entrepreneurship Development,  
Paud Road Erandwane, Pune 411 038  
Tel. : 020 - 25431060,25425517

**EDUCATIONAL CENTRES**

Pune, Navi Mumbai, New Delhi,  
Sangli, Kolhapur, Solapur, Karad,  
Jawhar, Satara

**DIVISIONAL OFFICES**

**NAVI MUMBAI**

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management studies & Research  
Sector No. 8, CBD, Belpada,  
Navi Mumbai - 400 614  
Tel. : 27572433,27562582

**SOLAPUR**

Bharati Vidyapeeth (Deemed to be University)  
Abhijit Kadam Institute of  
Management and Social Science,  
Bijapur Road, Solapur - 413004  
Tel. : 0217 - 2302016,2341353

**NEW DELHI**

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management and Research,  
A-4 Rohtak Road Opp. Ordnance Depot.  
Paschim Vihar, Extension New Delhi - 110 063  
Tel. : 011- 25285808,25284396,25276446

**SANGLI**

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management and Rural  
Development Administration,  
Rajwada Chowk, Sangli - 416416  
Tel. : 0233 - 2325776,2377249



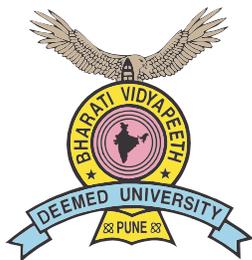
# IMED JMSR



SR.NO	TITLE OF PAPER
1	Impact of Covid -19 on Job Security in India
2	Changing Trends in FMCG: Pre-Post Covid Era
3	A study on perception of employees towards e-recruitment.
4	A Study on Food Aggregators: Its Impact Post Covid-19
5	Footfall Measurement in SBI Branches, Pune & ways to reduce footfall
6	Web Based ICT Initiative for Indian Agriculture
7	Drop in SBI's Car Loan Market Share: An alarming Sign!
8	Customer relationship management in state bank of India – Pune branch
9	A study of the effect of different leadership styles
10	Agriculture Mobile Apps – A Helping Hand for Farmers
11	Uses of Artificial Intelligence in Human Resource
12	Buying Behaviour towards Smart-phones.



**Bharati Vidyapeeth (Deemed to be University), Pune**  
**Institute of Management and Entrepreneurship Development, Pune.**  
 Erandwane Campus, Paud Road, Pune - 411 038,



**Dr. Patangrao Kadam**

M.A., LL.B., Ph.D.

**Founder, Bharati Vidyapeeth, Pune**

**Founder-Chancellor,  
Bharati Vidyapeeth  
(Deemed to be University), Pune**

### The constituent units of Bharati Vidyapeeth University, Pune

1. BVDU Medical College, Pune.
2. BVDU Dental College & Hospital, Pune
3. BVDU College of Ayurved, Pune
4. BVDU Homoeopathic Medical College, Pune
5. BVDU College of Nursing, Pune
6. BVDU Yashwantrao Mohite College of Arts, Science & Commerce, Pune.
7. BVDU New Law College, Pune
8. BVDU Social Sciences Centre (M.S.W.), Pune
9. BVDU Yashwantrao Chavan Institute of Social Science Studies & Research, Pune.
10. BVDU Centre for Research & Development in Pharmaceutical Sciences & Applied Chemistry, Pune
11. BVDU College of Physical Education, Pune.
12. BVDU Institute of Environment Education & Research, Pune
13. BVDU Institute of Management & Entrepreneurship Development, Pune
14. BVDU Poona College of Pharmacy, Pune
15. BVDU College of Engineering, Pune
16. BVDU Interactive Research School in Health Affairs (IRSHA), Pune
17. BVDU Rajiv Gandhi Institute of Information Technology & Biotechnology, Pune
18. BVDU College of Architecture, Pune
19. BVDU Abhijit Kadam Institute of Management & Social Sciences, Solapur
20. BVDU Institute of Management, Kolhapur
21. BVDU Institute of Management & Rural Development administration, Sangli
22. BVDU Institute of Management & Research, New Delhi
23. BVDU Institute of Hotel Management & Catering Technology, Pune
24. BVDU Yashwantrao Mohite Institute of Management, Malakapur-Karad
25. BVDU Medical College & Hospital, Sangli
26. BVDU Dental College & Hospital, Mumbai
27. BVDU Dental College & Hospital, Sangli
28. BVDU College of Nursing, Sangli
29. BVDU College of Nursing, Navi Mumbai

### CENTRAL OFFICE

#### PUNE

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management and  
Entrepreneurship Development,  
Paud Road Erandwane, Pune 411 038  
Tel. : 020 - 25431060,25425517

#### EDUCATIONAL CENTRES

Pune, Navi Mumbai, New Delhi,  
Sangli, Kolhapur, Solapur, Karad,  
Jawhar, Satara

### DIVISIONAL OFFICES

#### NAVI MUMBAI

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management studies & Research  
Sector No. 8, CBD, Belpada,  
Navi Mumbai - 400 614  
Tel. : 27572433,27562582

#### SOLAPUR

Bharati Vidyapeeth (Deemed to be University)  
Abhijit Kadam Institute of  
Management and Social Science,  
Bijapur Road, Solapur - 413004  
Tel. : 0217 - 2302016,2341353

#### NEW DELHI

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management and Research,  
A-4 Rohtak Road Opp. Ordnance Depot,  
Paschim Vihar, Extension New Delhi - 110 063  
Tel. : 011- 25285808,25284396,25276446

#### SANGLI

Bharati Vidyapeeth (Deemed to be University)  
Institute of Management and Rural  
Development Administration,  
Rajwada Chowk, Sangli - 416416  
Tel. : 0233 - 2325776,2377249



# IMED – 'Where Dreams Become Reality'



## BHARATI VIDYAPEETH (Deemed to be University), Pune, India Institute of Management and Entrepreneurship Development, Pune



Erandawane, Pune- 38. Maharashtra, India

Accredited with 'A+' Grade (2017) by NAAC | Category-I University Status by UGC  
'A' Grade University Status by MHRD, Govt. of India

Bharati Vidyapeeth (Deemed to be University) Ranked 68th among Top 100 Universities by NIRF 2021, MHRD Govt. of India

Ranked among top 75 B-schools in India by NIRF 2021, Ministry of Human Resource Development, Government of India.

### RANKING

- IMED is ranked among the Top 75 B-Schools in India by NIRF 2021, MHRD Govt. of India.
- It is for the six year continuously it is ranked in Top 75 in India.
- IMED is one of the only Two in Pune ranked in Top 75 by NIRF, MHRD, Govt. of India
- Outlook in association with ICARE (Indian Centre for Academic Rankings and Excellence) ranked IMED:
- 13th among Top 50 Institutes in West Zone  
25th among Top University – Constituent Colleges

### PROGRAMMES

#### MBA, MBA (HR)

2 year full time programme Dual specialization : Marketing, Finance, HR, IT, IB, Banking & Insurance, Retail and Hospitality Management

#### MCA

(2 Year Full Time Programme)

#### BBA/BBA (BPM) and BCA

(3 Year Full Time Programme)

**Dr. Sachin S. Vernekar**

Dean FMS BVDU, Director, IMED

### History:

Established by Bharati Vidyapeeth in 1978, IMED is one of the Premier Business Schools in Western part of India.

### Salient Features :

- Faculty with rich Academic and Industrial experience.
- Wi-Fi enabled campus with well equipped Library.
- Industry Institute Interface through National / International Seminars, Workshops, MDPs, FDPs Corporate Day, Alumni Day and Industry visits etc.
- Students from 10 Nationalities.
- Holistic development of students through Management & IT Forum Soft Skills sessions, CCEE, Foreign Language, International Management & Cultural Fest, Sports Club activities

### Placements 100%

- Companies Participate in Placement Drive every year : more than 152
- Highest package** : MBA 54.08 LPA (International)
- 18 LPA (Domestic)
- Highest package** : MCA 47.00 LPA (International) / Rs 8 LPA (Domestic)

### Important Dates

Course/Entrance Examination	Last Date of Application	Date of Entrance Examination	Date of Result Declaration	Date of Counseling
MBA/MCA-B-MAT)-2021	1st March 2022	13rd March 2022	30th April 2022	5th to 9th May 2022
BBA/BCA – (BU-MAT)-2021	1st June 2022	12th June 2022	18th June 2022	27th June to 2nd July 2022



### INSTITUTE OF MANAGEMENT AND ENTREPRENEURSHIP DEVELOPMENT

Erandawane, Pune - 411038. Maharashtra, India  
Tel. : +91 20 25425517, 25448005

E-mail : info.imed@bharatividyaapeeth.edu

Website : www.bvuniversity.edu.in /

imed.bharatividyaapeeth.edu

“Creating  
Successful  
Leaders and  
Entrepreneurs”

IMED-JMSR  
JOURNAL OF BV(DU) IMED, PUNE - 38.

PATRON



Hon'ble Dr. Shivajirao Kadam  
Chancellor, Bharati Vidyapeeth  
(Deemed to be University), Pune



Hon'ble Dr. Vishwajeet Kadam  
Secretary, Bharati Vidyapeeth, Pune  
Pro -Vice Chancellor, Bharati Vidyapeeth  
(Deemed to be University), Pune

---

ADVISORY BOARD

Hon'ble Dr. Manikrao Salunkhe  
Vice Chancellor, Bharati Vidyapeeth  
(Deemed to be University), Pune

Hon'ble Dr. S. F. Patil  
Executive Director, International Relations  
Bharati Vidyapeeth (Deemed to be  
University), Pune

Mr. L. D. Mittal  
Chairman, Sonalika Group

Mr. Pavan Choudary  
Chief Executive Officer, Vygon

Prof. Raj Kumar  
Vice Chancellor,  
Panjab University Chandigarh

Dr. Sudhir K. Jain  
Prof. Jawaharlal Nehru University  
Ex- HOD Department of Management IIT  
Delhi.  
Former V.C. Mata Vaishnao Devi University

Prof. Dr. D K Banwet  
IIT Delhi Professor Emeritus

Hon'ble Dr. Uttamraoji Bhoite  
Executive Director, Bharati Vidyapeeth

Dr. Gurdip Singh Batra  
Director, School of Management Punjab  
University, Patiala

Dr. Veena T. Nandi  
Professor (Management Sciences)  
Majan University College.  
Birdfordshire University UK

Dr. Bernardo Nicoletti  
Professor (Management Sciences)  
University of Temple University Rome  
Campus

Dr. Soniya Billore  
Faculty Department of Marketing School of  
Business and Economics, Linnaeus  
University, Sweden

---

Dr. Ranpreet Kaur  
Editor

Dr. Sonali Khurjekar  
Editor

Dr. Sachin S. Vernekar  
Chief Editor

Volume 12, Issue II  
July- December 2021

©Bharati Vidyapeeth (Deemed to be University), Institute of Management and Entrepreneurship Development, Pune.

Editors:

Dr. Sachin S. Vernerkar (Chief Editor)  
Dr. Ranpreet Kaur (Editor) Dr. Sonali Khurjekar (Editor)

Students Editors:

Ankita Khaire  
Akshita Singh  
Sukriti Agarwal

Published and Printed by:

Dr. Sachin S. Vernekar  
Director, Bharati Vidyapeeth (Deemed to be University), Institute of Management and Entrepreneurship Development,  
Pune.  
More Vidyaly Campus, Erandwane, Paud Road, Pune 411038.  
Tele No: (020) 25425517/ 25448005 Telefax: 020 - 24531060

On behalf of:

Bharati Vidyapeeth (Deemed to be University), Institute of Management and Entrepreneurship Development, Pune.  
Erandwane, Paud Road, Pune 411038.

Laser Printing at,

Bharati Printing Press  
More Vidyaly Campus, Erandwane, Paud Road, Pune 411038.

Printed at:

Bharati Printing Press  
More Vidyaly Campus, Erandwane, Paud Road, Pune 411038.

Blind Review Committee :

Dr. Anthony Rose  
Dr. Sonali Dharmadhikari  
Dr. Sachin Ayarekar  
Dr. Pravin Mane

Please Note:

- 1) Plagiarism policy will be as per UCG Norms
- 2) The acceptance of Research Paper will be Communicated after plagiarism check and blind peerreview.
- 3) The accepted research paper will be published free of cost.
- 4) The acceptance of research paper will be based on the contribution towards body of knowledge
- 5) Kindly send your research paper on below mentioned email IDS  
ranpreet.kaur@bharatividyaapeeth.edu,  
sonali.khurjekar@bharatividyaapeeth.edu



Prof Dr. Manikrao .M. Salunkhe  
B.Sc., M.Sc., Ph.D.  
Vice Chancellor  
Bharati Vidyapeeth  
(Deemed to be University), Pune

## *Vice Chancellor speaks*

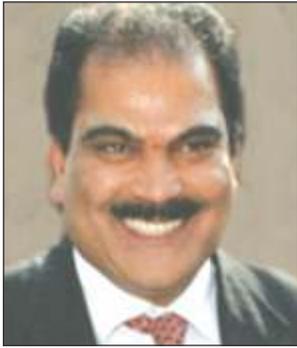
Someone has rightly stated that even the tiny lamp has the power to silence the pride of darkness. Our human race has been bestowed with such a lamp called an educational establishment. Hence, it's one of the greatest obligation of an educational institute to develop and seek bright minds capable of endlessly fuelling the lamp of knowledge, ensuring that the darkness of unknown folly is kept at bay.

As a result, Bharati Vidyapeeth takes big moves toward worldwide supremacy, one of which is "research." Universities with a strong research focus are critical to a country's long-term success, especially in today's more sensitive and uncertain global context, where institutes may quickly become obsolete. It is necessary to focus all of our resources into task that can really enhance one's thinking and evaluating skills. And this is the root cause of our existence.

I appreciate and respect IMED's efforts to launch the JOURNAL OF MANAGEMENT AND SOCIAL RESEARCH - JMSR. It offered society the freedom to disseminate their research, ideas, tactics, insights, alternatives, greatness, and so on. I wish all the success to the editorial board, the authors of the research papers, and the entire team of IMED JSMR. Congratulations for the consistent efforts and perseverance and best wishes!

Prof Dr. Manikrao .M. Salunkhe

## Chief Editor's Message



Dr Sachin S. Vernekar  
Dean- FMS BVDU  
Director-IMED

Considering the enigmatic times, the whole world is witnessing, corporate careers are bound to experience some unusual shifts. The global pandemic has created a havoc & took off with it a massive economic disruption. The pandemic has unfolded vast vistas of new innovations and possibilities.

I'm highly elated to know that dynamic researchers like you all have showcased a great passion and vivacity to take the initiative and deep dive into one's research capabilities and study the problem areas amidst the pandemic.

IMED's Journal of management & social research (JMSR) is one of the pioneers in many aspects as it generates expertise in research through cutting-edge experimentation carried out by scholars across various domains of management practices, behavioral sciences, human resource operations, banking and finance, artificial intelligence, IT sector etc. It incorporates the amalgamation of qualitative and quantitative analysis.

Research papers in JMSR go through a rigorous quality control procedure and derive the strength from the faculty, dedicated staff and exceptional alumni. The faculty are not just inspiring teachers but also outstanding scholars who instill the research skills and impart knowledge to cultivate a spirit of curiosity into the minds of students and for prolific motive invite them to challenge the existing exemplars.

I'm sure that this edition is going to help not only students but institutes, faculty, academicians, employees etc. leaving a trail of abundant evidences on modern day challenges faced across globe. This edition is a result of your continuous dedication, undefeatable confidence and zeal that has inspired us to renew our commitment inspite of the pandemic barriers as we start accepting submissions for the upcoming issue.

I look forward to helping the editorial board and all the authors to produce exceptional quality research that is acknowledged around the world. I whole heartedly thank everyone for showing trust in us. We will continue to initiate something that will continue to assist & lead these researchers.

Conveying my best wishes & warm regards!

A handwritten signature in black ink, appearing to read 'S. Vernekar'.

Dr Sachin S. Vernekar  
Dean- FMS BVDU  
Director-IMED

## *From the Editor's Desk*

Greeting everyone! Welcome to the Vol.12 Issue 2 of IMED's JMSR.

JMSR's Vol.12, Issue 2 presents work of those authors with whom it was possible to bridge the gap between the classroom and the society. This issue has been systematically designed to engage the scholars and provide them with an enlivening circumstance that comprehends and brings out the researchers approach in them.

This issue invites papers across different domains of science and technology, economy and international business trends, socio and cultural barriers, manufacturing services, market situations post covid-19, entrepreneurial innovations etc.

One paper focuses on the marketing tactics adopted by aggregators to sustain in the market considering the changed consumer behavior amidst covid-19. Another paper portrays the importance of customer relationship management in the banking industry, predominantly focusing on SBI.

An immeasurable amount of study and work has undergone for the creation of this journal and we anticipate that the research papers will reciprocate the impact. With JMSR, we aim to reach a larger audience of researchers and help them in stimulating latest work through experimentation, discussions, analysis from divergent disciplines. One of the authors has also spoken about web-based ICT initiative for Indian Agriculture considering the dominance of agriculture sector in Indian economy.

We thank all our readers, contributors, authors for their patronage over the years that has helped us in building a strong foundation thereby making research an important juncture in the institute's evolution.

We also take this opportunity to invite submissions for upcoming issue as we aim to continue this journey and develop JMSR to its full potential.

Happy Reading!

Dr. Ranpreet Kaur  
Dr. Sonali Khurjekar



# Content

SR.NO	TITLE OF PAPER	AUTHORS	PAGE NO
1	Impact of Covid -19 on Job Security in India	Ms. Rashi Jain	1
2	Changing Trends in FMCG: Pre-Post Covid Era	Dr. Muskan P Singh Dr. Sudhir Agrawal Mr. Mudit Menali	14
3	A study on perception of employees towards e-recruitment.	Mr. Jitender Kumar Goyal	21
4	A Study on Food Aggregators: Its Impact Post Covid-19	Mr. Abhishek Kankirad Ms. Ankita Khaire	31
5	Footfall Measurement in SBI Branches, Pune & ways to reduce footfall	Mr. Shashank Raghuwanshi Dr. Ranpreet Kaur Mr. Ajay Ramchandani	42
6	Web Based ICT Initiative for Indian Agriculture	Ms. Sheetal Desarda Prof. Sangeeta Patil Ms. Zoya Talat Siddiqi	54
7	Drop in SBI's Car Loan Market Share: An alarming Sign!	Mr. Tushar Aghav Dr. Anuradha Yesugade Ms. Aarushi Agrawal	72
8	Customer relationship management in state bank of India – Pune branch	Dr. Ajit Singh Tomar Dr. Sonali Khurjekar Ms. Shubhangi Mishra	82
9	A study of the effect of different leadership styles	Ms. Krupa Ulhas Kelkar Mr. Shreyas Dingankar Ms. Gargi Banerjee	112
10	Agriculture Mobile Apps – A Helping Hand for Farmers	Ms. Sangeeta Patil Ms. Pratima Gund Mr. Jitesh Gupta	120
11	Uses of Artificial Intelligence in Human Resource	Mr. Mayank Thakur Mr. Prachi Thakur	126
12	Buying Behaviour towards Smart-phones.	Mr. Pranav Methe Mr. Kundan Patil	133



# Impact of Covid -19, on Job Security in India

---

Ms. Rashi Jain  
PhD Scholar BVIMR

## ABSTRACT

The flare-up of coronavirus named COVID-19 has disturbed the Indian economy and is spreading in all countries. The development of the malady and its financial effect is exceptionally unsure which makes it hard for policymakers to plan a fitting approach whether it is a macroeconomic level strategy or arrangements shaped by the business houses. The economic downturn caused by the current COVID-19 outbreak has substantial implications for gender equality, both during the downturn and the subsequent recovery. Compared to “regular” recessions, which affect men’s employment more severely than women’s employment, the employment drop related to social distancing measures has a large impact on sectors with high female employment shares. In order to better understand possible economic outcomes, this paper explores how COVID-19 impacted the business houses and due to this laying off employees is one thought in the mindset of corporates which in turn is creating a fear among the employee for their job. Therefore, the paper attempts to find out what impact does covid19 has on the job security of employees.

Keywords: Covid-19, Job, Job security, Gender, Pandemic

### 1. Introduction

Coronavirus malady (COVID-19) is an irresistible illness brought about by a newfound coronavirus. The vast majority tainted with the COVID-19 infection will encounter gentle to direct respiratory disease and recuperate without requiring extraordinary treatment. More established individuals and those with fundamental clinical issues like cardiovascular infection, diabetes, incessant respiratory sickness, and malignancy are bound to create genuine ailment.

The COVID-19 infection spreads basically through beads of spit or release from the nose when a tainted individual hacks or wheezes, so it's significant that you likewise practice

respiratory behavior (for instance, by hacking into a flexed elbow).

An underlying appraisal of the effect of COVID-19 on the worldwide universe of work says the impacts will be sweeping, driving a huge number of individuals into joblessness, underemployment, and working neediness, and proposes measures for a conclusive, coordinated and prompt reaction. GENEVA (ILO News) – The monetary and work emergency made by the COVID-19 pandemic could increment worldwide joblessness by very nearly 25 million, as indicated by another appraisal by the International Labor Organization (ILO).

Notwithstanding, on the off chance that we see a

universally planned strategy reaction, as occurred in the worldwide money related emergency of 2008/9, at that point the effect on worldwide joblessness could be essentially lower.

The primer evaluation note, COVID-19 and the universe of work: Impacts and reactions, calls for earnest, enormous scope and composed measures across three columns: securing laborers in the work environment, animating the economy and business, and supporting employment and wages.

These measures incorporate expanding social security, supporting business maintenance (for example brief timeframe work, paid leave, different endowments), and budgetary and charge alleviation, including for smaller scale, little and medium-sized undertakings. What's more, the note proposes monetary and money related arrangement measures and loaning and budgetary help for explicit financial divisions.

In light of various situations for the effect of COVID-19 on worldwide GDP development, the ILO gauges demonstrate an ascent in worldwide joblessness of between 5.3 million ("low" situation) and 24.7 million ("high" situation) from a base degree of 188 million of every 2019. By examination, the 2008-9 worldwide money related emergency expanded worldwide joblessness by 22 million.

Underemployment is additionally expected to increment for an enormous scope, as the monetary results of the infection flare-up convert into decreases in working hours and wages. Independent work in creating nations, which frequently serves to pad the effect of changes, may not do so this time as a result of limitations on the development of individuals (for example specialist organizations) and products.

Falls in the business likewise mean huge pay

misfortunes for laborers. The examination assesses these as being between USD 860 billion and USD 3.4 trillion before the finish of 2020. This will convert into falls in the utilization of products and ventures, thus influencing the possibilities for organizations and economies.

Working neediness is relied upon to increment altogether as well, as "the strain on livelihoods coming about because of the decrease in financial action will obliterate laborers near or beneath the destitution line". The ILO evaluates that somewhere in the range of 8.8 and 35 million extra individuals will be in working destitution around the world, contrasted with the first gauge for 2020 (which anticipated a decrease of 14 million around the world). The ILO note cautions that specific gatherings will be excessively influenced by the occupation's emergency, which could build imbalance. These remember individuals for less secured and low-paid occupations, especially youth and more seasoned laborers. Ladies and vagrants as well. The last are defenseless because of the absence of social insurance and rights, and ladies will in general be over-spoken to in low-paid occupations and influenced parts.

"In the midst of emergency like the present one, we have two key devices that can help moderate the harm and reestablish open certainty. Right off the bat, social exchange, drawing in with laborers and businesses and their agents, is fundamental for building open trust and backing for the measures that we have to beat this emergency. Furthermore, global work measures give an attempted and-confided in the establishment for strategy reactions that emphasis on a recuperation that is economical and impartial. Everything should be done to limit the harm to individuals at this troublesome time," finished up Ryder.

A country's way of life alludes to the mutual mental implications and aggregate practices

that recognize one country from another (Hofstede, 1980). The mutual social implications have been operationalized in different manners, for example, social qualities (Hofstede, 1980; Schwartz and Bilsky, 1987; Triandis, 1995), self-interpretations (Markus and Kitayama, 1991), thinking styles (Ji, Nisbett, and Su, 2001; Nisbett, Peng, Choi, and Norenzayan, 2001; Spencer-Rodgers, Williams, and Peng, 2010), administrative center (Higgins, Pierro, and Kruglanski, 2008; Kurman and Hui, 2011, etc. Given that individuals from a similar country are associated to utilize their way of life explicit directions to control their day by day adapting forms, there are critical multifaceted contrasts in people's examinations of stressors, decisions of adapting systems, and pointers of versatile results (Heppner, 2008; Wong and Wong, 2006). In this segment, we talk about how culture assumes an inescapable job in forming the manners in which individuals evaluate and adapt to vocation related stressors related with the COVID-19 pandemic.

The COVID-19 pandemic develops as an upsetting and even horrible mishap that expects people to comprehend the new circumstance and pick suitable adapting activities. Since social qualities mirror the attractive end expresses that merit seeking after (Hofstede, 1980; Schwartz and Bilsky, 1987; Triandis, 1995), they are probably going to impact individuals' mindfulness to and prioritization of stressors in the evaluation forms. For instance, in a nation that qualities independence (versus cooperation), individuals will in general structure a free (versus reliant) self-interpretation (Markus and Kitayama, 1991) and like to utilize perfect self (versus should self) to control their practices (Higgins et al., 2008; Kurman and Hui, 2011). These social directions will guide individuals' focus toward stressors firmly identified with their own

profession improvement (Heppner, 2008, for example, work frailty, challenges of telecommuting, development of new vocation openings, etc. Conversely, in a collectivistic culture, individuals' consideration may go past their own vocation improvement contemplations to incorporate issues identified with their work gatherings, associations, and informal organizations (Guan et al., 2015; Guan, Deng, Risavy, Bond, and Li, 2011; Wong and Wong, 2006). In light of various evaluation forms, the decisions of adapting techniques and their belongings may vary (Lazarus and Folkman, 1984), which will be talked about beneath. As independence, self-interpretations and administrative concentrate just speak to restricted parts of social impact, future examination ought to receive a progressively exhaustive system of social directions (e.g., Schwartz and Bilsky, 1987) to progress existing writing on social contrasts in evaluations of stressors.

COVID-19 has affected social portability whereby schools are not, at this point ready to give free school suppers to youngsters from low-salary families, social segregation and school dropout rates. It has additionally significantly affected childcare costs for families with small kids. Moreover, there exists a wide uniqueness among populaces with a higher salary who can get to innovation that can guarantee instruction proceeds carefully during social confinement. In Dubai, 13,900 individuals have marked a request to diminish independent school charges by 30% as guardians battle to source these assets in the midst of ongoing compensation cuts coming to as high as half, and significant expenses of living. Moreover, guardians are being approached to furnish schools with private data, for example, bank explanations and benefit and misfortune organization articulations.

The effect of long haul school conclusion is yet to be seen. Anyway an examination by Chen et al. of a multi week conclusion of schools in Taiwan during the 2009 H1N1 flare-up found that 27% of families couldn't go to work with 18% losing salary as an immediate outcome. An examination by the Brookings Institution , demonstrating terminations in significant US urban areas and across the country, proposed that there would be a middle expense of \$142 per understudy every week. This prompted a gauge that a four-week conclusion of New York City would bring about a financial expense of \$1.1bn and that an across the country conclusion for 12 weeks would cost 1% of GDP. Besides, this examination takes a gander at the immediate effect of terminations on the offspring of human services laborers with an expected 6–19% of social insurance workforce hours lost. A gauge in the UK recommended that extended terminations could cost 3% of UK GDP. In any case, Wren-Lewis places a view that this effect will be brief as its motivation is known and characterized and, in this way, will have a reasonable endpoint, in contrast to a typical monetary downturn.

COVID-19 has likewise affected the tertiary segment. Just as the effect on undergrad training, the most huge effect is on the postgraduate exploration network with investigation into numerous non-COVID related points being requires to briefly wait. In the United Kingdom, the national financing body for wellbeing research has ended all non-COVID research so as to permit clinically prepared staff who are regularly on scholastic secondments to come back to the forefront. In the United States, comparable move has been made by the National Institute for Health to close down all non-basic examination so as to let loose staff and assets for 'strategic' research. Outside of the medicinal services research

setting, a few foundations have placed exploration in fields, for example, the humanities and sociologies on hold with Harvard University shutting all labs in the Faculty of Arts and Sciences.

Moreover, concerns have been raised with respect to the quantity of logical gatherings that have been dropped or deferred. These gatherings are the way to logical exploration in numerous orders, permitting spread of examination just as giving systems administration chances to joint effort and occupation chasing. Numerous meetings have moved on the web, anyway these 'virtual gatherings' are frequently not as amiable to systems administration and casual methods for logical correspondence.

COVID-19 has influenced networks, organizations and associations all around, coincidentally influencing the monetary markets and the worldwide economy. Awkward administrative reactions and lockdowns have prompted a disturbance in the gracefully chain. In China, lockdown limitations altogether diminished the creation of merchandise from industrial facilities, while isolate and self-seclusion strategies diminished utilization, request and usage of items and administrations. As COVID-19 has advanced to influence the remainder of the world, China will start to recuperate quicker than the remainder of the nations, fortifying its exchange arranging power against the US. Truth be told, chinese organizations will be in the worthwhile situation to get their western partners, which are enormously reliant and will be unavoidably influenced by the financial exchange.

Notwithstanding the disturbance in the flexibly chain, the capital market segment has likewise been influenced. In the US, the S&P 500, a financial exchange record that quantifies the

stock execution of 500 huge organizations on the US stock trade, the Dow Jones Industrial Average and the Nasdaq fell drastically until the US government made sure about the Coronavirus Aid, Relief, and Economic Security (CARES) Act, with the files raising by 7.3%, 7.73% and 7.33% separately. Moreover, 10-year US Treasury security yields have dropped to 0.67%. In the Asian markets, a similar example followed with China's Shanghai Composite, Hong Kong's Hang Seng and South Korea's KOSPI, at first dropping at that point followed by an ascent in stocks after legislative help. Japan's Nikkei was up 2.01%. Europe's security yields for the most part declined, arriving at advertise pressure hit levels looked in the eurozone emergency of 2011–2012. Germany's DAX, the UK's FTSE 100 and the Euro Stoxx 50 were all down on March 23rd, however rose essentially after the EU's salvage bundle was concurred. Gold dropped against the dollar by 0.65%.

The decrease in worldwide financial exchanges has putrefied an unpredictable domain with basic liquidity levels. To battle these impacts, Central banks universally have mediated to guarantee liquidity is kept up and alleviate the financial stun, with a few heads setting out on a 'Whatever it adopts' strategy. Educator of Financial Economics, David Miles, from Imperial College London has compared such government spending to the post-Napoleonic, first and second world war times where open part liabilities rose incredibly. He further clarifies that security markets could experience issues in adapting to huge scope government security issuance and that national banks may need to intercede by buying these securities on a remarkable scale.

With fears of another downturn and budgetary

breakdown, occasions such as these call for versatile and solid initiative in human services, business, government and more extensive society. Prompt help estimates should be actualized and balanced for those that may become lost despite a general sense of vigilance. Medium and longer term arranging is expected to re-equalization and re-invigorate the economy following this emergency. A wide financial improvement plan including segment by area plans and a biological system that energizes enterprise is additionally required so that those with vigorous and economical plans of action can prosper. It is judicious that administrations and budgetary foundations continually re-survey and reexamine the condition of play and guarantee that the 'whatever it takes' guarantee is really conveyed.

## 2. Literature Review

Numerous investigations have discovered that populace wellbeing, as estimated by future, newborn child and youngster mortality and maternal mortality, is emphatically identified with financial government assistance and development (Pritchett and Summers, 1996; Bloom and Sachs, 1998; Bhargava and et al., 2001; Cuddington et al., 1994; Cuddington and Hancock, 1994; Robalino et al., 2002a; Robalino et al., 2002b; WHO Commission on Macroeconomics and Health, 2001; Haacker, 2004).

Late reports feature the a huge number of cutbacks activated by the pandemic and lockdown. They additionally relate numerous instances of huge scope recruiting. As of April 18, Walmart recruited 150,000 new representatives in the range of a month and plans to employ 50,000 more (Nassauer, 2020). Similarly, Amazon recruited 100,000 new representatives lately and means to enlist

another 75,000 (Koetsler, 2020). Dollar General intends to employ 50,000 new laborers before the finish of April. Lowe's, the home improvement chain, plans to recruit 30,000 new representatives this spring (Tyko, 2020). Starting late March, numerous takeout and conveyance arranged firms are scrambling to employ laborers. Instacart, for instance, is adding 300,000 customers to its finance, and Domino's is including about 10,000 pizza conveyance drivers (Bender and Dalton, 2020). Father John's arrangements to

enlist 20,000 new workers to satisfy elevated need for pizza conveyance in the wake of the pandemic (Bandolm, 2020). Outschool looked to employ 5,000 new instructors over the most recent fourteen days of March to offer more online classes considering school terminations. A few organizations are shaping associations that abuse the reallocated idea of the COVID19 stun to speed recruiting. Market chain Kroger made a trade with Sodexo, Sysco and Marriott International to employ laborers laid off from food-administration and cordiality firms. CVS Healthcare is looking to select 50,000 new staff by joining forces with the Hilton lodging network, garments retailer Gap, and Delta Airlines (Weber, 2020). Uber now records employment opportunities at 7-Eleven, amazon and McDonald's and twelve different organizations for its jobless drivers (Lee, 2020).

The close term reallocative impacts of the COVID-19 stun are additionally clear in purchaser spending designs. The information examination firm, Earnest Research, followed charge card and check card buys for about 6,000,000 Americans to survey the effect of the COVID-19 stun on customer spending. For the week finishing 1 April 2020, their information show that spending on carriers, inns, rental vehicles, taxis, ride sharing and cinemas is down 75-95 percent comparative with spending in

2019 (Leatherby and Gelles, 2020). Spending on cheap food, vehicle parts, and automobiles is down 35 percent, and spending on attire is down 70 percent. Simultaneously, spending on home improvement, video spilling, gaming, food conveyance, feast units, and online merchants has blasted. The heft of these spending cuts and moves will turn around when the pandemic retreats and the lockdown closes, yet a few parts of the move are probably going to endure.

There are numerous channels through which an irresistible ailment flare-up impacts the economy. Immediate and backhanded monetary expenses of ailment are regularly the subject of the wellbeing financial aspects concentrate on the weight of ailment. The ordinary methodology utilizes data on passings (mortality) and ailment that forestalls work (dreariness) to evaluate the loss of future salary because of death and incapacity. Misfortunes of time and pay via carers and direct use on clinical consideration and supporting administrations are added to acquire the gauge of the financial expenses related to the malady. This ordinary methodology thinks little of the genuine financial expenses of irresistible maladies of pestilence extents which are exceptionally transmissible and for which there is no antibody (for example HIV/AIDS, SARS, and pandemic flu). The experience from these past illness episodes gives important data on the most proficient method to consider the ramifications of COVID-19. The HIV/AIDS infection influences families, organizations and governments - through changed work flexibly choices; productivity of work and family wages; expanded business costs and inevitable interest in staff preparing by firms; and expanded open use on medicinal services and backing of impaired and kids stranded by AIDS, by the open segment (Haacker, 2004).

The impacts of AIDS are long haul however

there are clear avoidance gauges that limit the dangers of obtaining HIV, and there are archived triumphs in executing anticipation and instruction programs, both in created and in the creating scene. Treatment is additionally accessible, with present-day antiretroviral treatments expanding the future and improving the personal satisfaction of HIV patients by numerous years if not decades. Investigations of the macroeconomic effect of HIV/AIDS incorporate (Cuddington, 1993a; Cuddington, 1993b; Cuddington et al., 1994; Cuddington and Hancock, 1994; Haacker, 2002a; Haacker, 2002b; Over, 2002; Freire, 2004; The World Bank, 2006).

The dread factor was powerful on the planet's reaction to SARS – a coronavirus not recently distinguished in people (Shannon and Willoughby, 2004; Peiris et al., 2004). It is likewise reflected in the reaction to COVID-19. Whole urban communities in China have shut and travel limitations put by nations on individuals entering from contaminated nations. The dread of an obscure savage infection is comparable in its mental impacts to the response to organic and other psychological warfare dangers and causes a significant level of pressure, frequently with longer-term outcomes (Hyams et al., 2002).

During an emergency, the way between corporate disavowal and cutbacks is frequently a short one. For a considerable length of time, our corporate customers and contacts waved off worries about a potential monetary effect from the Covid-19 episode. At that point, something changed around March 9. In the first place, our contacts revealed to us they were confining guests to their workplaces and empowering remote work. Presently, just a couple of days after the fact, we are hearing that numerous them are thinking about cutbacks to guarantee they endure the emergency — and an ongoing review found that a greater part of corporate

pioneers is thinking about a type of money related activity because of the pandemic. Undoubtedly, a cost-cutting reflex is justifiable. Pioneers are committed to settling on mindful choices to keep their organizations above water. Be that as it may, the individuals who deal with the monetary impacts of this emergency in a reasonable and sympathetic manner make more an incentive for their organizations and will come out of this pandemic more grounded than at any other time. So before announcing deep layoffs, HARVARD recommends to consider these measures first.

#### Communicate openly

Many leaders assume that if they admit that the company is facing turbulent times it will scare away its best employees. The assumption is that these employees will worry less if management holds their cards close to their chest. Everyone knows a slowdown in parts of the economy and increased uncertainty might impact their company as well. Instead of forcing employees to second-guess what might be in store for them, be utterly clear with them about the financial health of your firm and what goals you will prioritize. These goals will not be the same for every company, and the company shouldn't communicate empty statements you don't believe in, such as "we put our employees first." These statements can be confusing and even counterproductive when people are worried about their jobs. It's better for you to be specific.

#### Consider Crowdsourcing Ideas with Employees

It can be overwhelming to open the floor for ideas from employees on what the company should do. You might fear that employees will be resentful if their ideas are not selected. You might also fear that asking your employees for ideas means that you will appear to have less control. It is critical that you ask your employees to voice their ideas. By showing them, not just

saying, that you care about what they think, you will have stronger buy-in for the initiatives you eventually prioritize.

#### Review All the Options (Even the Less Conventional Ones)

Before layoffs, consider all your non-obvious options for reducing cost. A four-day workweek for roles where you have excess capacity will reduce staff costs by nearly 20% (assuming some costs will remain due to overhead and benefits). Some employees might agree to work half-time if they know that doing so will save jobs. You can also offer employees the opportunity for unpaid leave if they so wish — framing this leave as a “sabbatical” can help take some of the stigmas of the absence away. In fact, you might find that some employees welcome these options and wish they could have had them all along. By making it clear that one of your overriding goals is to avoid layoffs, you might find that employees are amenable to the personal sacrifices inherent in salary-increase freezes, halting bonuses, bans on overtime, pausing of payments into retirement funds, reduction of vacation days, and other cost-saving measures. Consider decelerating pay decreases for lower salary ranges to protect employees who are the most vulnerable.

#### Have “Ice in the Belly”

Being a leader in turbulent times can be nerve-racking. If you act too fast, it might turn out that you overreacted. If you act too slow, the business might go under. It would be wise to have what in Swedish is called *Is i Magen*, “ice in the belly,” roughly translated as your ability to keep your cool in a critical situation. First, recognize that as bad as things look, government assistance may be forthcoming. Furthermore, don't treat all negative indicators for your business the same. It's also reasonable to explain to them that you are trying to understand what

the economic impacts of this pandemic will be on your firm and ask them if they can have an open discussion with you to help you understand how likely it is that they will continue the project once things calm down. This is a time to show empathy, rather than maintaining an emotional distance from your people. Lead with compassion, especially for the most vulnerable members of your company. One common misconception is that most people primarily look out for themselves in turbulent times.

Acc to Times of India research 63% of respondents at Times Jobs survey said that the Coronavirus outbreak has adversely impacted their way of working. 27% of professionals claimed that the IT sector would be worst hit by COVID-19 spread. 23% of respondents said job security was the biggest concern for them at present. Most Indian workplaces have installed relevant advisories as a measure to make their workplace safer, work from home voted as the last measure provided by the organizations. 45% of Indian professionals are worried about losing foreign-based job opportunities as an aftermath of the COVID-19 pandemic. From the employment perspective, ‘job security’ is the biggest working of professionals at present, revealed the survey.

Acc to Economic times MUMBAI, as companies are implementing measures to curtail the spread of coronavirus infections in the country, a survey has revealed that the majority of professionals believe the outbreak has adversely impacted their way of working.

A majority (67 percent) of the surveyed professionals stated that jobs at the multinational companies (MNCs) will be most vulnerable during the time. Almost 45 percent of professionals claimed that the spread of Covid-19 will have a negative impact on the hiring activities across different industry verticals.

### 3. Objectives of the study

- To analyze the impact of Covid-19 on Job Security among the employees
- To analyze the impact of Covid-19 on Job Security among different Gender and Age groups.

### 4. Research Methodology

The research is Exploratory in nature. Reference of various related papers and information through times of India etc have been taken to analysis. The tool used for analysing the data is One-way Anova and Independent Sample T-Test. The study is based on the Primary Data which is the first hand-collected data. the total respondents were 128. Also, the research is conducted in Delhi only.

### 5. Data Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.614
Bartlett's Test of Sphericity	Approx. Chi-Square	455.711
	df	153
	Sig.	.000

#### Interpretation of KMO and Bartlett Test

Kaiser-Meyer-Olkin (KMO) Test is a measure of sampling Adequacy of how suited is the data is for Factor Analysis. It indicates variance caused by factors. The Test The value of KMO should not be less than 0.50 and in this case, the value is 0.614 which proves that the data is valid. The Bartlett's Test of Sphericity is done to check for any null hypothesis and here the correlation matrix does not have an identity matrix because the significance value is less than 0.05. This means the factor analysis done will be useful for the data.

Communalities		
	Initial	Extraction
@1DuetoCOVID19crisisjobrelatedhardshipswillexist	1.000	.656
@2DuetoCOVID19crisisfinancialsalarydeductionhardship	1.000	.610
@3Millionsofpeoplearoundtheworldmightlosetheirjobsdue	1.000	.586
@4Coronavirushasdisruptedworklife	1.000	.459
@5TheoutbreakofCOVID19hasadverselyimpactedthewayofwo	1.000	.478
@6Employeeswouldbeequallyormoreproductiveworkingfromho	1.000	.646
@7Employeescanefficientlydoajobwhileworkingfromhome	1.000	.646
@8Coronaviruswouldhavealongtermnegativeimpactonthecom	1.000	.657
@9ThespreadofCOVID19willhaveanegativeimpactonthehir	1.000	.646
@10ThecompanymightdeductDAandTAfromemployeessalary	1.000	.396
@11Employeesmightloseforeignbasedopportunitiesduetothe	1.000	.690
@12COVID19outspreadwillcauseeconomicslowdownbothdomesti	1.000	.453
@13Companieshaveaskedtheemployeestoworkfromhomebecause	1.000	.637
@14Companiesofferedadditionalpaidunpaysickleaveinrespo	1.000	.672
@15Companieshadtakenactivemeasurestofightthepandemici	1.000	.555
@16Thedecreaseintherateofinterestinthepaymentofloan	1.000	.518
Age	1.000	.568
Gender	1.000	.800
Extraction Method: Principal Component Analysis.		

### Interpretation of Communalities

Communalities indicate the common variance shared by factors with given variables. Higher communality indicated that larger amount of the variance in the variable has been extracted

by the factor solution. For better measurement of factor analysis communalities should be 0.5 or greater. In Table above shows communalities for all values are above 0.4, so we would not exclude any variable on basis of low communalities

Total Variance Explained						
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.253	18.070	18.070	3.253	18.070	18.070
2	2.094	11.636	29.706	2.094	11.636	29.706
3	1.683	9.351	39.057	1.683	9.351	39.057
4	1.310	7.277	46.335	1.310	7.277	46.335
5	1.192	6.622	52.957	1.192	6.622	52.957
6	1.143	6.349	59.306	1.143	6.349	59.306
7	1.000	5.554	64.859			
8	.944	5.246	70.105			
9	.807	4.483	74.588			
10	.756	4.200	78.787			
11	.654	3.631	82.419			
12	.608	3.378	85.797			
13	.550	3.055	88.852			
14	.529	2.936	91.788			
15	.486	2.698	94.486			
16	.401	2.228	96.714			
17	.345	1.915	98.629			
18	.247	1.371	100.000			

Extraction Method: Principal Component Analysis.

### Interpretation of Total Variance

The Total column gives the amount of variance in the original variables accounted for by each component. The Eigenvalue table has been divided into two sub-sections, i.e. Initial Eigen Values, Extracted Sums of Squared Loadings.

All variables used for study are defining 65.495 variance of desired area.

HO1: There is no significant impact of Covid-19 on Job Security among different Gender.

H1: There isa significant impact of Covid-19 on Job Security among different Gender.

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
COVID19	Equal variances assumed	.291	.590	-.161	126	.872	-.01219	.07567	-.16195	.13756
	Equal variances not assumed			-.162	125.975	.871	-.01219	.07514	-.16090	.13651

### Interpretation

Since independent t test significance(p) is > 0.05 i.e. p value is high, that means null hypothesis(ho) is high and thus accepted. This indicated that there is no significant impact of Covid-19 on Job Security among different Gender.

HO2: There is no significant impact of Covid-19 on Job Security among different Age Groups

H2: There is a significant impact of Covid-19 on Job Security among different Age Groups.

ANOVA					
COVID19					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.247	4	.312	1.763	.141
Within Groups	21.75€	123	.177		
Total	23.00€	127			

### Interpretation

Since independent t test significance(p) is > 0.05 i.e. p value is high, that means null hypothesis(ho) is high and thus accepted. This indicated that there is no significant impact of

### Covid-19 on Job Security among different Age Groups.

#### 6. Conclusion

The flare-up of coronavirus named COVID-19 has disturbed the Indian economy and is spreading in all countries. The development of the malady and its financial effect is exceptionally unsure which makes it hard for policymakers to plan a fitting approach whether it is a macroeconomic level strategy or arrangements shaped by the business houses. The economic downturn caused by the current COVID-19 outbreak has substantial implications for gender equality, both during the downturn and the subsequent recovery. An underlying appraisal of the effect of COVID-19 on the worldwide universe of work says the impacts will be sweeping, driving a huge number of individuals into joblessness, underemployment, and working neediness, and proposes measures for a conclusive, coordinated and prompt reaction. GENEVA

(ILO News) – The monetary and work emergency made by the COVID-19 pandemic could increment worldwide joblessness by very nearly 25 million, as indicated by another appraisal by the International Labor Organization (ILO).

No significant impact of Covid-19 on Job Security is seen among different Gender i.e. male and female and among different age groups. This means that both males and females have a fear of their job security in this pandemic of covid19 and so does the different age groups as well.

#### References

- Alon, T. M., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (2020). The impact of COVID-19 on gender equality (No. w26947). National Bureau of Economic Research.
- Acemoglu, Daron, David H. Autor, and David Lyle. 2004. “Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury.” *Journal of Political Economy* 112 (3): 497–551.
- Albanesi, Stefania. 2020. “Changing Business Cycles: The Role of Women’s Employment.” NBER Working Paper 25655.
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., ... & Agha, R. (2020). The socio-economic implications of the coronavirus and covid-19 pandemic: A review. *International Journal of Surgery*.
- [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_738742/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_738742/lang-en/index.htm)
- <https://economictimes.indiatimes.com/magazines/panache/covid-19-impacts-professional-life-jobs-at-mnacs-to-be-most-vulnerable-virus-affects-hiring/articleshow/74710055.cms?from=mdr>
- <https://content.timesjobs.com/covid-19-pandemic-makes-job-security-a-major-concern-among-employees-timesjobs-survey/articleshow/74690407.cms>
- Yap C.-W. China's factories struggle to resume operations after virus shutdown. *Wall St. J.* 2020 Feb 8 <https://www.wsj.com/articles/chinas-factories-struggle-to-resume-operations-after-virus-shutdown-11581157800> [Internet] [cited 2020 Mar 20]; Available from: [Google Scholar]
- S P X | S & P 5 0 0 i n d e x . <https://www.marketwatch.com/investing/index/spx> MarketWatch [Internet]. [cited 2020 Apr 7]. Available from:
- DJIA | Dow Jones industrial average. <https://www.marketwatch.com/investing/index/djia> MarketWatch [Internet]. [cited 2020 Apr 7]. Available from:
- COMP | NASDAQ composite index. <https://www.marketwatch.com/investing/index/comp> MarketWatch [Internet]. [cited 2020 Apr 7]. Available from:
- Daily I.B. Investor’s Business Daily; 2020. Dow Jones Today, Stocks Drop: Fed Stimulus; New York, California Lockdown; NYSE Floor Closes. <https://www.investors.com/market-trend/stock-market-today/dow-jones-today-futures-slide-fed-stimulus-impasse-new-york-california-lockdown-nyse-floor-closes/> [Internet] [cited 2020 Mar 23]. Available from: [Google Scholar]

- 10 Year Treasury rate .  
[https://ycharts.com/indicators/10\\_year\\_treasury\\_rate](https://ycharts.com/indicators/10_year_treasury_rate) [Internet]. [cited 2020 Apr 7]. Available from:
- Elliot Smith YL. CNBC; 2020. 10-year Yield Dives below 0.7% after Fed Announces Unlimited Asset Purchases.<https://www.cnbc.com/2020/03/23/treasury-yields-fall-as-coronavirus-cases-rise-relief-bill-stalls.html> [Internet] [cited 2020 Mar 23]. Available from: [Google Scholar]
- N225 18,950.18 373.88 2.01%: Nikkei 225 - yahoo finance .  
<https://finance.yahoo.com/quote/%5EN225/?guccounter=1> [Internet]. [cited 2020 Apr 7]. Available from:
- Stocks sink 12% amid COVID-19 pandemic | time .  
<https://time.com/5803847/coronavirus-stocks-fall/> [Internet]. [cited 2020 Mar 20]. Available from:
- XAU/USD (gold/USD dollar)  
<https://www.fxstreet.com/rates-charts/xauusd> [Internet]. [cited 2020 Apr 7]. Available from:
- The economic impact of COVID-19 | Deloitte Insights .  
<https://www2.deloitte.com/global/en/insights/economy/covid-19/economic-impact-covid-19.html> [Internet]. [cited 2020 Mar 19]. Available from:
- Mitigating the COVID economic crisis: Act fast and do whatever it takes | VOX, CEPR policy portal .  
<https://voxeu.org/content/mitigating-covid-economic-crisis-act-fast-and-do-whatever-it-takes> [Internet]. [cited 2020 Mar 20]. Available from:

# Changing Trends in FMCG: Pre-Post Covid Era

---

Dr. Muskan P Singh  
Faculty of Management  
Studies -BVDU

Dr. Sudhir Agrawal  
Professor, College of Business  
and Economics

Mr. Mudit Menali  
Student BV(DU)

## ABSTRACT

The Indian economy is facing significant level of growth in the FMCG sector with different businesses which include food, grains, beverages, cosmetics, health care product etc. The paper focuses on how Covid-19 pandemic is impacting most of the industries at an unparalleled scale worldwide specially in consumer products and consumer behaviour is being influenced by the pandemic. The study shows the changing trends in the FMCG sector for pre and post covid era. This study emphasis on the challenges which companies are facing in Covid situation such as labour shortages in factories, unoptimized production, restrictions in vehicle movement and inability to ensure essential products to consumers. The responses of companies to this issue include the introduction of protection procedures such as sanitization methods, streamlining of their portfolios, a more responsive evaluation of their supply chain resilience and an analysis of emergency management plans. This research paper studies about its impact on consumer buying behaviour and helps companies to design effective marketing strategy as per changing scenario.

Keywords: Covid-19, Consumer, Pandemic, FMCG, India, challenges, industry

### 1. Introduction

Panic is in the market because of the Covid-19 pandemic. There is no unaffected market from this pandemic. Corona pandemic is impacting all the industries including FMCG sector. The COVID-19 has contributed to a worldwide recession in FMCG sector as a consequence of the onset of the global pandemic. Due to a scarcity of food availability, workers and tight government rules and retail food establishments face problems. Demand has also grown at an unprecedented rate of growth for organic and natural product enriched food. A country like India in its developing phase have seen the reaction even higher. Many sectors have

experienced severe changes like loss of jobs in the tourism sector due to travel restrictions. (Rajamohan, 2021).

Lack of labour, operations limiting to production, increased knowledge in health and hygiene, boost the demand for sanitizer, hand wash, tissue, etc and improved demand for organic products resulted in a shift in consumer preferences. The sectors are trying to contribution towards the GDP as it is necessary to analyse deviations in the sector to sidestep future hitches (Jenefer, 2021).The demand is rising at an alarming pace worldwide for personal hygienic goods such as sanitary equipment's and hand washing in physical

retail and online retail. The pandemic is having a see-saw pattern of recovery hence the companies need to build an agile model to tackle and minimise the future disruptions (Mahajan, 2020). Various countries are taking aggressive measures to control the disease. Social distancing though had a dramatic influence on the FMCG industry, the impact of COVID-19 also did not protect the food & beverage sector. As a consequence of shortage of fresh fruits and vegetables for instance, businesses have engaged themselves in the manufacturing of refined and non-perishable goods which have seen high profits grow (Mahajan, 2020).

## 2. Literature Review

Jakhotiya explains the effects of COVID-19 on the Indian economy. She discussed about the COVID-19 pandemic and the paper also proposes some solutions that eliminates certain structural defects (2020).

Jayanthi in her research paper studied the significance, trends, scope and growth of FMCG sector in India and the challenges faced by them along with the strategies FMCG sector has adopted (2017). Mahajan states the factors which drives Indian millennials to a particular online retailer in India and perceptions of millennials towards these online retailers. It is also found that millennials are more or less satisfied with the services of selected online retailers. (2015). Dr. Pramod states that the growth in FMCG sector is because of various factors such as increase in demand, developments in supply side and favourable changes in government Policy. He further explored that FMCG companies should encash opportunities like increasing consumer income, changing consumer life style, aspiring rural consumer, consistent economic growth by utilizing its strengths (2016). Shashidhar in her study did the

comparative analysis of two FMCG companies focusing upon their brand awareness of the consumers. A comparative study was done by taking into consideration the two leading FMCG companies working in India - Hindustan Unilever Limited and Procter & Gamble (2015).

In this paper, an attempt have been made to analyse the complex network with respect of FMCG and retail industries of India and have listed down trends in these markets along with the potential strategies companies must incorporate in order to come out of this pandemic successfully (2020). Nafde describes that the government's push for digital India, change in tax structure with GST, improved transportation and logistics facilities and booming E-commerce market makes FMCG industry a favourable sector. (2017).

FMCG sector is highly affected due to COVID-19 and also changes in consumer preferences. There is a significant shift in certain sectors which will accelerate and the rest will slow down. The companies which are able to react to the evolving dynamics of demand and are showing a resilient attitude could overcome this coronavirus pandemic (Mahajan, 2020). The companies must learn from this ongoing pandemic in order to prepare for the future. The welfare of workers, employees and distributors should be a priority. The effectiveness of the response of an emergency is highly dependent on the quality and quantity of the data which is available at any given time (Bhattacharjee, 2019).

During the study period, the COVID-19 in India made an adverse impact in automobile sector. The sudden fall in the stock values had affected the industry's manufacturing process and it has been influenced the stock market for a significant period which may recover soon with optimum potential (Rajamohan, 2020). The study identifies the impact of covid-19

pandemic and the ways in which the various sectors in the country had been affected and have also suggested appropriate measures to control the negative impacts from this pandemic (Joshi, 2020).

### 3. Objectives of the Study

- To examine the changing trends of FMCG Sector in India for pre and post Covid era.
- To investigate the pre and post covid growth of FMCG Sector.
- To explore the impact of Covid-19 pandemic on consumer behaviour in India.
- To suggest measures to improve the current situation of FMCG sector in India.

### 2. Research Methodology

In order to achieve the objective of exploring the impact of covid-19 on consumer behaviour in India, a well-structured questionnaire was designed. Responses of individuals were collected through filled questionnaire with pre explained objectives of research. Questionnaires were sent to 100 respondents in Delhi/NCR. Main focus of questionnaire was to obtain responses of individuals regarding how their purchasing behaviour has been impacted by the covid-19 and a change in trend in FMCG sector has been observed. For this purpose, random sampling was done. Age constraint considered in the questionnaire was minimum 20 years.

#### Hypothesis Formulated

H1: The covid-19 does not impact the market prices of top 5 FMCG companies during the pandemic.

H2: The pandemic has not changed the preference of consumers of buying FMCG goods.

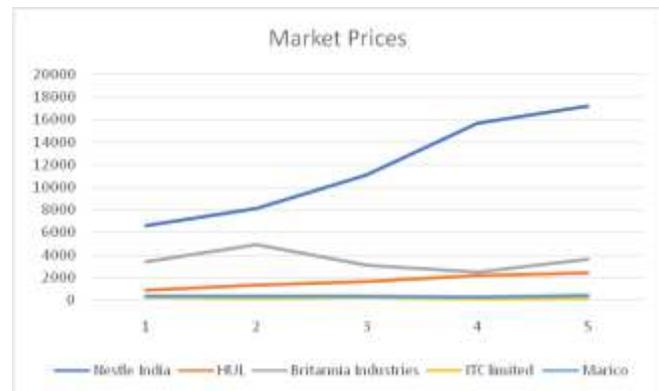
There are three independent variables used in the study- Gender, Age and Income

There can be dependent variables are Frequency of buying FMCG goods during the pandemic, Frequency of buying FMCG goods before the pandemic, Buying FMCG goods online in the pandemic and Preference of FMCG goods

Statistical Tools/Analysis: The sample method used was non-probability sampling under which convenience sampling method was used an analytical aspect of data collection will be presented in suitable diagrammatic representation like tables, pie charts etc.

Hypothesis (H1):

FMCG Companies	2017	2018	2019	2020	2021
Nestle India	6605.2	8112.7	11073.1	15658.7	17165
HUL	919.2	1332.8	1683.9	2184.35	2398.75
Britannia Industries	3395.15	4964.8	3096.55	2473.75	3616
ITC limited	282.75	258.9	300	159.2	214.55
Marico	296.5	325.65	337.6	258.7	408.2



Nestle India Limited: Over the past five years, Nestle India had introduced more than 80 new products. This helped in improving and increasing their sales over the years. Also, the sales of packaged products had increased during Covid due to at-home consumption in lockdown.

HUL: Some of its products faced a decline in their sales during pandemic like ice-cream,

cosmetics and vending businesses due to lack of mobility. However, there has been a sharp surge in the categories like sanitizers, hand washes and home essentials like tea, shampoo, toothpaste etc. due to change in the consumer behaviour which include clean living, staying at home, stocking and saving during the pandemic and will continue post the pandemic as well.

**Britannia Industries:** When consumer firms were getting impacted from the Covid-19 situation, Britannia Industries was among the worst hit in the starting. However, amidst the pandemic during the recovery phase, the view changed completely. People were spending more time at home due to which the demand for its products which majorly include biscuits gave a boost to its portfolio which can clearly be seen in the market price of the year 2021.

**ITC Limited:** The products which were badly impacted were cigarettes, tobacco, and hotel industry. A decline was seen in their sales due to lack of travel and more awareness towards healthy living. However, there was an increase in sales in the products related to wealth, immunity and health.

**Marico Limited:** It's food business including oats, honey, cooking oils etc were showing an increase before the Covid situation. However, a sudden decline was observed during the pandemic in its growth where the sale of its cooking brand Saffola was increasing as people were stocking household items but overall, there was a low single digit volume decline in the domestic business. Marico saw a double-digit growth in Mar'21 due to strong performance in the oats franchise and its innovations during the year whereas paying more attention to their health and wellness portfolio. Thus, Hypothesis 1 is supported as there is high price fluctuations observed in top five FMCG companies.

## Hypothesis (H2):

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.239 <sup>a</sup>	.057	-.004	.993

a. Predictors: (Constant), 14. Would you consider in buying (FMCG) goods from e-commerce companies post lockdown?, 13. Other than 2n-essential goods, how much would you spend on Essential (FMCG)goods?, 9. Has the Covid-19 pandemic lockdown increased your frequency of buying online?, 10. Do you think the e-commerce industry (FMCG) is going to replace your traditional offline shopping of FMCG goods?, 12. Do you think e-commerce in FMCG goods is playing a vital role during the lockdown period?, 11. Are you 4 with buying essential goods (FMCG) online rather than buying through Retail shops?

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.557	6	.926	.939	.471
	Residual	91.683	93	.986		
	Total	97.240	99			

a. Dependent Variable: 5. What is your income level per month?

b. Predictors: (Constant), 14. Would you consider in buying (FMCG) goods from e-commerce companies post lockdown?, 13. Other than 2n-essential goods, how much would you spend on Essential (FMCG)goods?, 9. Has the Covid-19 pandemic lockdown increased your frequency of buying online?, 10. Do you think the e-commerce industry (FMCG) is going to replace your traditional offline shopping of FMCG goods?, 12. Do you think e-commerce in FMCG goods is playing a vital role during the lockdown period?, 11. Are you 4 with buying essential goods (FMCG) online rather than buying through Retail shops?

## Factor Analysis

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.704
Bartlett's Test of Sphericity	Approx. Chi-Square	128.380
	df	15
	Sig.	<.001

The results of the test for multicollinearity are depicted in the above table. This test is essential to avoid the multicollinearity problem among the sample variables that are used in the model. In the present model, the data is multicollinear since the condition index has values more than 15. While checking the assumptions for factor analysis it was observed that there is no missing value, improper codes and unengaged responses in the data. The Kaiser-Meyer-Olkin (KMO) Test depicts the value as 0.734 which indicates that the sample is adequate and valid.

Tests of Normality								
		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
		Statistic	df	Sig.	Statistic	df	Sig.	
7. Have you ordered (FMCG) goods online during the lockdown period?	9. Has the Covid-19 pandemic lockdown increased your frequency of buying online?	Strongly disagree	.407	6	.002	.640	6	.001
		Agree	.433	10	<.001	.594	10	<.001
		Neutral	.448	42	<.001	.567	42	<.001
		Disagree	.473	30	<.001	.526	30	<.001
		Strongly agree	.417	12	<.001	.608	12	<.001

a. Lilliefors Significance Correction

One-Sample Kolmogorov-Smirnov Test							
		9. Has the Covid-19 pandemic lockdown increased your frequency of buying online?	10. Do you think the e-commerce industry (FMCG) is going to replace your traditional offline shopping of FMCG goods?	11. Are you 4 with buying essential goods (FMCG) online rather than buying through Retail shops?	12. Do you think e-commerce in FMCG goods is playing a vital role during the lockdown period?	13. Other than 2n-essential goods, how much would you spend on Essential (FMCG) goods?	14. Would you consider in buying (FMCG) goods from e-commerce companies post lockdown?
N		100	100	100	100	100	100
Normal Parameters <sup>a,b</sup>							
	Mean	3.32	3.01	3.31	3.76	2.58	3.29
	Std. Deviation	1.014	.785	.800	.767	.912	.756
Most Extreme Differences							
	Absolute	.216	.315	.291	.333	.308	.266
	Positive	.204	.315	.291	.257	.308	.209
	Negative	-.216	-.285	-.249	-.333	-.192	-.266
Test Statistic		.216	.315	.291	.333	.308	.266
Asymp. Sig. (2-tailed) <sup>c</sup>		<.001	<.001	<.001	<.001	<.001	<.001
Monte Carlo Sig. (2-tailed) <sup>d</sup>							
	Sig.	.000	.000	.000	.000	.000	.000
	99% Confidence Interval						
	Lower Bound	.000	.000	.000	.000	.000	.000
	Upper Bound	.000	.000	.000	.000	.000	.000

By doing the KS test our data value is < 0.05 so now we will perform Non parametric test (H-test) where the output declared as the test

distribution is normal. Levene statistic carried out where our p value > 0.05 so, it concluded Hypothesis 2 also supported.

### Descriptives

Descriptive Statistics									
	N	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
2. What is your gender?	100	1	2	1.46	.501	.163	.241	-2.014	.478
3. What is your age group?	100	1	4	1.16	.598	3.974	.241	15.301	.478
4. What is your occupation?	100	1	5	1.71	1.250	1.679	.241	1.595	.478
5. What is your income level per month?	100	1	4	1.74	.991	1.118	.241	.043	.478

6. Have you purchased essential (FMCG) goods online before COVID-19 pandemic lockdown?	100	1	2	1.34	.476	.686	.241	-1.561	.478
7. Have you ordered (FMCG) goods online during the lockdown period?	100	1	2	1.32	.469	.784	.241	-1.415	.478
8. Why do you purchase (FMCG) goods online?	100	1	4	2.34	1.017	.505	.241	-.853	.478
9. Has the Covid-19 pandemic lockdown increased your frequency of buying online?	100	1	5	3.32	1.014	-.326	.241	.022	.478
10. Do you think the e-commerce industry (FMCG) is going to replace your traditional offline shopping of FMCG goods?	100	1	5	3.01	.785	.366	.241	.987	.478
11. Are you 4 with buying essential goods (FMCG) online rather than buying through Retail shops?	100	1	5	3.31	.800	-.019	.241	.694	.478
12. Do you think e-commerce in FMCG goods is playing a vital	100	1	5	3.76	.767	-.792	.241	1.318	.478

### 3. Conclusion

The study concludes that the market prices of top five FMCG companies were impacted by the Covid-19. Our study shows that though companies in FMCG sector faced a decline in some of its sectors but there was a significant increase in the other sectors like health and wellness which impacted their market prices with huge margins. So, Covid-19 is blessing for some sectors. But overall, it has effective negatively to all sectors.

The study also shows that the pandemic has changed the consumer preferences and buying behaviour. Consumers had started frequently buying products from online mode amidst the pandemic. Most of the consumers were satisfied in shifting from offline mode to online mode for buying the goods in the pandemic. There was an increase in the buying for health and wellness products than other non-essential products. Consumers became more aware about their health and safety during the pandemic and have

shifted their focus to buy healthy and immunity booster products. In online payment preferences have gained a great momentum. Easy online payment even has pushed impulse buying of customers on online retails.

Companies needs to utilize this online retailing platform to survive and get competitive edge. Even unorganised retailing must move to this situational forced strategy (online platform) to expand their business and continue successfully in market.

### References

1. Amitab Bhattacharjee, Asghar Afshar Jahanshahi, Mohammad Rashed Hasan Polas, Mohammad Imtiaz Hossain, Abdul Saboor Asheq(2019), "Customer Care Service Management Is Moving Forward To Achieve Sustainable Customer Retention In Every Industry. Does It Play A Role To Increase Brand Retention?", <https://www.researchgate.net/publication/334273391>

2. Gaurav Shetty, Shrey Nougaraahiya, Dheeraj Mandloi, Sapna jain Dabade(2020), "COVID-19 and Indian Commerce: An Analysis of Fast Moving Consumer Goods (FMCG), and Retail Industries of Tomorrow", Int J Cur Res Rev, Vol 12-17
3. Jakhotiya, Girish (2020) "Impact of COVID-19 on Indian economy and the Road Ahead." MPRA Paper No. 101456.
4. Pramod Patil (2016), "An Overview Of Indian FMCG Sector", Aripex - Indian Journal Of Research, Volume 5-2, [https://Www.Researchgate.Net/Publication/314216580\\_An\\_Overview\\_Of\\_Indian\\_FMCG\\_Sector](https://Www.Researchgate.Net/Publication/314216580_An_Overview_Of_Indian_FMCG_Sector)
5. Rajamohan, J. Jenefer, A. Sathish (2021), "Impact of COVID-19 on FMCG Sector", [https://www.researchgate.net/publication/350588721\\_Impact\\_of\\_COVID-19\\_on\\_FMCG\\_Sector](https://www.researchgate.net/publication/350588721_Impact_of_COVID-19_on_FMCG_Sector)

# A Study on perception of Employees towards E- Recruitment

---

Mr. Jitender Kumar Goyal  
PhD Scholar BVIMR

## ABSTRACT

Web is an internationally connected and efficient organization game plan that makes use of Internet Protocol to bestow data through various types of media. With rise of Internet from 1990's work rehearses have advanced, the change from announcements to paper's work notice to online work entries and presently even to web-based media enlistment has totally developed the Hiring Process. This survey means to choose the factors that sway the perspective on agents towards e-Recruitment. There view shows that factors, for instance, usability, information plan, and site convenience are generally associated with the perspective on specialists towards e-selection. Among the three components, information plan radiates an impression of being the most grounded pointer. It could be said that e-selection will continue to gain prominence, and administrators should give broad thought to their online Recruitment information, appearance, components, and limits accepting they wish to attract the right work contenders.

Keywords: E-Recruitment, Online portals, Perception

### 1. Introduction

In Contemporary period associations are working in an unparalleled, profoundly serious and unsound work space which is assigned by the comprehensiveness of exchange and business which has prompted versatile labor force. Associations give a much due consideration to the enlistment and choice method, as representatives are the principal resource. In the present Dynamic world, heartless rivalry is not generally restricted to a common place or nearby outskirts so there emerges a requirement for planning and setting set up an incredible technique for appealing and holding top chiefs becomes significant for the association's constancy. Economy particularly relies upon the worth made by the human as set

of an association. Today HR experts have been set on weighty interest with its inversion in connection with human resources, procurement, use, improvement, maintenance of representatives. With evolving elements, HR

chief is to comprehend, consider, start, execute and feed related arrangements and contribute basically to dole out triumphant edge to the association. These endeavors with respect to the association oversaw in keeping up with upper hand on the edge of ability obtaining and maintenance as an essential need.

The enrollment cycle is expensive as it incorporates the compensation of scouts, regulatory expense, term spent by the administration on readiness of set of working

responsibilities, exposure cost, cost of choice, like wise incorporates cost of extra hours and reevaluating on the off chance that the opportunity stay sun filled. Consequently, an association assesses the activity of adequacy of enrolling by social event all connected data.

The enrollment and choice cycle is both positive and negative. Enrollment is a more extensive idea as it includes looking for a pool of utilizations or additional choice, while determination process has thin degree it targets choosing best competitor from pool of uses for work. The choice of competitor is the lengthiest advance in enlistment process where different tests are led and afterward meet is taken which consequently guarantees the most ideal appropriate contender for the gig. The technique for determination should be methodical and logical in order to guarantee no extent of uncertainty and disarray about the decision of chosen applicants. Various business sectors are viewed for various degree of representatives, homegrown market for proficient staff, commonplace business sectors for specialized staff, and nearby business sectors for administrative staff.

The future accomplishment of an association is basically founded on the achievement of labor abilities and endeavors, which advance through acknowledgment and fascination of value new representatives actuated from the enrollment interaction that will urge association to create and develop as an outcome of human asset abilities accessible in the association. Associations have seen the advancement of acknowledged enlistment strategies to online enrollment, especially since the mid-1990s.

To coordinate work competitors with live opening, Companies and enlistment organizations have begun selecting on the web. By Using data set computerization, work posts

can be filled in quickly by managers which recently took far to go, online work promoting sheets and web search tools, sites are among advancements utilized regularly. Web enlistment includes interlinkage association among bosses and occupation searchers which has turned into a pattern that has prompted the development of another market. It connotes distributing employment opportunities web based, having an internet-based fill-in structure accessible for candidates and a robotized information base accessible to save the educational plans got for additional strategy. Candidates can email their list of references or transfer them to corporate, person to person communication or enrollment sites, and straightforwardly contact the spotter or the leader utilizing this channel. This makes it not just less tedious than conventional enrollment strategies, yet additionally more advantageous and agreeable for candidates. Seen proficiency and usability are affecting elements to which Applicants respond to the data on the web-based work advertisement, which goes out to whether or not the competitor considers the work promotion straightforward and apply for something very similar. How much data given by the association impact competitor's choice in regards to the gig position, which ought to be explicit and refreshed. In essence, the acknowledgment of the web as a method by associations for enlistment is speedier.

## 2. Literature Review

FRED AND KINANGE (2016) inspected the online Recruitment program expected by the connection, e-choice methodology impacts association's accomplishment and helpfulness of enrolling process in the alliance. The HR division deals with the labor force combination in culture, time regions, wellness, advantages

and remunerations. Helper data was assembled for this audit. The examination found that associations appear, apparently, to be concerned for standard, fit open doors for opening that basically base on the expense. Untouchables, for example, using affiliations, head trackers play an arranged person in the online enlistment process. Web getting of work addition to capacity of the selecting structure, unequivocal web Recruitment procedures quality to the different evened out advancements and collects execution for real picking.

NASREEM ET AL. (2016) the assessment saw that as a large portion of the relationship in Pakistan were utilizing both e-enlistment and standard Recruitment sources. It also uncovered that the IT based affiliations are not completely depending upon e-Recruitment. The concentrate in addition displayed that greater piece of respondent affiliations use e-enlistment for filling the top positions.

AHLAWAT AND SANGEETA (2016) invest in gated the various well springs of e-choice in the connection like comfort for the alliance, decreasing an entryway to join up, staying before contenders, saving usage, openness for up-and-comer, to give giant competitor pool. This study was a ton of complete outlines of e-enlistment, correspondingly to see the difficulties and advantages of utilizing on the web degrees of progress. The alliance utilized online Recruitment framework to follow and deal with competitor's application that gives essential advantages in the term of cost and limit, productivity to screen on choice works out.

MALHOTRA and SHARMA (2016) separated standard choice cycle and contemporary collaboration i.e., e-Recruitment, changes in using rehearses and investigated the difficulties

and openings looked by the two affiliations and workers utilizing e-enlistment. The assessment observed that even today conventional systems are considered for process. It should improve. It is a quick association. In the cutting-edge time, the most famous well spring of e-Recruitment is work segments since business objections give a phase to scouts to track down the typical representatives ALAN PRICE (2012): In his work, human asset the bosses in a work setting, formally perceive enlistment as the method toward recuperating and pulling in fit applications. He conveys that the technique for responsibility requires drive. "Human asset may be considered as the total learning, innovative limits, improvement gifts and wellness of an affiliation work power, similarly as the characteristics, attitudes and benefits of an individual included"

SAKS (2012): Recruitment incorporates set moves and activities made by a relationship to perceive and attract individuals who have the abilities to help the relationship with understanding its fundamental objectives. Saks perceived three stages in course of enlistment: Application, Collaboration, and Job offer. Practice should deliver a pool of useful contenders; redesign their benefit in and appreciation for the relationship as a business; and addition the probability that they will recognize a suggestion for work. This definition has unequivocal the impact between the components of Recruitment and of Selection (which follows Recruitment) and highlights the association among enrollment and legitimate method (destinations and objectives).

Repel and WILSON (2015): expressed that association completes those practices and exercises in enlistment which are fundamentally embraced with motivation behind acknowledgment and charming of competent representatives. E-Recruiting alludes to utilizing on the web organization to enlist

through corporate site pages, work entryways or onlinead.

GALANAKI (2016): Recruitment is cycle of searching out the right leader and empowering them to be important for association. It is a fundamental capacity of HRM. It is the most normal method of tracking down the well springs of staff and drawing in them to settle on compelling decision among applications to interface up the particulars of the staffing.

LIEVENS AND HARRIS (2011): Internet enrollment has five methods for managing enrollment, including association locales, work sheets, e-enlisting, relationship choosing, and a couple of procedures.

SINGH AND FINN (2013): Internet selection gives many benefits to the two scouts and occupations earchers. Scouts use web to pursue the right quality (to the extent reason able levels of getting, attitude, capacities and aptitudes) and measure of HR to support the development of association.

In perspectives on CASCIO (2012), Change in work market is after effect of expanding globalization and the use of new computerization, among different peculiarities. Online enlistment is a considerable wellspring of enrollment in a steadily changing setting were new innovations experience fast turn of events.

### 3. Research Methodology

#### Objectives of the study

1. To Study the perception of employees towards e-recruitment.
2. To Study the factors influencing perception of employees toward e-recruitment.

The research is Descriptive in nature. Reference of various related papers have been taken to

analyse the factors affecting individual's online shopping. The tool used to survey is questionnaire (primary method of data collection) containing various statements regarding individual demographics and various factors affecting perception of employees towards e- recruitment are included. KMO (Kaiser-Meyer-Olkin) and Bartlett's Test is used to analyse the collected data. The research is done in Delhi only. 104 responses were collected.

### 4. Data Analysis & Interpretation

GENDER	No. of Respondents	% of Respondents
MALE	55	52.99%
FEMALE	49	47.11%
<b>TOTAL</b>	<b>104</b>	<b>100%</b>

#### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		<b>.857</b>
	Approx. Chi-Square	1010.558
Bartlett's Test of Sphericity	Df	153
	Sig.	.000

### Communalities

	Initial	Extraction
1. Using e-recruitment I obtained a satisfying view of job opportunities.	1.000	.639
2. The use of internet has made me more aware of future job opportunities.	1.000	.682
3. Using e-recruitment provides me with job information that will lead to better job decisions.	1.000	.724
4. I am more likely to find job information using recruitment than through other sources of information.	1.000	.598
5. Corporate website is user friendly.	1.000	.704
6. I can find the information with less effort.	1.000	.740
7. I can quickly and easily obtain the job information I need.	1.000	.595
8. The My jobs section provides easy to follow search paths.	1.000	.612
9. The corporate website is easy to use.	1.000	.773
10. The information provided seems truthful to me.	1.000	.614
11. The job information seems correct to me.	1.000	.550
12. The website provides the most current job information of the organisation.	1.000	.720
13. Visiting the My job section provides me with relevant information.	1.000	.732
14. The information provided in the job section applies to me.	1.000	.541
15. I can effectively complete my application using e-recruitment.	1.000	.577
16. The Interface of website is pleasant.	1.000	.694
17. The website has all the functions and capabilities I expect it to have.	1.000	.676
18. I found various functions in the recruitment website to be well integrated.	1.000	.619

Extraction Method: Principal Component Analysis.

#### Interpretation of Communalities

Communalities indicate the common variance shared by factors with given variables. Higher communality indicated that larger amount of the variance in the variable has been extracted by the

factor solution. For better measurement of factor analysis communalities should be 0.5 or greater. In Table above shows communalities for all values are above 0.4, so we would not exclude any variable on basis of low communalities.

## Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.719	42.881	42.881	7.719	42.881	42.881	5.621	31.228	31.228
2	1.659	9.219	52.100	1.659	9.219	52.100	2.081	11.563	42.790
3	1.348	7.490	59.591	1.348	7.490	59.591	2.059	11.439	54.229
4	1.063	5.905	65.495	1.063	5.905	65.495	2.028	11.266	65.495
5	.942	5.232	70.727						
6	.752	4.178	74.906						
7	.636	3.534	78.439						
8	.598	3.321	81.760						
9	.576	3.199	84.959						
10	.504	2.799	87.758						
11	.449	2.494	90.252						
12	.389	2.161	92.413						
13	.338	1.880	94.293						
14	.265	1.473	95.766						
15	.234	1.298	97.064						
16	.214	1.191	98.255						
17	.177	.983	99.238						
18	.137	.762	100.000						

**Extraction Method: Principal Component Analysis.**

### Interpretation of Total Variance

The Total column gives the amount of variance in the original variables accounted for by each component. The Eigenvalue table has been divided into two sub-sections, i.e. Initial Eigen Values, Extracted Sums of Squared Loadings. All variables used for study are defining 65.495 variance of desired area. It is clear from table

that 4 variables namely perception, user friendliness, information provision, website usability are formed. Here It should be noted that Notice that the first factor accounts for 42.881% of the variance, the second 52.100%, the third 59.591% and fourth 65.495%. All the remaining factors are not significant.

**Rotated Component Matrix\***

	Component			
	1	2	3	4
1. Using e-recruitment I obtained a satisfying view of job opportunities.	.796	.021	.013	.061
2. The use of internet has made me more aware of future job opportunities.	.816	-0.082	-0.017	.089
3. Using e-recruitment provides me with job information that will lead to better job decisions.	.842	.066	.088	-0.055
4. I am more likely to find job information using recruitment than through other sources of information.	.724	.180	-0.193	.070
5. Corporate website is user friendly.	.264	.621	.489	.095
6. I can find the information with less efforts.	.411	.737	.002	.167
7. I can quickly and easily obtain the job information I need.	.396	.647	.006	.138
8. The My jobs section provides easy to follow search paths.	.678	.119	.349	.123
9. The corporate website is easy to use.	.283	.580	.591	.093
10. The information provided seems truthful to me.	.733	.063	.231	.137
11. The job information seems correct to me.	.721	.093	.118	.093
12. The website provides the most current job information of the organisation.	.401	-0.010	.741	.095
13. Visiting the My job section provides me with relevant information.	.374	.107	.749	.139
14. The information provided in the job section applies to me.	.445	.252	.322	.419
15. I can effectively complete my application using e-recruitment.	.368	.009	.101	.657
16. The Interface of website is pleasant.	.303	.048	.081	.770
17. The website has all the functions and capabilities I expect it to have.	.376	.321	.070	.653
18. I found various functions in the recruitment website to be well integrated.	.476	.383	.034	.495

Extraction Method: Principal Component Analysis

## Rotated Component Matrix Interpretation

The loadings (extracted values of each item under 4 variables) of the variables on the four factors extracted. The higher the absolute value of the loading, the more the factor contributes to the variable. statements have extracted four variables wherein the items are divided into 4 variables according to most important items which have similar responses in component 1, component 2, component 3 and component 4.

The idea of rotation is to reduce the number of factors on which the variables under investigation have high loadings. Rotation makes interpretation easier. looking at Table 6,

We can see that assertion

(1) Using e-enlistment I got a fantastic perspective on open positions, articulation (2) The utilization of web has made me more mindful of future open positions, proclamation (3) Using e-enrollment furnishes me with work data that will prompt better work choices, explanation (4) I am bound to secure position data utilizing e-enrollment than through different well springs of data., statement (8) The My jobs section provides easy to follow search paths, statement (10) The information provided seems truthful to me and statement (11) The job information seems correct to me are loaded on component (factor) 1.

While explanation (5) Corporate site is easy to use, articulation (6) I can track down the data with less endeavors and proclamation (7) I can rapidly and effectively acquire the work data I want are considerably stacked on part (factor) 2.

Explanation (9) The corporate site is not difficult to utilize., articulation (12) The site gives the latest work data of the association and proclamation (13) Visiting the My work area gives me important data are stacked on part (factor) 3.

Every one of the excess factors are stacked on

part (factor) 4. These elements can be utilized as factors for additional investigation. Factor examination on the given example has been performed. It is obvious from the turned part lattice that all assertions are properly framed with the exception of articulation (14) The data gave in the gig are a concerns me and explanation

(18) I tracked down different capacities in the enrollment site to be very much coordinated.

## 5. Conclusion

The review has achieved its objectives in distinctive the components that sway the view of representatives towards Internet enlistment. It has added to the prosperous works in regards to this area of study. The disclosures increase the understanding of chiefs of the components which impact the perception of representatives towards Internet enlistment, especially associations that utilization online enrollment. The concentrate likewise helps different work entryways that are set up by exclusive organizations or state run administrations to the extent understanding the tendencies of calling searchers especially the representatives being referred to. The present managers can't bear the expense of not to get Internet Recruitment given that new ages have uplifting outlooks towards this enlistment strategy. Also, numerous occupation searchers today are searching for work through the Internet, and various associations advance their openings on their doorways utilizing Internet, and numerous associations post their openings on their entries or website page to enroll gifted, quality human asset. E-enlistment is

suitable for an enormous scope of data and correspondence innovations and get an admittance to the overall population any time.

E-Recruitment has brought a progressive social and direct change, both in side working of the HR office and the normal up-and-comers. Despite the huge number of organizations and applicants utilizing the E-Recruiting, there are as yet numerous potential outcomes to propel Understanding of E-Recruitment. Seeing innovation similarly as possibility will restrict examination to building up monetary objectivity of computerizing on the web enlistment undertaking and changes in schedules, while innovation for this situation assumes a more extensive cultural part, and may

influence livelihoods of people and associations. A superior comprehension of the hierarchical idea of E-enlistment may be accomplished by concentrating on what outer climate and a general public overall mean for association of E-enrollment and its usage, and an institutional point of view can be possibly helpful to this examination. Additionally, more investigations of how various components of getting sorted out of online enlistment.

## References

Athanasios. F.E., & Tzimas. G.T. An integrated e-recruitment system for automated personality mining and applicant ranking, *Internet research*, 22(5),551-568.<https://doi.org/10.1108/10662241211271545> (2012).

Teoh, Wendy. (2013). Factors Influencing Perceptions of University Students Towards Internet Recruitment. *Asian Academy of Management Journal*. 18. 123-142.

Alamro, S.; Dogan, H.; Phalp, K. E-military recruitment: A conceptual model for contextualizing the problem domain. In *Information Systems Development: Transforming Organisations and Society through Information Systems*; Strahonja, V., Vrčec, N., Plantak, V., Barry, C., Lang, M., Linger, H., Schneider, C., Eds.; University of Zagreb: Varaždin, Croatia, 2014

Iqbal, N., Ahmad, M., & Allen, M. M. (2019). Unveiling the relationship between e-HRM, impersonal trust and employee productivity. *Management Research Review*.

Avinash S. Kapse Vishal, Patil S, Nikhil Patil, E- Recruitment, *International Journal of Engineering and Advanced Technology*. (IJEAT) ISSN: 2249 – 8958, April, 2012, 1(4).

- Holm, Anna. (2012). E-recruitment: Towards a Ubiquitous Recruitment Process out Candidate Relationship Management. *Zeitschrift Air Personalforschung Germaii Journal of Research in Human Resource Management*. 26. 10.2307/23279203.
- Gupta, Ashish & Kumar, Sujeet. (2014). A Study on Recruitment & Selection Process with Reference. 10.13140 2.1.2424.0320.
- Babalola, D.Y., Oyeniyi, K.O., & Adeyemi, M.A, Empirical study on the relationship between electronic recruitment and Organizational performance: evidence from Nigeria manufacturing companies, *International Journal in Management and Social Science*, (4),379-389. (2015).
- Chauhan. D., Chaturvedi. L., Efficacy of job portals and social media on organizational business, *international journal of advanced research iii management and social sciences*, 2(7), 170-181. (2013).
- Falanaka, E., Tsakalidis, A., & Tzimas, G. An investigated e-recruitment system for automated personality mining and applicant ranking, *iiinternet research*, 22(5),551-568. (2012).
- Ahlawat, R., & Saiigeeta E-recruitment: Transforming trends of recruitment in Humaii resource management, *Global journal of Engineering Science and Research Maiiagement*, 3( 1), 21-25.(2016).
- Siiigh, Parbudyal & FINN, DALE. (2003). The Effects of Information Techiiology on Recruitment. *Journal of Labour Research*, 24. 395-408. 10.1007/s12122-003-1003-4
- Priyadarshini, C., Sreejesh, S. and Anusree, M. (2017), "Effect of information quality of employment website on attitude toward the website", *International Journal of Manpower*, Vol. 38 No. 5, pp. 729-745.
- Amusaii, D.G., Oyediran, M.O., Development of efficiente-recniinuent system for university staff in Nigeria, *Circulation in computers cience*, 1(1), 10-14.(2016).

# A Study on Food Aggregators: Its Impact Post Covid-19

Mr. Abhishek Kankirad  
Deputy Manager, ICICI

Ms. Ankita Khaire  
Student BV (DU)

## ABSTRACT

The COVID-19 pandemic has uncovered the panorama of Indian restaurants and food system. It has changed the entire picture of Food industry. The demand and tensity on supermarkets as a consequence of Covid-19 has given a reason to believe that deficient supply chains and food aggregators are the future.

Due to evolving lifestyle, there has been a shift even in the eating habits and demands giving an upsurge to the food aggregators in India. It has given prominence to the need of market reforms & technology to associate traditional restaurants with online Food applications. Online Food delivery services have warranted us to order food at ease keeping your budget under check by giving an option to choose meals from a large basket of restaurants with just a click away. The ongoing global pandemic has proved that “change is the only constant” where health & economy has changed every hour. Industry experts however have predicted that the Food aggregators will see an immense elevated scope of change & the traditional restaurants will have to adapt to it.

This research aims to understand the need for integration of Food Aggregator with restaurant business and also lists the scenario of food aggregators pre and post covid, the challenges faced, the loss incurred and new strategies to rebuild the revenue model.

Keywords: Covid19, Food Aggregators, Online, FDA, economy, challenges, delivery

### 1. Introduction

The emergence and adaptation of technology and industrial science over the past decade has earned a revolutionary place for India as one of the fastest developing countries. The young generation has excelled exceptionally in the aeon of innovations and research. The standard of living has unravelled diversly and at a swift pace. The modification of needs and demands in India is a result of growing technology, exposure to the outside world and a sustainable approach to everyday lifestyle. The market drivers for increase in such establishments are

availability of affordable electronic gadgets, customer centric approach and realization of digitization in the data driven world. And with many such revolutions happening around, India is seeing a significant modification in the way of people buying and consuming food.

The food sector is one of the flourishing industries in the Indian economy as the revenues generated are very high and are expected to thrive vigorously in the coming years. The online food delivery sector is growing in double-digit Compound annual growth rate. This has given rise to the arrival of

many food aggregators and food chain applications in the market making life of the consumers effortless and comfortable.

Third party food aggregators are most preferred over restaurant owners because, it is convenient to refer to one marketplace rather than having an application of every QSR (Quick-Service Restaurant). Here are some top food aggregators currently in India.



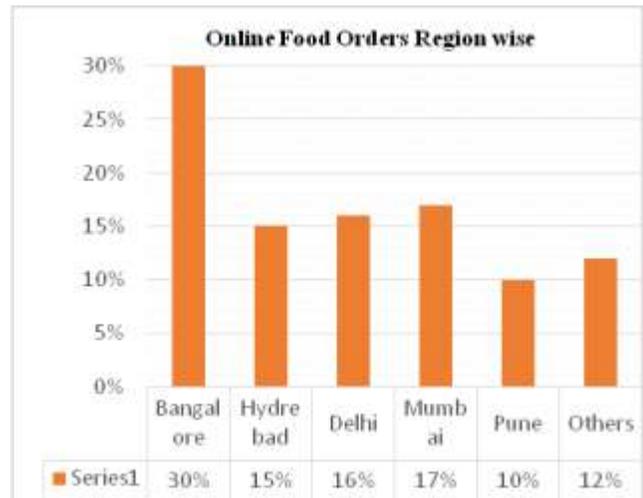
### 1.1 Two Types of Online Food Delivery Platforms in India

**Restaurant-to-consumer delivery:** This delivery model provides a full stack service wherein; they ensure absolute control over the entire process. These are the food brands that cook their own food, have their own couriers & logistics are at full time service. They solemnly manage their application/website, order management, customers. They do not associate any other restaurants or couriers on their platform. E.g., Dominos, Pizza Hut.

**Platform-to-consumer delivery:** These are the food aggregators who act as mediators between the local restaurants & the customer. This platform delivery process allows a customer to choose through various restaurants& cuisines under single application/website. In this

process, the aggregator passes the order to the restaurant once the order gets confirmed. And then the actual delivery to the customer used to happen by the carrier restaurants courier. E.g., Swiggy, Zomato.

Following are some of the cities that have contributed to the rise in Online food business.



## 2. Literature Review

Many researches and studies have found out that there is an enormous prospect and potential in Indian Online Food Delivery Market which is attracting huge investments. The Indian online food delivery market is majorly divided and driven by India's young population, tier I and tier II cities, increasing users of smartphones. The upcoming start-ups have also embarked upon innovative and creative marketing strategies which has led to customer engagement activities thereby attracting the consumers. These food aggregators have designed a user-friendly interface wherein they offer lucrative compensations, cash-backs and tempting food advertisements. Most of the Indian population is acquainted to food aggregators like Swiggy, Zomato, Food Panda, Faasos, Uber Eats etc and many more are now entering the market.

According to Indian Brand Equity Foundation (IBEF), the Indian food sector has been one of the fastest evolving e-commerce segments. Network endorsement and word of mouth help in attracting the new customers.

As per the reports by Google and BCG (Boston Consulting Group), Indian food-tech sector is esteemed to touch US\$ 8 billion, observing a CAGR of 25-30 per cent.

A report titled as 'Demystifying the online food consumer' states that the key reasons for success of Food delivery applications include multiple restaurants, offers and easy User interface. The report further read, "once the consumers are satisfied with the delivery and service, they become habitual". However, this behaviour is dynamic and can change at any given time with respect to geographical location, society, class and personal experiences.

The Covid-19 has turned out recent noticeable good and bad changes in the FDA market. Rohan Agarwal, director of Redseer (Management consultancy firm) shows that 49% out of their 5000 respondents would prefer home cooked meals. Sriharsha Majety, co-founder of Swiggy on May 18th 2020 announced a hapless downscaling decision where they planned to lay off 1100 employees for few days. And the reason, not surprisingly was the pandemic which showed a direct hit on cloud kitchen business since the onset. The spokesperson also mentioned that Swiggy has been fortunate enough to earn profitable capital before Covid hit, but they need to prepare for unprecedented situations in macro environment. He further mentioned, that the impact will stay over for a longer time but will show improvement later. With his insights he made it clear, the need to build a lean organization to minimize the indirect costs (hubs, infrastructure) and to be able to combat

any Covid like situation. The decision of lean organization looks prudent as it doesn't affect the employees or the customers. The co-founder went in about announcing Swiggy's efforts in creating platform for Grocery and other service offerings. In his words "The business has impacted us obstructively, and there is no doubt that we are at a contamination point for digital adaptation and home delivery in India."

Gurmeet Kochhar, founder of SpiceBox says states that every start-up and all the entrepreneurs are trying best to take their business to another level and survive in the market. SpiceBox is a tiffin service delivered restaurant style home cooked food across regions in Mumbai. She mentioned that she has plans to adapt a subscription-based business model for meals in breakfast and dinner. In addition to this, they also have plans to expand their base in Pune, Delhi, Bangalore etc.

There are multiple business models of popular food aggregators in the food tech space such as on demand delivery, home cooked food etc. The Indian FDA companies like Zomato are here to analyse and stabilize operations, and pick up the clarity with how to grow back in the situations like post Covid.

### 3. Objective of The Study

- a. Understanding the plan of actions taken by food aggregators to identify the reasons for success & failure and to re-design their revenue models.
- b. To assess the market conditions and challenges of different food brands and changes consumer behaviour post Covid.
- c. To study the positive and negative impacts that food aggregators make in the current scenario.

## 4. Research Methodology

### 4.1 Data Collection

Primary Data – Descriptive research is used in this study to draw a conclusion for the problem statement. An online survey was taken to obtain data & understand the consumer speculation & behaviour post covid. The form was circulated amongst 160 obtaining responses from 125 respondents. The two set of respondents are:

- a. Consumers using online FDA
- b. Entrepreneurs and existing business men of food tech sector.

Secondary Data – This research is also based on secondary data consisting of information obtained by referring to e-books, research papers, from e-newspapers, the industrial statistics & food ordering applications. Business models of different food aggregators have been compared qualitatively and quantitatively based on various factors.

The study starts with a SWOT analysis that outlines the features of the food-tech market in India post covid-19.

### 4.2 Swot Analysis Post Covid

#### Strength

1. Exposure to New Audience: With traditional restaurants, the business gets acquainted only to a specific region. But with the power of aggregators platform, you get an opportunity to attract a large segment of geographical location.
2. Ability to modify user interface: At any given time, the food aggregators can change the thematic layout, listings etc. They can change their design concepts & enhance beauty of their dishes and services, thereby engaging user experiences. E.g., Content & order

management, effortless registration, efficient search engine etc.

3. Aptness to invent own delivery radius: Online Food brands have the ability to conceive their last mile delivery that could be location specific which can be analysed by the logistics management and may include strategic tasks such as route planning, route timing, traffic, etc.

#### Weakness

1. Reliability on Restaurants to deliver great food and smooth experience.
2. Difficulties in Integrating Logistics and the Restaurants.
3. Balance orders spike on weekends: The highest-volume days for the online platforms were Friday, Saturday, and Sunday, when 74 percent of orders were placed.

#### Opportunities

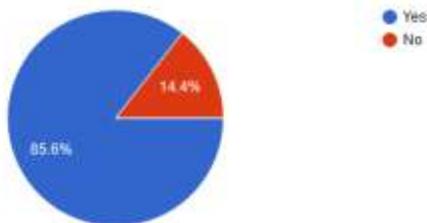
1. Reduce Delivery Fee: Food aggregators in the pandemic have undergone a considerable change as they have increased the price listing, reworked cancelation policies, delivery charges etc.
2. Adapt Sustainable Packaging Habits: With the changing lifestyle & habits, people have started making wise decisions. Sustainable packaging should be a considerate choice as it reduces the ecological footprint in the product's life-cycle.
3. Exponential growth opportunities to integrate Small scale restaurants: The new delivery players & aggregators both have attracted magnificent investment, as they widely advertise and build reputation.

## Threat

1. Evacuation of migrant labours: With the growing number of Covid cases, all the states tried to evacuate their daily workers and get them back to their hometowns. These daily workers also included our food delivery & logistic people that were stranded across the nation.
  2. Less operational restaurants due to lockdown: Nationwide lockdown caused the shutdown of more than 70% of listed restaurants on the food aggregators platform.
  3. Drastic change in customer's attitude & need for home cooking: The food industry has turned its attention with utmost importance to the safety standards to fight the battle of covid with their customers, However, a margin of people still remains sceptical in ordering online food & prefer cooking at home.
5. Data Analysis and Interpretation
- 5.1 People cannot stay away from restaurant food.

Have you ordered online food after first covid outbreak ?

125 responses



### Interpretation

Meals are for Home. As per a survey, it was found out that most of the orders, about 80 per cent were placed from home, while only 20 per cent were placed from workplace.

## 5.2 Statistical Analysis of Indian FDA 2020 and after.

Parameters	Restaurant to Consumer	Platform to Consumer
Revenue by End of 2021	US \$5,960m	US \$5,706m
CAGR 2021-2024	5.98%	9.91%
Market Volume by 2024	US \$7,095m	US \$7,575m
ARPU	US \$43.72.	US \$47.11
Global Comparison	USA will lead	China will lead

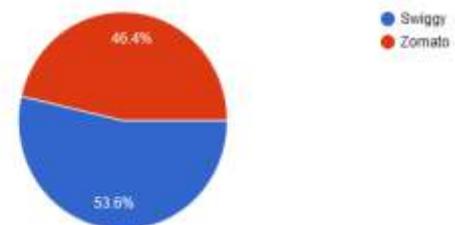
### Interpretation

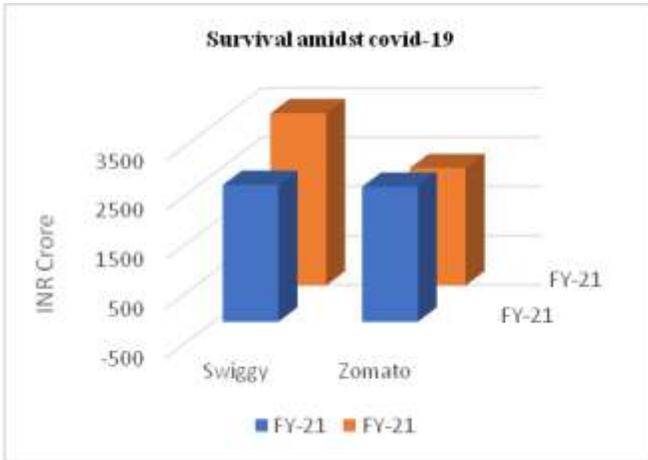
- a. The Indian food market today stands at \$350 billion.
- b. Online food delivery sector in India is projected to touch USD 11,666 M by end of 2021.
- c. Annual growth rate CAGR of 7.94% is expected in the period 2021-2024 leading to a revenue market of USD 14,670 M.
- d. China is expected to generate most revenue on a global level comparison.

## 5.3 Battle Bruised Competition between Swiggy and Zomato amidst covid-19.

Which Food App do you prefer for ordering ?

125 responses





**Interpretation**

The popular FDA Swiggy and Zomato have been heavily thrashed by the covid-19 outbreak.

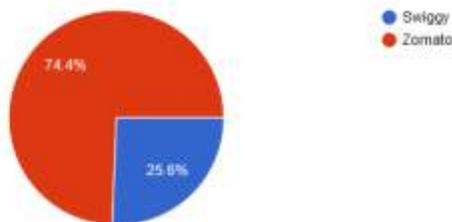
The business has been affected by 60 per cent amidst the lockdown. Indians have not yet gone back to ordering like pre-pandemic days. However, just a few months later the companies went aboard to recover the sales.

Sales bounced back to 60-75 per cent for Zomato and 73 per cent for Swiggy.

**5.4 Zomato leads the race in marketing and advertising.**

Who do you think advertises well ?

125 responses



**Interpretation**

Zomato has outlined an increase in the expenses of advertisement and sales promotion by INR 1326 for the FY-20. Zomato gold business, Ad Sales and online ordering are the top segments that account for its primary revenue source.

Zomato uses highly functional marketing strokes to ensure they drive the most traffic on their website by investing boundlessly in SEO. They use a productive strategy where they pick keywords and then build its own URL. They exactly know the traits of their audience & dynamically adapt to current trends in a funny and attractive gimmick to engage people.

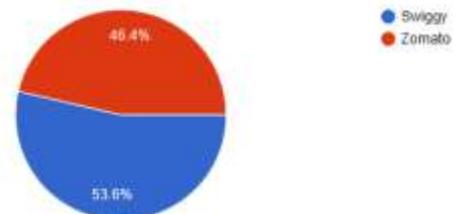
**5.5 Responses obtained via survey.**

Pick any 2 out of the following options that you will consider while ordering food, post covid. 125 responses



Who of the following gives you great discounts ?

125 responses



**Interpretation**

Zomato in FY-19 planned to cut down on discounts. Companies like Swiggy and Zomato have been roaring monthly discounts of \$30-\$40 Mn every month as per FY-19 and thus the discounts were planned to be reduced by 40 per cent. But the survey found out that, safety measures and discounts would be the top priority here after.

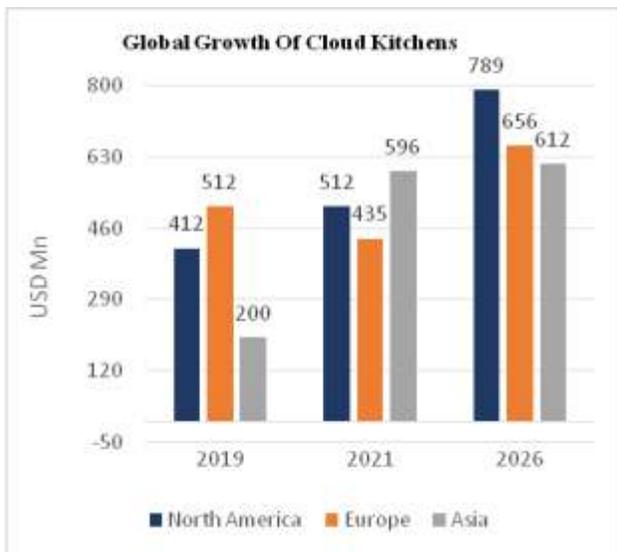
**6. Findings of the study**

The Indian food sector has been one of the biggest victims of Covid-19. Restaurants have opened the doors and laid the tables albeit 5 feet

apart, but there is no gathering, there are no guests. In a heinous situation like this there is no space for luxurious or peaceful dining. Let us take a look at the major findings from this study.

### 6.1 Cloud Kitchens to take over the future.

A cloud kitchen also known as Ghost/Dark kitchen is a place only responsible for preparing and delivering food. They do not provide Dine-in facility. These kitchens depend on food aggregators or 3rd party platforms for delivery services.



As per the findings, a report from Data Labs by Inc 42 states that, Indian FDA market will expand at a CAGR of 16 percent and touch \$17 bn by end of 2023 and food aggregators like Swiggy and Zomato will aggressively try to invest and associate with cloud kitchens. Tier 1 and Tier 2 cities already have welcomed cloud kitchen concepts and have scaled successively. E.g., Rebel Foods, Biryani by Kilo.

Rebel Foods is one of the Indian cloud kitchens who has establish a footprint giving a tough competition to other upcoming players. Swiggy definitely didn't want to be left back and 3 years ago it started its cloud kitchens parallelly and has co-created 2000 brands with its business model

by using restaurant kitchens. And they were called Swiggy Access.

Reasons why cloud kitchens might transform the traditional dining practice;

- Brands will no longer focus on ambience & manpower for serving.
- Reduced operating costs and higher margins.
- Increased productivity as the investors will mostly consider the quality of chefs.
- Can be based in any non-premium location & might less rented properties.

### 6.2 Market Key Drivers

The FDA market of India, currently is in growing stage. The market started showing exponential growth by a CAGR of 120% since the year 2016 which has resulted in increased Gross Merchandise Value. The current traits and the market drivers in today's scenario are as follows.

- Improving & Stimulating Demographics: Age group of 22-36 years millennials were observed to be the higher market drivers.
- Fulfilling Income
- Commending Lifestyle
- Growing Women Employment

### 6.3 FDA attracting Food Entrepreneurs.

If you were to be a restaurant entrepreneur, would you associate your brand with Swiggy/Zomato ?  
125 responses



#### 6.4 Competitive Advantage

Zomato takes over Uber Eats: The Indian FDA has integrated over last few years emerging strong with very powerful Swiggy and Zomato. Uber eats on the other hand quit the race in 2020 by purchasing 9.99 per cent stake in Zomato.

In the year 2020, Zomato acquired Uber Eats in all stock transition for USD 350 million. This amalgamation is expected to acquire 50% market share w.r.t number and value of orders.

#### 6.6 Opportunities for Platform-To-Consumer Model

- High commission: In today's date, the commission charged by food aggregators in India varies between 18 - 40%. This commission depends on factors like order size, the listed restaurant & of course the food aggregator. As per the reports of 2020, the FHRAI (Federation of Hotel & Restaurant Association of India) has written to Zomato & Swiggy, asking for reduction in the commission charges. This will help the sector and small restaurants to get their financial models back in place.
- Unique Identification: This platform has introduced and given many small restaurants a reason to stay in the market. Food aggregators has surely played a major role in facilitating the low scale business's; however, it has also taken away the standing place of many popular restaurants. On this platform all the restaurants are listed together and thus only a fewer might get noticed based on the advertisements and reviews. Thus, there is a need for the food aggregator platforms to promote and advertise all the restaurants fairly.
- Data Integrity: The platform to consumer

delivery model involves restaurants from all the regions & also delivery men from 3rd party vendors. So, involving relationship managers and analytical structure will take care of the confidential data.

#### 7. Conclusion

The Indian online food industry is headed for a sea change. There will be notable transformations with digitisation at its crux. Products and Services will grow to become more customised and customer-oriented. Parameters like health & safety with top the priority list with creative service offerings will be developed and appreciated. The course of operations and management will experience less labour intensive and book of accounts will become slender. All such changes will accentuate customer experience and set new degrees for the food industry in the post-COVID pandemic era. Overall, the food aggregates suspected that the first lockdown obligated or re-enforced the businesses to go back to the drawing board and fathom what had to be done in such unprecedented situations. Later as the unlock was set in motion in June, businesses started witnessing improvement, with new marketing operations and some compromises. The year 2020 surely has been a downfall and might have pushed away the growth of FDA sector by three years, however it is not yet a lost opportunity. The emerging FDA's will desperately need revolutionary technological intervention.

#### 8. Managerial Implications

To ensure longevity of food aggregators in food industry, practical actions and implications must be understood considering the changed consumer behavior in 2020 and here after. To

augment and broaden the market size, it is needed that the positive impacts of a brand must be magnified and continued. Whereas, the negative impacts must be examined and improvised.

### 8.1 Consumer Behavior Post Covid-19

Covid-19 set crucial standards for all the food aggregators in the market specially to meet the bottom-line needs of the consumers where covid has hastened them. The existing inputs & outcomes must be examined to comprehend the future trends.

- a. Digital Acceleration: No waiting, No Contact.

Before Covid-19, 50% of the industries & consumers were versed with digital transformation. But soon after the lockdown, 80% of the market & consumers reshaped their living on digital platforms. To keep up with the data driven world, consumers will planned & acted wisely to the adaptation of digitization with the fear to not be left behind.

E.g., E-commerce, Education, Corporates, Events, Binge watching, Food & Fitness industry etc.

- b. Branding: It is expected that people will invest only in the respected brands that assure better pricing, large covers etc. Brand equity is a market driver & will help separate oneself from the rest. Customers might agree to pay double for a brand that they trust.
- c. Shift to White Glove Service: All the food brands will need to put their staff through rigorous training & strictly adapt the habit of gloved service i.e., masks and hair nets.

Brands that are able to do so, will manage convey clean message of customer centric services.

- d. Revamping the Menus and Portions: The current focus is on “Contactless” service. However, there is no stopping and the restaurants will have to undergo some new traits, because, it’s also about the minimal contact at the table. This will ensure no-sharing and separate portions for everyone at the table. The menus, prices and portions will need to be catered.
- e. Prioritizing Health & Hygiene: The pandemic has penetrated into the minds of the consumers of how much health matters, not only of your own self but also of the society. The same behaviour was experienced by food aggregators. The customers really considered factors like FQ (Food Quality), SM (Safety Measures), Vaccination of the delivery partners thus ensuring Customer Satisfaction & Customer Loyalty.
- f. Shift to Essentials Shopping: Unsurprisingly, there was a sudden rise in sales of essentials & value items in the market. Indian consumers started shopping more essentials due to the falling income & optimum economic resources, Disinfectants, soap/sanitizers, pharmaceutical products etc were need of the hour. On the other hand, the items that consumers stopped buying in covid were apparels, footwear, luxury items, cosmetics etc. Covid-19 definitely worked out for consumers to understand the importance of sustainable lifestyle habits.
- g. Rise in Self Reliant: In the early months of lockdown, we all were acquainted to “Do it Yourself” values. The lockdown discovered a lot of inside chefs within us.

With this change coming in, the degree to which it will remain constant is highly uncertain.

- h. Sparse Gathering at Restaurants: Social distancing will be the biggest menace of the restaurant business. The guarantors and the patrons will themselves adhere to norms and the 'Old normal' might see a drastic market drop in such situations. To get back the old business will require quite some time.
- i. Feedbacks, Ratings, Influencers / Bloggers: With the advent of digital platforms people have started coming front to openly share their experiences to reach the maximum mass. One good or bad post will be more than enough to uplift or demolish a brand. Thus, all the brands need to be aware & keep customers on top priority.

## 8.2 Impact of Food Aggregators

The first stage of any strategic planning for is to find out about the type of potential impact your existence might bring in the society. The impacts of Indian Food Aggregators have been organized as the building blocks of the sustainability foundation.

### a. Economic Impact

Economic study involves all the monetary gains and losses that arise from your being. This includes a lot of study related to money earned, money saved, profit funding, increased avenue.

E.g., Increased Job Opportunities, Loss of Small-Scale Restaurants.

### b. Cultural and Creativity Impact

The changes in the values, beliefs and changing trends are some of the traits that

contribute to Cultural impact. Every society has a cultural theme which has a significant impact on how that culture reacts to a business. Loss of trustworthiness and disconnect causes a loss of business opportunity. Also, with a lot of competition in the market, all the food aggregators are indulged in developing creative business models and marketing styles.

E.g., Creative marketing strategies to reach the market during different festivals and other changing trends to continue maintaining the consumer relations.

### c. Environmental Impact

This impact can make a contribution or destruction to the wellbeing of environment. The degree of effectiveness of how environmental impacts are balanced depends on how the food aggregators deal with the packaging and plastic use. It also depends on the country's infrastructure recycling method.

E.g., Increased Carbon Foot Prints, Food & Packaging waste.

### d. Social Impact

Social impacts are the impacts where the audience include individuals, communities and organisations who have a deep understanding of the urban life and the parameters that lead to construction and destruction of the social life and surrounding. Social Impact is related to public discussions, community organizations and awareness in context to some life practices or activities.

E.g., Vegan movements, Health & Fitness, Pollution & Traffic issues etc.

## References

1. <https://www.bbc.com/future/bspoke/follow-the-food/how-covid-19-is-changing-food-shopping.html>
2. <https://economictimes.indiatimes.com/topic/food-aggregators>
3. <https://www.ibef.org/blogs/future-of-indian-food-and-beverage-industry-post-pandemic>
4. <https://www.globenewswire.com/news-release/2019/05/30/1859604/0/en/India-Online-Food-Delivery-Market-2019-2023.html>
5. Dr. Mitali Gupta, A Study on Impact of Online Food delivery app on Restaurant Business special reference to zomato and swiggy.
6. Zamarrud Ansari, Dr. Surabhi Jain, Food Portals – The Growth Engine” “Do You Have an Appetite?”
7. Dr. Neha Parashar, A Study on Customer’s Attitude and Perception Towards Digital Food App Services

# Footfall Measurement in SBI Branches, Pune & ways to reduce footfall

Mr. Shashank Raghuwanshi  
Asst System Engineer,  
Tata Consultancy Services Ltd, Indore

Dr. Ranpreet Kaur  
Faculty of Management  
Studies -BVDU

Mr. Ajay Ramchandani  
Student BV (DU)

## ABSTRACT

The study Footfall measurement and ways to reduce footfall in SBI Bank branches primarily focuses on the reasons because of which customers visit bank branches. Even today, in the digitally sound and technologically advanced era, bank branches experience a massive number of customers barging in daily for services that is either possible at the click of a button; using Internet and Mobile Banking or be deferred for now. Although, the Covid-19 pandemic has significantly increased the number of customers using digital platforms for availing their banking product and services, a certain segment of customer base does not open-heartedly accept digital banking practices; maybe due to transaction security and safety issues or because of technical and educational barriers. The study also elaborates on the measures to reduce footfall in the SBI Bank branches and understand that why customer prefer to visit bank branch.

Key words: Footfall, Covid-19, Internet banking, Mobile Banking and Customer Segment.

### 1. Introduction

The State Bank of India (SBI) a Fortune 500 company is an Indian Multinational, Public Sector Banking and Financial services statutory body headquartered in Mumbai. The rich heritage and legacy of over 200 years, accredits SBI as the most trusted Bank by Indians through generations. SBI, the largest Indian Bank with 1/4th market share, serves over 44 crore customers through its vast network of over 22,000 branches, 58,500 ATMs, 66,000 BC outlets, with an undeterred focus on innovation, and customer centricity, which stems from the core values of the Bank - Service, Transparency, Ethics, Politeness and Sustainability.

The Bank has successfully diversified businesses through its 11 subsidiaries i.e., SBI General Insurance, SBI Life Insurance, SBI Mutual Fund, SBI Card, etc. It has spread its

presence globally and operates across time zones through 233 offices in 32 foreign countries. Growing with times, SBI continues to redefine banking in India, as it aims to offer responsible and sustainable Banking solutions.

- Vision: Be the bank of choice for a transforming India
- Mission: Committed to providing simple, responsive and innovative financial
- Values: Service, Transparency, Ethics, Politeness and sustainability.

SBI being largest Bank have lot of customer base who visit bank on regular basis to access banking services even in COVID-19 pandemic situation. This has given interest to researchers to study this research topic.

## 1.1 Research Objective

The study is guided by the following objectives:

- To understand the reasons of increased footfall in SBI Bank branches in Pune.
- To find methods to measure footfall in SBI Bank branches in Pune.
- To find measures to reduce footfall in SBI Bank branches in Pune.

## 1.2 Background of the study

In the past few years, competition in the banking and financial service industry has intensified because of advancement in technology, deregulation and entry of new competitors. The biggest asset for any bank is the knowledge of its customers and this knowledge can be used for their competitive advantage. The traditional banking distribution has been gradually supplemented by the emerging use of electronic banking. The fintech era has not only encouraged customers to use mobile and internet banking but has also resulted in reduction of mass in the branches and barriers to entry of new customers.

The purpose of the study is to understand the major reasons for high footfall in the SBI Bank branches and ways to reduce footfall. Being a public bank having the largest customer base, SBI focuses on satisfying each of its customers but it gets difficult when there are huge number of entrants in the branches creating chaos and developing a tense environment in the branches as nobody likes to stand in queues. This also results in heated arguments between the customers and staff at times. It is important for the customers to understand that the employees have their own limitations while operating on the bank's behalf, whereas the employees of the bank must also have a sense of empathy for

customers who are visiting the branch by taking out time from their busy routines. When a major portion of SBI Bank's customer base is captivated by senior citizens, it becomes very important for the staff to show the values of responsiveness and assurance while doing the banking transactions to ensure customer satisfaction. Reducing footfall in bank will not only minimise the average customer turnover time in the branches but will also ensure fast services.

Given the highly competitive nature of the financial sector, banks have a lot to gain by adopting new technologies of queue systems for banking. When people visit banks, they expect a high level of efficiency and professionalism. They want to get in, conduct whatever business they came for, and leave without any delays or hassles. In real life, this is hardly ever the case. With banking queue management systems, however, banks can manage to have access to the technologies they need to streamline their services and meet the highest standards that visitors expect from them. Banks can optimize the layout of the banking floor with our bank traffic counter, and make staff scheduling as efficient as possible. There are number of bank queue software that will help the banks to will boost customer satisfaction, increase conversion rates, and improve overall performance.

## 1.3 Research Question

- a) Why is footfall in SBI Bank branches increasing in Pune?
- b) What are the methods of measuring footfall in SBI Bank branches?
- c) What are the ways to reduce footfall in SBI Bank branches?
- d) What is the SBI Bank employee's perception on increasing footfall in the SBI Bank branches?

## 2. Conceptual Understanding

### 2.1 Key concepts

The study on Footfall measurement and ways to reduce footfall in State Bank of India (SBI) requires a clear understanding of some primary concepts. This section of the paper hence introduces the readers to some basic understanding of the key concepts which are discussed in the study.

#### 2.1.1 Footfall measurement

Footfall measurement or analysis is the use of analytic techniques to monitor waiting times in bank branch teller lines or lengths of waiting time to use automated teller machines (ATMs). Newer systems use fixed video cameras to track the movements of each visitor to the branch, with algorithms that compute individual and average waiting times. This entry refers to applications designed for collecting data, especially video-based, about customer wait times to measure and analyse traffic throughout the branch (Gartner Glossary, n.d.).

Need for Footfall measurement in banks:

- Demand Driven Staffing: Measuring customer foot traffic and dwell times enables banks to ensure the right number of staff are rostered at all times to service the right types of customers (BLIX, n.d.).
- Marketing ROI: Measure the performance of marketing campaigns on the buyer's journey for your banking customers.
- Analyse Branch Locations: Understand the walk by traffic beyond the front door of branches and walk by conversion rates.
- Improve Customer Experience: Monitor key customer experience metrics such as dwell times, bounce rates, loyalty and customer movement.

#### 2.1.2 Benefits of Footfall measurement to banks:

- Real-time occupancy: Know the number of people in the building at all times. This helps with staff deployment and management of resources (V-COUNT, n.d.).
- Peak hours: With the help of bank people counter, know the busiest hours hold the most potential for sales and customer conversion. Adequate preparation is key.
- Conversion rates: By comparing the number of visitors to the number of effective operations completed, banks can measure (and improve) their conversion rates.
- Benchmarking: Figure out the best performers in the chain. Strategies that worked at high-performing branches can be replicated at branches with poorer performances.
- Track visitor traffic/flow: Visitor flow shows how customers move around, which departments see the most traffic, and customer dwell time in each department.
- Improve floor layout: Visitor flow can be used to improve floor layout, increase accessibility, and reduce bottlenecks.
- Measure the effectiveness of new initiatives: Test the effectiveness of new marketing initiatives by monitoring visitor traffic to the related departments.
- Improve customer satisfaction: Improve customer satisfaction by cutting out queues and reducing wait lines on the banking floor and at customer service desks by using bank queue software.
- Optimize staff scheduling: Deploy more

staff during peak periods to improve staff-customer ratio.

- Increase effective operations: shorter queues and optimal staffing translate to more effective operations completed per visit.

#### 4. Research Methodology

##### Problem statement

The banking industry is performing exceptionally well in terms of ensuring seamless customer experience. The SBI Bank has also come up with number of advancements like mobile banking, internet banking, YONO, banking kiosk, etc. Even after being provided with such services at “one-click”, customers of SBI Bank (in Pune branches) tend to visit the branches for avail such products or services. The traffic of customers even during the pandemic phase was as much as on regular working days, whereas, many branches in Pune experienced a higher footfall during this phase. This increased footfall in the branches result in queue of customers leading to higher average customer’s time turnover in branches and increased pressure for performance on employees along with the responsibility for catering to customer’s need and expectations. The study aims to identify the reason for this increased footfall in the SBI Bank’s Pune branches and various ways to reduce it.

##### 5. Data collection

Data collection and empirical context refer to the overall strategy that you choose to integrate the different components of the study in a coherently and logically, thereby, ensuring you will effectively address the research objective, it constitutes the blueprint for the collection, measurement, and analysis of data. The descriptive research was carried out to measure

footfall in SBI Bank. For the purpose of research primary as well as secondary data is collected. Primary data is collected by formulation of questionnaire. Secondary data is collected from websites, published articles, research papers and various reports.

##### Population and sample area

The population of a study refers to a specific group of the units such as individuals, households, organizations, and similar that are targeted for definite study. For the study, 396 customers of SBI Bank of Pune city in India were identified.

##### Sample method and sample size

The Probability sampling method was used for collecting data for this study. Under this sampling procedure, simple random sampling procedure was adopted for this research. The sample size of the study as per the researcher’s ability is 396 customer. The primary data is collected through a set of questionnaires. The respondents are asked to give their opinion relating to the various and factors resulting in their visit to any SBI Bank branch. The first part of the questionnaire comprises demographic variables with optional questions and the second part comprises footfall related factors, feedbacks and measures.

##### Question design

The primary data is collected through the questionnaire method. The respondents i.e., SBI Bank’s customers were asked to give their opinion relating to the basic banking operations, efficiency of bank kiosk and other available facility in SBI Bank.

##### Measurements of variable and statistical methods

After collecting the data, questionnaires were checked for completeness. The Likert scale was used for rating responses. Each testimonial is

measured by 5- point Likert scale: 1= strongly disagree; 2=Disagree; 3=Neutral; 4= Agree; 5=strongly agree. Further, the interpretation was made with the help of excel are given in the next section.

- 4. Data Analysis & Interpretation
  - Age Distribution

The age distribution of the respondents is illustrated in Table 4.1. We can see that the section. majority of respondents belongs to 37.62 % and 29.29 % belongs to 46-55 years and 36-45 years age category. This implies that a lot of middle-aged people are customers of the banks and are using their products and services regularly. The respondents belonging to other categories are given as follows:

▪ **Table 4.1: Age Distribution of the Respondents**

• Age Groups	• No. of Respondents	• % Of Total
• Below 25 Years	• 32	• 08.08%
• 25 - 35 Years	• 57	• 14.39%
• 36 - 45 Years	• 116	• 29.29%
• 46 - 55 Years	• 149	• 37.62%
• 55 Years & above	• 42	• 10.60%

- Gender Composition

The gender composition of the respondents was 35.50% Female and 64.50% Male. This shows that even females are empowered enough to independently avail the banking services. It also eliminates the stereotypes that a whole family would rely on a single (family) account, frequently with a name of a male in the family. Contrary to this, nowadays people even started to open their children’s accounts when they are minors, just a habit of saving for their children’s future.

- Educational Qualification

Talking about the highest educational qualifications of the respondents, the majority of the respondents 46.96% belongs to the Graduate category. Literacy plays a vital role in developing one’s personality; an educated individual is more likely to avail the banking services and products. The respondents categorized as per their highest educational qualification are given in Table 4.2.

•Table 4.2: Educational Qualification of the Respondents

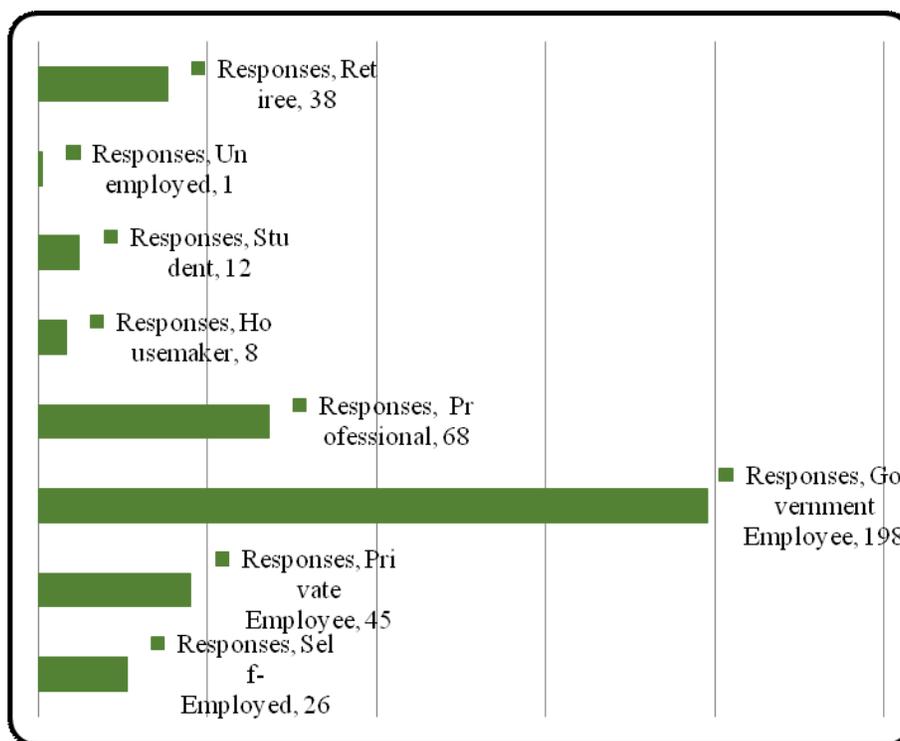
• Educational Qualification	• No. of Respondents	• % Of Total
• HSC/SSC	• 15	• 03.78%
• Under Graduate	• 25	• 06.31%
• Graduate	• 186	• 46.96%
• Post Graduate	• 124	• 31.31%
• Diploma	• 14	• 03.53%
• Professional	• 32	• 8.08%

• Employment Status (Occupation)

Considering the employment status of the respondents given in Graph 4.1, it shows that out of 396 respondents, 40.75% are Government employees, 24.5% are salaried and working in

the private sector and 9.25% are retiree. The number of working class customers, both private and government employees have their company's salary accounts with SBI Bank. The other occupation streams of the respondents are given as follows:

**Graph 4.1: Employment Status**



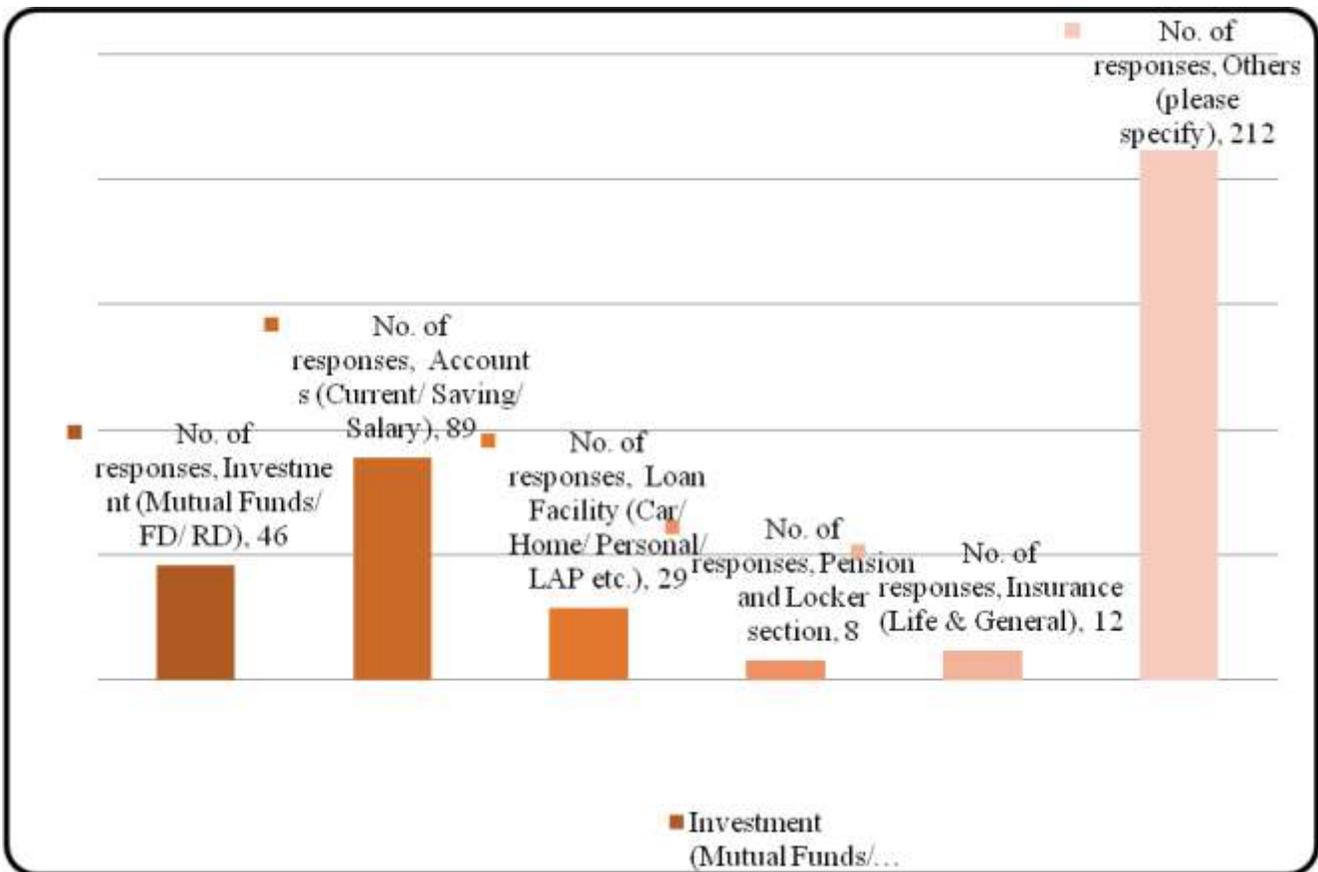
- Marital Status**

Talking about the marital status of the respondents, 73.50% said they were married, 24% were unmarried and the rest 2.50% belong to the others category.
- Nature of recent transactions**

When asked about the nature of recent transactions, customers responded as per the given Graph 4.2. It can be interpreted that out of 396 respondents, 46 have done

investment in the form of mutual fund, FD, RD, 89 have opened accounts like saving and current with the bank. 29 respondents came for loan related enquiry, 8 visited for locker and pension related issues and rest of the customers visited the branch for other work like KYC updating, linking PAN, passbook printing, requesting a credit/ debit card, filing complaints relating to online transactions, auto-deduction service, account closure, debit/credit card related queries etc

Graph 4.2: Nature of recent transaction



- Frequency of visiting the bank branch**

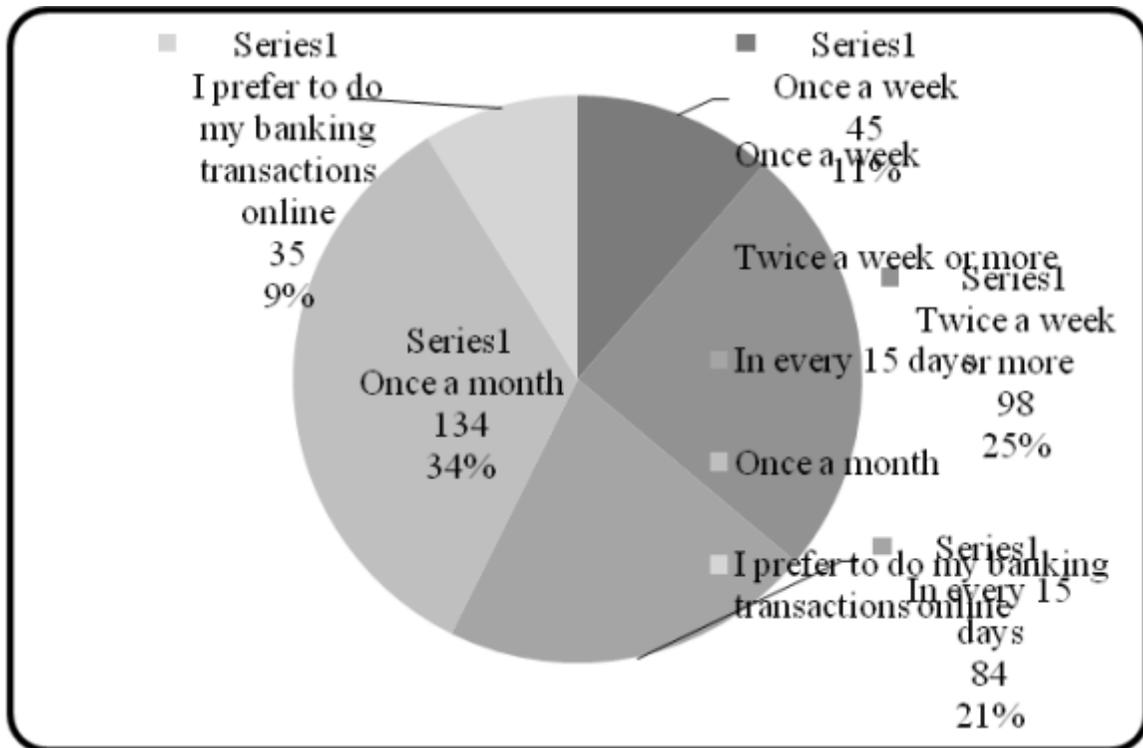
When the customers were asked about their frequency of visiting the branch, out of 396 respondents, 45 said they visit the branch once a week, 98 said they visit

twice, 84 said they visit in every 15 days, 134 said once a month and the remaining 35 customers prefer doing online transactions, as shown in Graph 4. 3. It was found that out of these customers who tend

to visit the branches just for the update on their cheque clearance, account balance

check, passbook printing or even for the status of their NEFT or RTGS transactions

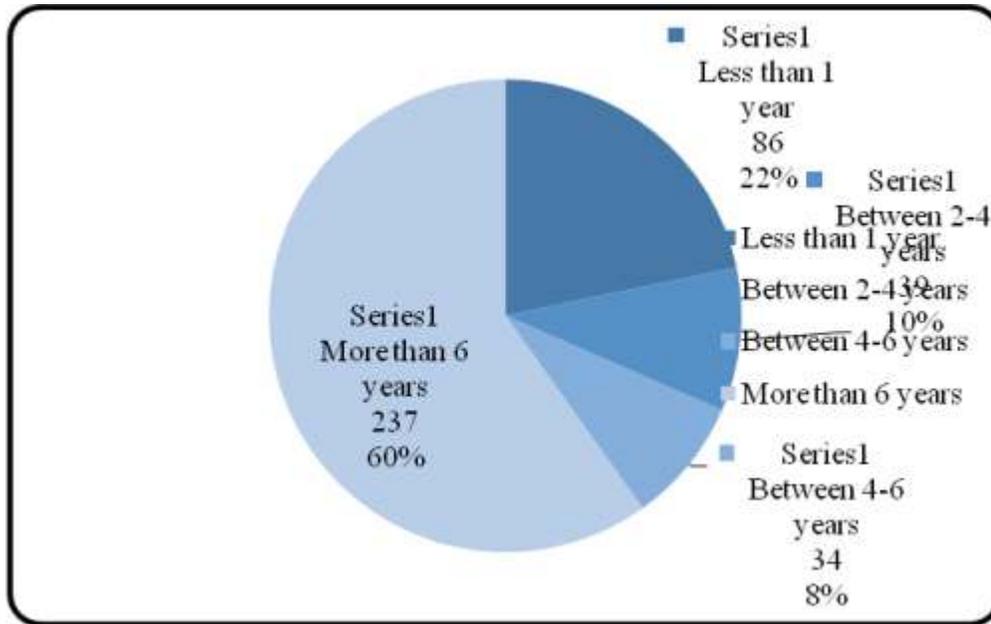
Graph 4.3: Frequency of visiting the branch



- Years of association

After talking to the customers about their years of association with the SBI Bank it can be concluded that out of 396 respondents collected, 86 are associated for less than a year, 39 are associated for tenure between 2-4 years, 34 are customers to the bank for a period between 4-6 years and 257 are availing services for more than

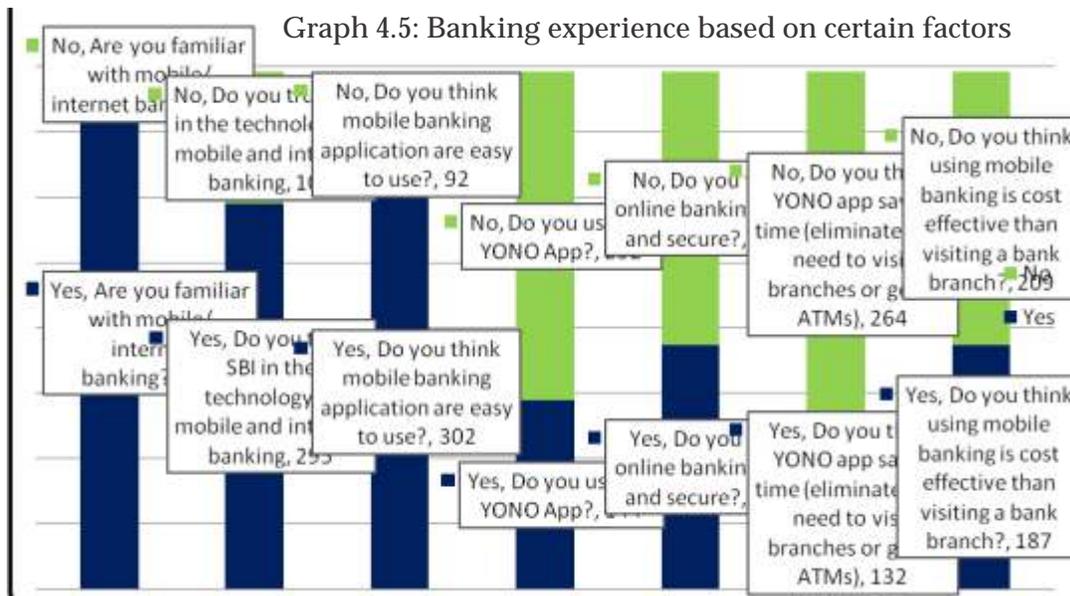
6 years as shown in Graph 4.4. This data reflects that the maximum number of customers in Pune branches is banking with SBI Bank from a quite long course of time. It also indicates that somewhere the customers are satisfied with the overall services and products offered by the bank; else, they would've shifted to other banks during this term of 6-long years.



- Answer the questions based on your banking experience with SBI Bank

When the customers were asked to answer the questions based on their banking experience, their responses are shown in Graph 4.5. From the graph given below, it can be concluded that majority of the customers are availing mobile banking services but most of them do not feel secure and safe in doing online

transaction. This can be because of their need of personal touch and their habit of visiting bank branches regularly. Another reason can be lack of proper guidance; customers are hesitant to use platforms like YONO and internet banking because they are not thoroughly guided through the procedure which raises doubts and queries in their mind related to the transparency, security and safety of the transactions.



- YONO application awareness
 

The introduction of YONO application by SBI Bank primarily focused on making banking easy for their customers. YONO provides a variety of functions which a customer can now perform even from their mobile phones, hassle-free without visiting any branch. But the challenges which here arise are the awareness about the functions which the YONO application possess. When asked about the application's certain features, customers responded in a surprising manner as shown in. Graph 4.6. The majority of customers are unaware about the various features and functions of YONO application, this is the reason why some of the specific banks in Pune have dedicated YONO kiosk to educate customers and increase their awareness in the right direction.
- g) Primary reason to visit the bank branch
 

From the graph given below, it can be concluded that the maximum number of customer visit branch either for

withdrawal or deposits on daily basis (for business related work), other reasons for which customer come to branch are saving/current account related enquiries, balance check or availing loan service, passbook printing, etc. as given in Graph 4.7. The point which is to be highlighted here is that even though after having number of cash deposit machines at various ATMs and strategically located branches, majority of customer walk-in to the branch for availing this facility. During the study it was found that many of these cash deposit machines and other banking machines like passbook printing etc. are not in proper working conditions. This therefore results in higher than usual traffic inside the branches when customers enter the branch for availing services which can be easily availed with the help of banking kiosk. Similarly, loans and accounts can also be opened and availed through the YONO platform but due to lack of proper guidance customers end up in the branches for availing these products or services.

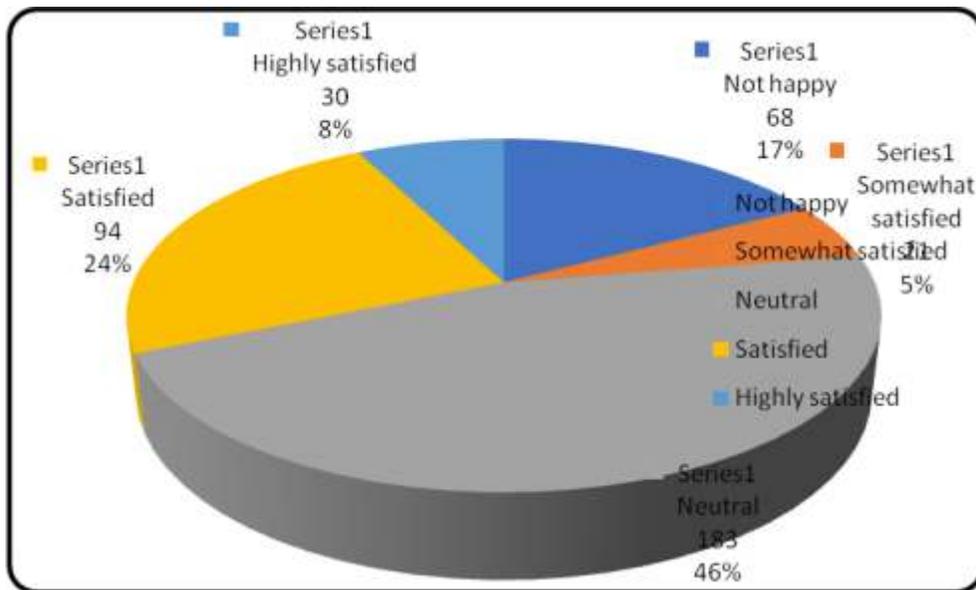


- Rate your overall banking experience with SBI Bank

The customers were asked to rate their overall banking experience with SBI Bank by keeping in mind all the service dimensions and range of products offered by the bank on the scale of 1 to 5 where 5 means Highly Satisfied. Their responses are shown in Graph 4.9. It can be interpreted that there are majority of customers i.e., 183, who have a neutral response in terms of rating the overall satisfaction in banking with SBI Bank

branches in Pune. This may be due to their positive and somewhat unlikely experiences with various products or services offered by the bank; for example: a customer is happy with his loan account but is facing trouble whenever he visits the branch for passbook printing because of non-functioning printing kiosk, then, he has wait in line or take a token to do so. In such a scenario the employees must provide a proper guidance to the customer and make his aware about the facilities of YONO app for their own convenience.

Graph 4.9: Overall banking experience with SBI



5. Observation

After visiting the number of SBI Bank branches across Pune, Researchers have observed that some of the major reasons why customers usually visit a SBI bank branches are given as follows:

- Opening and checking their account status
- Make a deposit or withdrawal
- Enquire about a Loan
- Apply for debit/ credit cards

- For Interest certificates
- Pay Bills
- Lower Facility
- Passbook printing
- Enquire about investment products
- Cheque deposit and status check
- Account closure and nomination related formalities etc.

Other than these obvious banking service and product related reason; customers also tend to

visit the branches out of a habit. Senior citizens and businessmen usually like to do their bank related work by going to certain branches on one-to-one basis, this not only ensures their transaction's success but has also become a part of their day-to-day routine work.

Another observation is that customers like to keep human connection. Even today, some people don't believe in online and digital transactions due to safety and security reasons and generally the mass visiting the Pune SBI branches have a majority of senior citizens, who are more resilient towards the use of technology wherever the money related matters are concerned.

The customers expect the bank staff to pay individual attention to them. Their basic requirement is to be heard and handled in a responsive manner, which are properly catered by majority of Bank employees. Customers use to sit back and wait for the employees to get free just in order to talk and keep a check on them out of respect and love.

Talking about the YONO application, it has almost every banking feature which a normal bank branch offers. The customers are unaware about many of its functions and features. This becomes a challenge for the bank because the mass visiting the bank can avail the same service or product by sitting at their homes and following their usual routine. This unawareness promotes footfall in the bank branches and ultimately leads to increased pressure on the employees and increased average time taken by employees to get the customer's work done.

YONO also provides traditional mobile banking facilities, such as opening bank accounts, transferring money, cashless bill transfers, and loans as well as card-less ATM withdrawals can be rendered using the app's YONO cash facility. This facility allows customer to withdraw a

minimum of Rs.500 and maximum of Rs.10, 000 in a single transaction. Along with it now customers are also provided with the ease of adding beneficiary, making nominations, making fixed deposits and avail services from all State Bank bodies; Insurance, Mutual Funds, Investment etc. Other than the banking services, YONO has also covered all their customer needs like grocery, electronics, booking tickets and hotels etc. The app also has a smart spend analysis facility, wherein a summary of customer's expenses pattern is generated.

Even many large branches in Pune also have a separate YONO Kiosk dedicated to assist and educate customers to use the YONO application for any kind of product or service. This kiosk also handles and rectifies the issue related to YONO application's functioning.

Similarly, SBI has also come up with token system but customers who need their passbooks printed, check account statements, etc., also wait in the queue. This unnecessary gathering also contributes in increased footfall in the branches. Although there is another facility provided by SBI Bank, called the No Queue application, wherein customers can avail tokens via their mobile phone and get updates on when is their turn scheduled. This feature not only reduces the footfall but also saves the customer's time but is not utilized because of the unawareness amongst the customers. The SBI bank also extends its products or services like cash pickup and delivery, cheque pickup and delivery, KYC documents pickup etc. with the doorstep banking facility by charging a certain fee/charges. Similarly, about 112 customer service points have also been set up in the city for the ease of customers. They are the agents or representative of the bank and operate as mini banks and offer limited banking services relating to withdraws and deposits.

The eligibility for availing this SBI doorstep banking facility include:

- Senior Citizens of more than 70 years of age and differently-abled or infirm Persons (Having medically certified chronic illness or disability) including those who are visually impaired.
- Fully KYC compliant account holders
- Valid Mobile Number should be registered with the account
- Single account holders and Joint Account Holders with Either or Survivor/ Former or Survivor.

The facility is not available for:

- Accounts operated jointly.
- Minor Accounts.
- Accounts of Non-Personal nature.
- Customers having registered address within a radius of 5 KMs from the Home Branch

The various services included in the SBI's doorstep banking are:

1. Cash pickup
2. Cash delivery
3. Cheque pickup
4. Cheque requisition Slip pickup
5. Form 15H pickup
6. Delivery of Drafts
7. Delivery of Term Deposit Advice
8. Life Certificate Pickup
9. KYC documents pickup

Registration for doorstep facility: The registration for Doorstep Banking (DSB) Services should be done at the home branch. The amount of cash withdrawal and cash deposit is restricted

to Rs. 20,000 per transaction per day. The service charges per visit for non-financial transactions are Rs. 60+GST and Rs. 100+GST for financial transactions.

As per the observations, it can be concluded that majority of people still don't avail SBI's doorstep banking facility because:

- Lack of customer awareness: Majority of customers still do not know about the doorstep banking facility. Since, the information is available only available of the website, it is noticed that many customers still do not frequently visit the website, frequently.
- Fear of safety and security: Many of the customers who belong to the senior citizen category are still hesitant to do banking with the help of a banking representative, because of the safety and security concern. Many individuals still rely only on themselves or their trustworthy family /staff members to do money related banking transactions. This often becomes a constraint for doorstep banking initiative.
- Eligibility: The facility is available for single/ individual account holders and Joint Account Holders with Either or Survivor/ Former or Survivor. For any account operated jointly doorstep banking facility is not useful.
- Availability: The facility is restricted to the registered address within a radius of 5 Kilometers from the Home Branch radius only. It is available in urban areas only and also at selected branches. It will definitely attract a greater number of customers if the facility is extended by variety of branches.
- Limitations: Many customers don't prefer the facility due to applicable charges. They think why to pay for a service which can be

availed by visiting a branch itself! Also, the SBI doorstep banking services are provided to those who register for the said services at the home branch. It has been observed in majority of cases that the customers have their home branches away from their place of residence. It becomes impossible for customers those who live far away from their home branches, in different area, city or even countries.

## 6. Findings of the Study

It can be observed that the maximum number of respondents are middle-aged and are associated with the bank for a period of more than 6 years. The maximum number of customers visit the branches for account related work like balance check, passbook printing, interest certificates, nomination related work, fund transfer, cash deposit and withdrawal etc. The bank has also set up kiosk and machines for facilitating the ease of banking and minimizing the average footfall turnover of customer in a bank branch, but still there are about 50 walk-ins in the branch everyday just for passbook updating and printing. Talking about the peak in walk-ins, usually the traffic is higher than usual on the first two working days i.e., Monday and Tuesday. Higher traffic is also observed post long-weekends (after 2nd and 4th weekends). The bank branch also experiences a large mass during morning 11am to pre-lunch 1:30 pm – 2 pm, depending branch-to-branch. Although, it has been observed that majority of these machines are not in operating conditions. Hence, bank must pay attention that all these banking kiosks are properly functioning, resulting in minimizing the traffic inside the branches.

As of researchers observations majority of customers visit the bank branches for availing services which can be done via the YONO app.

This becomes a challenge for the bank as people are not aware about the overall dynamic features of the application. When asked about their level of awareness, except the usual services like opening accounts, checking balance, money transfer, requesting cheque book, changing debit/credit card PINs, etc., customers were not aware of the other facilities which the YONO app can provide. This leads to an increased footfall in the branches. Although, some customers who are aware of the facility also try to avoid using them and visit the branches for doing their banking activities, this may be due to a mere habit of visiting a branch, a need for human interaction or a surety of successful transaction. The majority of customers feel that a better and improved user interface will motivate more customers to avail mobile banking services.

Also, it has been observed that for some customers using mobile and technology is overwhelming at times; maybe due to knowledge barriers or resistance to technology, hence, there is a need to provide assistance and help, this emerges as another reason for customers to visit branches. The customers coming inside the branch usually gather at the very first counter they see for resolving their issues. Then, the employee at that desk has to redirect them to other counters based on their needs. Although, the branches have sufficient hoardings and boards directing to specific counters like service manager, cashier, PPF, loan department, YONO section etc. It has also been noticed that the helping hands and even the security guards at some branches are polite and kind enough to assist the customers. A simpler and easier to comprehend directions must be written for customers, so rather than wasting their time on the wrong counters, they are directed to the right counter initially.

Other than the increasing awareness about YONO and YONO Lite application, it is

important to make the customers aware about facilities like NO Queue app. The token system has very specifically addressed the issue of queue management as customers are lined up in a sequence. This issue can be more easily addressed if customers start using NO queue app, as they will be able to receive their token numbers from anywhere without even visiting the bank branches. Similarly, the scope of customer service points must also be gradually developed for various other banking transactions. The doorstep facility also proves to benefit customers as they're getting all the necessary services at their home, hassle-free.

Many of the employees have also shared their mobile numbers with old and trusted customers. These customers tend to give calls to the employees for minute queries and assistance like checking account balance, get their statements printed before they visit the branches etc., hence, at times even the employees regret sharing their contact details. Maybe a certain counter in the bank branch, especially dedicated to assist the customers calling to the specific branches would help to improve the situation.

The bank staff even stated that even the climatic conditions, natural disasters and calamities like COVID-19 pandemic has not cease customers from visiting the branches. The bank staff as well as the customers followed the SOPs very strictly during these tough times. Hence, it is clear that even during the era of techno-driven banking operations, a physical branch location still plays a very vital touch point in the consumer's journey and helps the bank in retention of costumers.

#### 7. Recommendation & Limitations of the Study

- Digital Footfall: The SBI Bank must focus on attracting digital footfall which will

automatically eliminate the mass entering the bank branches. This can be easily done with the help of YONO application but many customers have faced issues in their transactions due to server and technical issues, hence, such technicalities must be taken care of.

- Queue Management: There is a large queue waiting for their turn to come after collecting the tokens from the token machine. This unnecessary mass can be eliminated if people are more aware of the NO Queue facility provided by the SBI Bank, wherein the customer can access the status of their turn through their mobile phones.
- Use of YONO: The minute banking services which can be done via the applications are also availed by the customers from the bank branch. For this purpose, banks can arrange a different set of manpower to assist the customer specifically with the YONO transactions only. This will not only reduce the average time taken by a customer in the branch but will also reduce the unnecessary pressure on the staff.
- Bank Kiosk: The major crowd barging in daily in any branch majorly includes people coming for passbook printing and account status. This can be easily done using the passbook printing kiosk. But it has been observed that the kiosk is not in working condition in some or the other branch. SBI Bank has come up with much technological assistance for their customer's seamless banking experience like passbook printing kiosk, cash deposit machine, token machine, ATMs, etc., but in order to reduce and manage footfall in the branches all these facilities must be in proper working condition.

- **Financial Education:** Branches can include separate space for financial education and awareness sessions as well as trained staff to offer training to the customers. These sessions must not only make the customers aware about the financial products or services but also regarding the functioning of internet banking, mobile banking and applications like NO Queue. This might have some limitations as it can become challenging to train the elderly customers.
- **Branch Interior:** As per my observation, the interior of any bank branch also plays an important role in managing footfall. A branch having all the machines in the front has comparatively less footfall as compared to the one in which customers have to travel inside for operating these machines. Banks can also optimize their floor planning with the help of traffic counter software, making the staff scheduling more efficient.
- **Increasing workforce:** Since the bank has largest customer base; the traffic in the branches is also relatively higher than other competing banks. In such a scenario when there is absenteeism of employee or the number of employees in the bank branches is insufficient to handle the crowd it becomes disappointing for the customers and results in large queue on the desk of some employees. Hence, the bank must focus on increasing their manpower in order to efficiently address their customer's requirements.
- **Appointment visits:** Customers can take prior appointments with their Relationship Managers for resolving certain issues and availing services. This will not only make it easy for the employees to cater to single customer at a time by paying individualized attention but also in reducing the footfall in branches. This cannot be done across all the branches at one single time because some branches are larger than others in terms of infrastructure and customer base.
- **Proper directions:** while entering in any branch the customers tend to visit the very first counter which comes in their sight, rather than looking at the directions and counter numbers written in the branches. This result in making a huge queue in front of one single desk and the employee sitting at that counter have to direct the costumers to other counters, making the customers frustrated because of waiting in queue and asking them to go at different counters to avail services and resolve issues.
- **Phone assistance in branches:** Since a lot many customers call different employees on their personal mobile numbers, to resolve this issuea certain counter in the bank branch, especially dedicated to assist the customers calling to the specific branches would help to improve the situation. Although the bank has appointed several phone bankers but the customers are able to connect to them via the toll-free or customer care numbers only. But an in-branch phone banker will be available whenever the customer dial's any bank branch's telephone number.
- **Increased awareness about doorstep banking facility:** Employees have to tell their customers and make them more aware about this facility. Many of the branches did not have any kinds of poster/banner/information note relating to the doorstep banking facility. Hence,

customers, especially those belonging to the senior citizen category must be assured regarding the safety and security of banking transactions done with the doorstep facility. Customer's attention must be drawn to the fact that they're paying nominal service charges, which are equivalent to the petrol charges which their vehicle is consuming while coming to the bank branch or the fare they pay to the cab/auto drivers while visiting the bank branch. They must be informed that the facility is only for ensuring their ease of banking with SBI; this will definitely attract more customers. Further, the eligibility for the service must be updated as it is not available for accounts of non-personal nature and minor accounts and also has various restrictions on withdrawals.

#### Limitation of the study

- The study is conducted during the COVID-19 pandemic phase; hence, the responses are limited and geographically concentrated.
- The study is primarily conducted in the city of Pune; hence, the responses are demographically limited.
- Customers are reluctant to answer the questionnaire as they hesitate to share information.

#### 8. Conclusion

The State Bank of India have introduced number of initiatives to make banking experience seamlessly easy and satisfying for their customers. From internet banking to YONO and No Queue applications, SBI has yet again

proved that it's the people's bank. After all this still the customers visit the bank even for minute bank related work resulting in increased footfall. Out of SBI's vast customer base a major portion is captivated by senior citizens. They do not feel digital banking convenient for themselves and human interaction is crucial for them in doing money related transactions. They do not rely on technology completely; there is a sense of insecurity while they are asked to do any technologically assisted task. There is also a need for making awareness amongst the customers regarding the features of the digital applications. Those customers who are technologically sound must try and adopt more of digital banking services.

The banks are most crowded during the first two days of the week i.e., Monday and Tuesday, especially after festivals or long-weekends. The peak banking hours are 10:30 am to 1:30 pm – 2 pm, depending on the lunch timings of different branches as the customers tend to visit the bank while leaving for their respective jobs or maybe during their break timings. In case customers need to interact and have a deep insight on a certain product or service the staff specifically asks them to visit on Saturdays due to less footfall as many customers are confused whether the bank is operating on Saturdays (second and fourth Saturdays being holidays). Talking about the monthly view, usually the first and the fourth week has more footfall as observed as the pensions and salaries of many customers are credited during this period.

For reducing footfall and waiting time in branches can upgrade their token system facility and make No Queue application mandatory. In this way, customers will enter the branches only when they get notified about their turn through SMS alerts or status check on the application. In other words, bank can focus on implementing an appointment-based banking system. This

measure will make the customers feel prioritized; they will feel that the bank respects their time and emotions. In order to reduce the queue and minimize footfall the analog system on which banking relies i.e., physical waiting lines must be eliminated. Furthermore, the use of YONO application must be done, this is possible only when more and more customers are financially literate, aware about the functioning of YONO and have a service-center approach towards banking.

Similarly, the extended banking facilities of doorstep banking and customer service points are also very successful in engaging the customers. Although, they both have a relatively less scope; not every customer is aware about the doorstep banking facility or they are not willing to pay service charges, likewise, the customer service points also engage the customers by extending major services like withdrawals or deposits. If handled properly, they can effectively help to address the issue of increasing footfall in the bank branches to some extent.

Another observation made so far is that the ratio of employees to customers in the bank is relatively low, this many a times emerges as an issue and results in longer waiting queues at single counters of limited employees. Customers if properly trained can also use the digital kiosks at the banks for fulfilling their purpose in the banks. Unless the issue is huge enough it must not be taken to the staff. This will ensure an improved complaint redressal mechanism in the bank. Implementation of proper direction systems must be developed to ensure that the customers are properly directed to the right counter as soon as they step-in. The overall bank branch interior also plays a vital role in deciding the customer's banking experience. Placing all the bank kiosk at the front will definitely attract more footfalls

resulting in decreased footfall inside the bank branches.

#### References

- BLIX. (n.d.). Banking Footfall Analytics. Retrieved from BLIX : <https://www.getblix.com/banking-footfall-analytics>
- Gartner Glossary. (n.d.). Information Technology Gartner Glossary - Footfall Analysis. Retrieved from Gartner: <https://www.gartner.com/en/information-technology/glossary/footfall-analysis>
- V-COUNT. (n.d.). Banks. Retrieved from V - C O U N T : <https://v-count.com/industries/bank/>

#### Appendix

##### List of graphs

Graph no.	Name of the Graph
4.1	Employment status
4.2	Nature of recent transactions
4.3	Frequency of visiting the bank branches
4.4	Years of association
4.5	Banking experience based on certain factors
4.6	YONO application awareness
4.7	Primary reasons to visit bank branches
4.8	Motivation to adopt Mobile Banking
4.9	Overall banking experience with SBI Bank

List of tables

Table no.	Name of the table
4.1	Age Distribution of the respondents
4.2	Educational Qualification of the respondents

Questionnaire

“A study on Footfall measurement and ways to reduce customer footfall in SBI bank branches”

I am Ajay Ramchandani of Institute of Management and Entrepreneurship Development (IMED), Bharati Vidyapeeth Deemed University (BVDU), Pune, pursuing MBA (with a specialization in Finance & IT) is conducting a study on Footfall measurement and ways to reduce customer footfall in SBI bank branches. Your participation by responding to the following questions will prove to be a great support.

1. Name: \_\_\_\_\_
2. Gender:  
 Male      Female      Prefer not to say
3. Name of the Home Branch:  
 \_\_\_\_\_
4. Age:  
 Below 25 Years  
 25 - 35 Years  
 36 - 45 Years  
 46 - 55 Years  
 55 Years & above
5. Marital Status:  
 Unmarried      Married      Others

6. Occupation:  
 Self-Employed  
 Private Employee  
 Government Employee  
 Professional  
 Housemaker  
 Student  
 Unemployed  
 Retiree
7. Nature of your recent transaction with the bank:  
 Investment (Mutual Funds/ FD/ RD)  
 Accounts (Current/ Saving/ Salary)  
 Loan Facility (Car/ Home/ Personal/ LAP etc.)  
 Pension and Locker section  
 Insurance (Life & General)  
 Others (please specify): \_\_\_\_\_
8. Your years of association with SBI:  
 Less than 1 year  
 Between 2-4 years  
 Between 4-6 years  
 More than 6 years
9. How frequently do you visit the bank branch?  
 Once a week  
 Twice a week or more  
 In every 15 days  
 Once a month  
 I prefer to do my banking transactions online.

10. Please answer the following questions:

	Yes	No
Are you familiar with mobile/ internet banking?		
Do you trust SBI in the technology of mobile and internet banking		
Do you think mobile banking application are easy to use?		
Do you use the YONO App?		
Do you find online banking safe and secure?		
Do you think YONO app saves time (eliminates the need to visit branches or go to ATMs)		
Do you think using mobile banking is cost effective than visiting a bank branch?		

11. Please answer the following questions with regards to the YONO application based on your level of awareness:

	Yes	No
Did you know cash withdrawal can be done without ATM card?		
Did you know account balance and statement can be viewed from your YONO App?		
Did you know you can pay utility bills, book tickets and hotels using your YONO App?		
Did you know you can open FD/RD accounts, check their status and change maturity instructions as well as avail pre - closure facility using YONO App?		
Did you know you can make account nominations with the YONO App?		
Did you know you can change the debit/ credit card pins using YONO App?		
Did you know you can transfer your bank account from one branch to another using YONO App?		
Did you know you can v erify your KYC and request a new cheque book using the YONO App?		
Did you know you can check your dispute status using YONO App?		
Did you know you can do the TDS enquiry using your YONO App?		

12. Which of the following best describes your “primary” reason for visiting the bank?  
(Kindly tick all the appropriate options)

Applying for a loan	
Opening Savings/ Current account	
Enquiry/research regarding Interest rates	
Cheque deposit	
Cash withdrawal or deposit	
Enroll in mobile/ internet banking	
Life certificate submission	
Account closing	
Account transfer	
Learn about bank’s products and services	
Verification of KYC	
TDS and Challan enquiry	
PPF enquiry and Interest certificate	
Passbook printing/ updating	
Applying for a Debit/Credit card	

Other reasons: \_\_\_\_\_

If other, please specify \_\_\_\_\_

13. What will help or motivate you to adopt or make use of the mobile banking application? (Please tick all the appropriate options)

Improved user interface

Increased awareness

Free demo by the bank

Reduced risk involved in transactions

14. How will you rate your overall satisfaction on the banking experience with SBI (on the scale of 1 to 5, where 5 means highly satisfied):

1    2    3    4    5

15. What would you like to suggest for improving your banking experience with SBI Bank?

# Web Based ICT Initiative for Indian Agriculture

Ms. Sangeeta Patil  
Assistant Professor,  
BVDU,IMED,Pune,

Ms. Sheetal Desarda  
Research Scholar,  
BVDU,IMED,Pune,

Ms. Zoya TalatSiddiqi  
Student, BVDU,  
IMED,Pune,

## ABSTRACT

Agriculture is an important sector of Indian economy. Around 70% of the Indian population relies on agriculture. Indian farmers face many challenges in their day-to-day life. Those who can't face these bravely; get disappointed, debt-burdened & commit suicide. Farmer suicides account for 11.2% of total suicides in India. It is essential to change this scenario of Indian agriculture.

ICT (Information & Communication technology) comes up with solutions to some of the challenges faced by farmers. It mainly includes internet, wireless networks, cell phones & other communication media.

There are several web-based projects which provide useful information such as farming practices, weather forecast, quality seeds etc. Farmers can avoid intermediaries & directly reach consumers with the help of these web projects.

We are going to study some of these web projects in this paper. This paper highlights the use of projects to the farmers & importance of them. These have changed Indian farmers' lives & more such initiatives are needed to boost agriculture in India.

## Introduction

### Agriculture:-

Agriculture sector is the identity of India. It is an important sector of economy as it contributes around 17% to the total GDP & provides employment to over 60% of the population. Still, India has the largest population of hunger in the world. Surprisingly, India produces enough food to feed its population. However, it doesn't reach to the needy ones.

So, in this situation, farmer empowerment is necessary. Farmers should be able to be in direct touch with the consumers. They should know the current trends & farming practices. For this purpose, ICT plays an important role.

### ICT:-

'ICT' stands for information & communication technology. ICT refers to the technologies that provide access to information through telecommunication. It mainly includes the internet, wireless networks, cell phones & other communication mediums.

### ICT in Agriculture:-

ICT can be a boon to agriculture. There are various ICT initiatives taken to help farmers. There are some web based projects which help farmers in gaining market information, weather information, updated knowledge on farming practices etc. Farmers can also sell their produce through these portals. We will study

some of the most important web projects & their functions in this paper.

#### Challenges before farmers

- Less no. of agri-commerce sites  
Commercialization of agri produce is important in India. We have e-commerce sites in abundance. We need more no. of agri-commerce sites to give justice to produce by Indian farmers & supply them quality material.
- Poverty among farmers  
Most of the farmers in India are poor. While the prices of crops have been pushed down - often even below the cost of production - the prices of inputs such as seed, fertilizers and pesticides have gone up. With limited resources, farmers depend on borrowed money to purchase seeds and other inputs and to farm their land. A drop in their farm income could quickly lead to farmers owing more than they own.
- Poor quality seeds  
Most of the times farmers get poor quality material. Then their yield is also of poor quality. So, it becomes a circle & farmers remain poor.
- Lack of advisory services  
Most of the rural farmers are uneducated. They need advice on farming practices. In India, As compared to total population of the farmers, there is deficiency of advisory service providers. Those who provide; they fail to provide timely services.
- Unawareness with regard to natural calamities & future problems  
Unseasonal showers affect cereal and vegetable crops in several parts of the country. Most of the times, farmers are unaware of the natural calamity in the near

future. Use of technology for weather forecasting & disaster management is a must.

- Inadequate information about sales & distribution  
For many years, farmers in India have had little freedom in choosing markets and buyers for their produce. Most of the states in the country, mandate that marketing and selling of farm produce must be routed through state-owned mandis, retail markets where middlemen squeeze farmers to increase margins.
- Lack of relevant & updated content  
Farmers should be aware about new farming practices & current technology used for farming. Most of the Indian farmers are not aware about these farming practices. Due to these, they generate losses.

#### Existing web based ICT efforts to help farmers

1. Gyandoot  
Gyandoot is an intranet in Dhar district connecting rural cybercafes catering to the everyday needs of the masses. The Dhar district in central India has a population of 1.7 million; 60% live below the poverty line. The goal of the Gyandoot project has been to establish community-owned, technologically innovative and sustainable information kiosks in poverty stricken, tribal dominated rural areas of MP.  
The Gyandoot project is launched by government on January 1, 2000 at Dhar district. Villages that function as Block headquarters or hold the weekly markets in tribal areas or are located on major roads (e.g., bus stops) were chosen for

establishing the kiosks. There are total 31 kiosk are working for information delivery. Each kiosk caters to about 25 to 30 villages. The entire network of 31 kiosks covers 311 Panchayats, over 600 villages and a population of around half a million (nearly 50% of the entire district). Gyandoot project provides services to farmer on paid mode. Following Services offered at the kiosks:

- Information about mandi prices.
- Copies of Land Records
- On-line Registration of Applications
- On-line Public Grievance Redress
- Village auction site
- Information regarding government programs
- A forum for school children to ask questions
- On-line matrimonial advertisements
- Email, STD-PCO, photocopier (provided only at some kiosks)

## 2. aAQUA

AQUA ('A'll 'QU'estions 'A'nswered) An Expert Question & Answered system for delivering information to the grassroots of the Indian Community. AQUA is established to fulfill following goals:

- To create multilingual communication framework.
- To provide a language independent knowledge database.
- To provide as easy to use interface to accommodate inexperienced users.
- To provide easy & fast access to reliable information (both through Artificial

Agents and Human Experts from all over the world)

This project is launched by government in 2004 at Maharashtra. AQUA project provides services to farmer on paid as well as free mode.

The objective of this project is to disseminate information to users in a resource constrained environment. Users can access aAQUA using a Web browser or Java-compatible mobile phone to create, view, and manage content. Farmers post and receive answers to questions via email and mobile phone text and search aAQUA's documents via mobile phone, either by providing keywords in a standard search interface or using an organized list of English and Marathi tags in the keyword browser. It provides other services like Market price, agriculture content (crop doctor), farmer schemes, expert advice, education, healthcare, farmer's query, e-mail alert.

## 3. Digital Mandi

This Project is based on Agricultural Marketing Information System Network sponsored by BSNL (Bharat Sanchar Nigam Limited) and is implemented by IIT Kanpur. The project is aimed at networking all the Mandi's located throughout the country, for effective information dissemination. It facilitates in the effective dissemination, over web, of the daily arrivals and prices of commodities in the agricultural produce markets spread across the country. Project aims at improving decision making capability of the farmers and strengthening of their bargaining power. This service provides registered farmer alerts through SMS and/or voice on his mobile about selected mandi rates of selected crops. For this service a farmer can register either through the help of officials available in Mandis (assisted mode) or directly through his mobile phone by

SMS or on WAP portal. The registration menu has been prepared by IIT- Kanpur. This service shall be made available on subscription basis at very economical rates which will be deducted from his mobile phone recharge. For a crop the subscription time is expected to be about 3 months.

#### 4. Agriwatch

Agriwatch.com is designed by Indian Agribusiness Systems Ltd. (IASL). The agribusiness sector is characterized by multi layered channels on the Agricultural Input and Output side, poor quality of information and analysis about Demand, Supply, Prices, Market Trends for various agri-commodities. The promoters of this organization, coming from an Agricultural background felt the need to address these anomalies in this sector and therefore have come together to create a professional team and an organization to deliver value to the participants at all the levels in this sector.

This agriculture initiative provides latest and accurate information to various participants in the Agribusiness sector such as the farmers, Suppliers of Agricultural Inputs, Processors of Agricultural Outputs, Traders etc. it also provides valuable analyses to the trade participants that will enhance their decision taking abilities in trade.

#### 5. m-KRISHI

m-KRISHI is an award winning, Rural Services Delivery platform developed by TCS Innovation Labs-Mumbai. It includes multiple types of technologies such as mobile applications, local language engine, web technologies, automatic weather system and various sensor capabilities integration,

integrated agricultural domain business logics (farm based agriculture, livestock, fisheries, etc.) and so on. mKRISHI - IPM is an initiative of Reviving Green Revolution (RGR) cell, in collaboration with SRTT and Punjab Agricultural University to transfer the "Integrated Pest Management (IPM)" technology to large number of farmers. mKRISHI - IPM, grouped all the information related to IPM (such as recommended crop practices, frequently asked questions, pictures of good bugs and bad bugs, etc.) in Gurumukhi language on the farmer's mobile handsets. This created the direct ICT channel between the farmers and the PAU agro expert, leading to the advisory on good bugs and bad bugs which should be controlled by the spraying of pesticides; and also timing for spraying the same. This helped in the reduction of number of pesticide cycles sprayed, leading to reduced cost as well as improvement in the soil and also the labourer's health.

#### 6. I-Kisan

Farmers employ various techniques to manage their production and their practices for the same are largely indigenous. Their prime motives are producing surplus and healthy crops and a failure to achieve that puts immense pressure on them, often challenging their survival. I-Kisan is an initiative to provide these farmers with ideas and materials that would help them in achieving their goals. From agriculture related content containing essential ideas for crop management to educating them on the use of pesticides and fertilizers, the I- Kisan vision covers a sea of first hand information for the farmers. Weather forecasts, types of soils or seeds or nutrients to be used and kinds of machinery required are all stated on the I-Kisan portal and the farmers have access to all this

information at the tap of a button. Information of Insurance and rural credit are also present to help the farmers safeguard their interests and livelihoods. What the I-Kisan business model also ensures is a system where the farmers benefit from their produce and also affect the agribusiness value chain in a healthy manner. The concept of a self-sustaining network helps generate good values which are eventually perpetuated back into the system as the farmers now are getting a competitive advantage over the previously functional business models. If a farmer can get access to all the above mentioned information, in their own language, it would decrease dependency and enhance the production multifold despite the limited literacy rates.

To help the cause of farmers, the I-Kisan claims to cover these services, as mentioned on their webpage:

- Information about crops, markets, prices, weather, agri news etc
- Knowledge in the form of crop management, pest management, water management, soil management, implements, agri-machinery etc
- Diagnostics and solutions for various problems (Pests, Nutrition etc)
- Information and facilitation of insurance, credit and other allied services
- Facilitation of trading in inputs and output

The I Kisan vision is not only limited to agricultural produce but also aims at developing the dairy and poultry businesses to name a few.

## 7. e-Choupal

e-Choupal is an India-based business initiative

by ITC Limited that provides Internet access to rural farmers. The purpose is to inform and empower them and, as a result, to improve the quality of agricultural goods and the quality of life for farmers. Through the e-Choupal initiative, ITC has created more than 6,500 e-Choupal computer stations in rural areas that serve an average of six hundred farmers each. Using this technology, farmers may order supplies, learn about best agricultural practices, receive weather reports and read about pricing for crops throughout the region. Farmers can use that information to form their own prices. They also obtain higher profit margins because they're no longer forced to sell through the middlemen. E-choupals are much more than internet kiosks. They are generally located within walking distance or a 5-km radius. Instead of travelling long distances to the nearest mandi, the farmer takes a sample of his produce to the e-Choupal.

## 8. e-Arik

As the name goes, Arik stands for agriculture in the Adi dialect of the tribals in Arunachal Pradesh. The impact of Information Communication Technologies in agricultural extension services has been noteworthy and to assess their impact on the tribal farmers, a two year research project named e-Arik was launched in "Yagrung" village of East Siang District of Arunachal Pradesh. It was funded by the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, under the Government of India. The primary aims of e-Arik were to provide the tribals with improved agricultural information and technology that they can readily use for their own benefit. The initiative proposed a single window system, reaching out to the target population through any accessible

electronic devices like computers, mobile phones, television and radio. The internet is used to provide consultation through the ICTs, where the experts share their knowledge on procurement of agricultural accessories, marketing and also protecting the livelihoods of women, youth and children, added to the promises of training on ICTs and capacity building.

E-Arik services:

- Information about crop cultivation and other agricultural practices.
- Baseline information from relevant agriculture and rural developmental departments of government.
- Specific information on government schemes such as farmer welfare programmers.
- Day to day market information and weather forecasts.

#### 9. TNAUAgri Tech portal

A TNAUAGRITTECH portal was designed to overcome following problems faced by the farmer

- Lack of instant farm advisory support to the farmers
- Lack of instant technical information support to field extension officials
- Poor weather and disease complex advisory services
- Lack of market information support services

It integrates allied sectors including agriculture, horticulture, sericulture, seed sector, marketing, fisheries, forestry and animal husbandry. The portal (<http://agritech.tnau.ac.in>) have feature of dynamic and multimedia based content

coverage for the benefit of field extension officials and farmers in bi-lingual (Tamil and English) mode covers around 7.5 lakhs web pages. The portal has been launched on 27th October, 2009. It holds all the farming information for decision making at the field level.

#### 10. n-Logue

n-Logue decided to adopt the demand aggregation approach to small villages by creating an Internet kiosk with a computer, an Internet connection, a printer and some accessories like web/digital camera in each village. The kiosk was to be the hub of the rural connectivity providing communication services (email, chat, browsing), as well as other much-needed applications like education and training, healthcare, agriculture consultancy and e-governance.

n-Logue Services:

- Communication: Kiosks offer e-mail and video mail as means of communication. It helps villagers for being in constant touch with relatives/friends who are living abroad or in far away places.
- Education: Education is one of the key applications that is very important to the rural populace. The education module created by nLogue is based on computer-based education and computer education.
- Computer Education: n-logue has helped to create a number of customized courses to train people to use computers.
- Remote tutorials: The online tutorial is specifically focused on assisting children to complete their school examinations. The online tutorial has focused on several subjects, including Mathematics, Social Science, English and Science.

- Spoken English: Spoken English module has been specially created to help children and adults improve their English speaking ability.
- Typing: Several children come to the kiosk to learn basic typing.
- Photography: Most kiosks double as photography studios, where photographs are shot using a digital camera and a printout can be made available.
- Agriculture Consultancy and Veterinary: Farmers in the village bring their animals to the kiosk and get them treated by

doctors remotely. A videoconference is initiated between the farmer and the doctor.

- E-governance: Internet is being used to approach the government for all kinds of problems.
- Entertainment: There are several means of entertainment like radio and movie CDs that are played at the kiosk.

### Review of web based ICT initiatives in Indian agriculture

Name of the projects	Types of Information	States	Organization Name	Orgn. Type	Launched year	Services
Gyandoot	Crop prices, registration of applications for copies of land records, public, grievance system, village auction site	Madhya Pradesh	State Govt. of MP	Government	2000	Paid
aAQUA	Market price, agriculture content (crop doctor), farmer schemes, expert advice, education, healthcare, farmer's query, e-mail alert	Maharashtra, Uttarakhand,	IIT Bombay	Government	2004	Some Free & Some Paid
Digital Mandi	Trading, market prices, decision support advisory on agri-inputs, plant diseases, improved irrigation techniques	Orissa, West Bengal, Calcutta, Bihar, Jharkhand, Assam, Gujarat, Maharashtra, Madhya Pradesh, Chhatisgarh, Punjab, Haryana, Himachal Pradesh, UP (East), UP (West), Uttranchal, Rajasthan, Jammu & Kashmir, Kerala, Tamil Nadu, Karnataka, Andhra Pradesh	Media Lab Asia, IIT-K	Government	2004	Some Free & Some Paid
Agriwatch	Spot and futures prices, news and analysis, statistics and trends, weather, crop forecasting, market price, agri buyers guide, agri yellow pages, policy watch, legal watch	All North Indian states	Indian Agribusiness Systems Pvt. Ltd. (IASL)	Private	2000	Paid
m-KRISHI	Warning to pest and disease attack, weather, soil, market price, crop insurance, agri-inputs and cold storage availability, news feeds	Maharashtra, Uttar Pradesh, Punjab	Tata Consultancy Services (TCS)	Private	2009	Paid
I-Kisan	Pest and disease, agri-practices, agri-news, animal husbandry, agri-machinery, agri-credit, agri-insurance, agri-inputs price, weather, market price	Arunachal Pradesh, Tamil Nadu, Maharashtra, Uttar Pradesh, Punjab, Haryana, Karnataka, Orissa	Nagarjuna group of companies	Private	2000	Paid

70	e-Choupal	Market price & its trends, crops info, local weather forecast, farm management & its package of practice, soil & water testing, insurance, virtual buying	Madhya Pradesh, Haryana, Rajasthan, Uttar Pradesh, Karnataka, Andhra Pradesh, Kerala, Maharashtra, Tamil Nadu	ITC Limited	Private	2000	Paid
	e-Arik	Pest and diseases, farmer's crop history, market price, weather, e-governance, health, education	Arunachal Pradesh	College of Horticulture and Forestry, Central Agricultural University	Government	2008	Paid
	TNAUAGRITTECH portal	Crop production, protection, organic farming, market price, weather, soil testing, availability of inputs, SRI, precision farming, news via newspaper clipping, radio, TV, etc.	Tamil Nadu	Tamil Nadu Agricultural University	Government	2009	Free
	n-Logue	detection & diagnosis of crop & animal disease, advice on	Maharashtra, Tamil Nadu, Rajasthan, Andhra	Communication s Private	Private	2001	Paid

## Conclusion

Government must provide subsidies for getting ICT tools. Efforts should be taken at national level to literate the farmers about ICT tools. The agriculture projects which promote ICT services should update their content regularly and should provide services of global standards. Use of ICT tools in agriculture is sure key to success.

## References

[1] Kavitha, A., Suseela, S., Sangeetha, M. and AnandaLakshmi, K. 2013 ICT in Agriculture-Indispensable.

- [2] Srihari Rao, N. 2013 Prospective Usage of ICT by Farmers for Agriculture.
- [3] Kimbahune, S., Singh, D. and Shinde, S. R. 2013 Designing User Interface for Agriculture Based Applications.
- [4] Singh, D. 2013 mKrishi: ICT Platform for Rural Youth Empowerment.
- [5] Sahu, A. K. 2011 A Review of Literature Study on Information and Communication Technology Initiatives in Indian Agriculture.

# Drop in SBI's Car Loan Market Share: An alarming Sign!

Dr. Anuradha Yesugade  
Faculty of Management  
Studies-BV (DU)

Mr. Tushar Aghav  
Senior Manager HR  
HDFC Life

Ms. Aarushi Agrawal  
Student, BV(DU)

## ABSTRACT

Today's modern era is witnessing the dynamic technological revolution with a rapid pace. Human beings are absolutely dependent on technology for every now and then. The advent of technology has facilitated the human lives. The gadgets a person is using in his/her daily life are just indispensable, and now a day's these gadgets have turned as necessity and not a luxury anymore. One of the gadget or technological device without which movement of human being is highly impossible is a "Vehicle". Use of vehicle in today's rapid life is extremely unavoidable. Right from evolution of cycle to four wheelers all these vehicles have facilitated human lives throughout past many years. Earlier possessing vehicles was considered as a status symbol but now it has become a necessity. Even though it is a necessity, still it is not affordable for everyone to buy a car/four-wheeler on hard cash. This need is addressed by financial institutions and banks by providing car loans and facilitating their decision for buying a car. This paper elaborates the comparative analysis of various car loan providers in general and addresses SBI Car Loan services specifically, special reference to Pune. The paper concludes by identifying the reasons of drop in SBI's share as a car loan provider in Pune and other geographies.

Keywords: Car Loans, Retail banks, NBFC's, Neo banks

### 1. Introduction

India's automobile industry is one of the biggest in the world and is scaling new heights every passing day. The increase in the purchasing power of the middle class in the country is one of the major reasons for this development. The ease of financing has also boosted the growth of this industry. The car loan industry is expanding at a rate of 18 – 20% every year. As per the latest industry reports, car sales are growing at a rate of 9 – 10% every year. With such a huge rate of expansion, the industry is looking to flourish and expand at the same rate during the current financial year. It is also

speculated that banks can scale up to 22% growth in the next financial year under current trends. HDFC Bank has doubled its business to ₹ 620 Billion during 2013 – 2017 and has become India's largest best car loan provider by scaling the growth rate of around 23%. ICICI Bank grew at a rate of 18% during this period and took its business to ₹ 250 Billion. The country's biggest bank, SBI, did a business of around ₹ 248 Billion in 2013. It has increased at a rate of 18.7% to reach ₹ 467 Billion in 2017 and become the second biggest lender in the car loan segment. Banks and other financial institutions come with exciting offers and variety of schemes/ offers as

per seasons and as per the festivals throughout the year, attractive offers (coz of competition amongst loan providers) like low cost EMIs, targeting influential group, special offers on particular brand etc. This study focuses on SBI's Car loan share in the market in comparison with other major players like HDFC and ICICI Bank.

### Types of Car Loan

There are several different types of auto loans so that every individual will find at least one auto loan that is able to meet their requirements.

**New Car Loan:** - A new car loan is taken out to purchase new vehicles generally from dealerships. As citizens of India are getting higher pay packages, many salaried and self-employed individuals are looking to get their dream car.

**Used Car Loans:** - Used auto loans are taken by the borrower to purchase a used car from either a second-hand car dealer or an individual seller. There are a number of lending institutions which provide used car loans in India.

Sometimes people can't afford to buy a new car and, in such cases, going for a used car is the best option. The amount of money that you can afford per month should also be taken into consideration in order to take the right decision for auto loans from top banks and lenders such as ICICI, PNB, HDFC, SBI and L&T.

### Benefits of Car Loans

Auto loans have many benefits. Some of the benefits for applying for car financing loans in India are given below:

1. People using a car for their business purpose can claim part of the interest and depreciation charges as expenses against taxable income.

2. Monthly payments can be directly debited from your bank account.
3. If you're paying fixed payments, the terms of the agreement allow for more accurate budgeting and protect you against any interest rate fluctuations.

**Process of Car loan:** Car loan procedure is generally same for all the banks, only time of disbursement differ from one to another. Procedure starts with income verification, background verification, vehicle inspection, monitoring CIBIL score and then only amount is disbursed.

### Doc required

- Statement of Bank account of the borrower for last 12 months.
- 2 passport size photographs of borrower(s).
- Signature identification from bankers of borrower(s).
- A copy of passport /voters ID card/PAN card.
- Proof of residence.
- Latest salary-slip showing all deductions
- I.T. Returns/Form 16: 2 years for salaried employees and 3 years for professional / self-employed/businessmen duly accepted by the ITO wherever applicable to be submitted.
- Proof of official address for non-salaried individuals.

### 1. Literature Review

Nikhil Agarwal and Amar Joshi (2011) in their

paper, “A study on response of vehicle finance for fourwheelers in Moradabad” discussed various schemes provided by public and private banks and vehicle finance companies for facilitating the purchase of four wheelers for an average Indian buyer. They have tried to find out consumer’s awareness towards vehicle finance activities and problems faced by them in availing vehicle finance and the scope of study was restricted to Moradabad region.

Dr. M. Muthu Kumar (January 2014) in his paper titled, “Car Loan by Commercial Banks – Consumer Attitudes’ on Schemes” has thrown light upon paradigm shift of Car being perceived as item of luxury to car being necessity. Further, the paper elaborates the financing options available in the market, by focusing upon the segmentation of the cars.

“Gender differences in Car loan Access: An Empirical Analysis”, authored by Yanghong Li, (Year) has analyzed whether gender inequality exists in India’s Car loan Industry. This paper has revealed that gender is a statistically significant predictor of disbursement, requested amount, and interest rate charged. Loan applications by women have a lower likelihood of approval when the applicants’ CIBIL scores are lower than 790.29. Furthermore, women with CIBIL scores lower than 769.54 are assigned higher interest rates than male applicants with comparable CIBIL scores.

SHARMA, ADITI; CHOWHAN, SUDHINDER SINGH (2013) in their paper titled, “To Study Marketing Strategies for Car Loans Customers: A Comparative Study of Public Sector Banks and Private Sector Banks With Special Reference to Meerut, U. P.” have studied marketing strategies adopted by public and private sector banks such as State Bank of India, Punjab National Bank, Bank of Baroda, Syndicate Bank,

Canara Bank, ICICI Bank, HDFC Bank, Axis Bank, IDBI Bank, Nainital Bank operating in Meerut, in order to find out the needs of loan customers and the services provided by the Banks to fulfil their expectations.

The observations from Literature reviewed are as follows:

- The Car Loan financing options are discussed in the context of particular regions like Moradabad, Meerut, U. P and there is hardly any literature which addresses the problem under study in the context of Pune Region.
- The available literature also comments on how gender has effect on disbursement of the amount financed for the car loan, but the available literature hardly considers the other influential factors like dealers’ role, previous accounts which is covered in this project
- The existing literature also presents the comparative analysis of the financing options provided by all Public and private sector banks (HDFC Bank, ICICI Bank and SBI) in general and not particular for SBI car loan financing.

Thus, these observations drawn from the literature review proves the novelty of the topic.

### 3. Objectives:

- To analyse SBI car loan services with other competitors in car loan segment.
- To identify the factors influencing customer preference in selecting financial institution.
- To explore the reasons for SBI losing shares and giving practical solutions to improve the situation.

## Research Design

The combination of descriptive and exploratory research design has been used to explore and describe the parameters under study. Primary data have been sourced by one-to-one interactions with car dealers, customers visiting at SBI Branches as well as showrooms. These interactions were carried out in line with structured questionnaire separately designed for dealers and customers. The questions were framed to seek the perceptions of the customers towards the variables under study. Secondary data is sourced through Research Papers/Articles, newspaper's articles / advertisements; bank Annual Reports /broachers /pamphlets of car loans and e-resources

## Research Methodology

The primary data was collected through administering formal questionnaire to the respondents. Convenient Sampling Method has been used. Total 32 dealers and 322 customers were interacted. The initial part of the questionnaire covers basic information like age, gender, profession, qualification etc. Second part of the questionnaire aimed at enquiry of the problem under study like annual income of the respondents, how they select preferred financier, what factors are they are considering for selecting their financier, any suggestions in line with car loan approval process by the financiers. The dealers were also interacted on the basis of enquiry towards their perception about car loan financiers.

The list of respondents (one to one interactions were held with following dealers)

Car Dealers in Pune City: -

<b>Name of Car Brand</b>	<b>Dealers</b>
Honda	Crystal Honda
Hyundai	Kothari Hyundai
Maruti Suzuki	Sehgal Auto riders Pvt Limited
Maruti Suzuki	Sai Services
Mahindra	Silver Jubilee Motors Ltd
Volkswagen	B U Bhandari Auto Pvt Ltd
Maruti Suzuki	Chowgule Industries Pvt. Ltd
Ford	Talera Automobiles Pvt. Limited
Kia	Crystal Auto Kia
B U Bhandari Mercedes	Mercedes
Renault	PPS Renault Showroom
MG	MG Pune Band Garden
Land Rover	Jaguar Land Rover Showroom
Datsun	Provincial Automobile
Jeep	Sky Moto automobiles
Nissan	Provincial Nissan
Volvo	Flyga Volvo
Audi	Audi Pune
Jaguar	Ace Perkins

5. Data Analysis and Presentation:

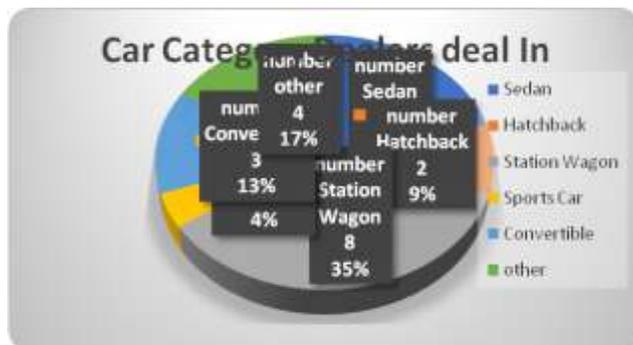
The responses gathered were classified and presented in a tabular format. The percentile method was used to arrive at findings. Graphs are drawn by using MS Excel

For Dealers

1. Car Category Dealers Deal In

Table 1.1

Car	No. of responses
Sedan	5
Hatchback	2
Station Wagon	8
Sports Car	1
Convertible	3
other	4
total	23



Interpretation

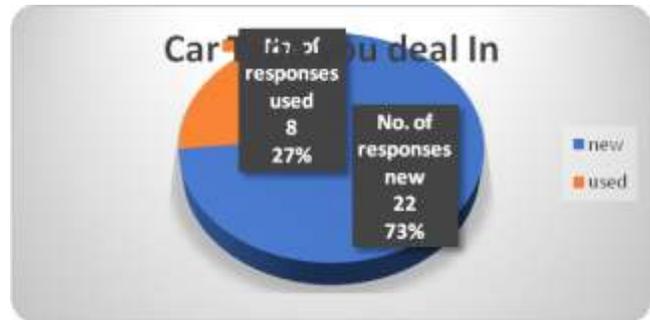
35% of the car dealers deal in Station wagon, followed by 22% in sedan, 17% combination, 13% convertible, 9% Hatchback, and 4% sports Car.

2) Car type Dealers deal in

Table 2.1

Car Category	No. of responses
new	22
used	8
Total	30

Graph 2.1



Interpretation: -

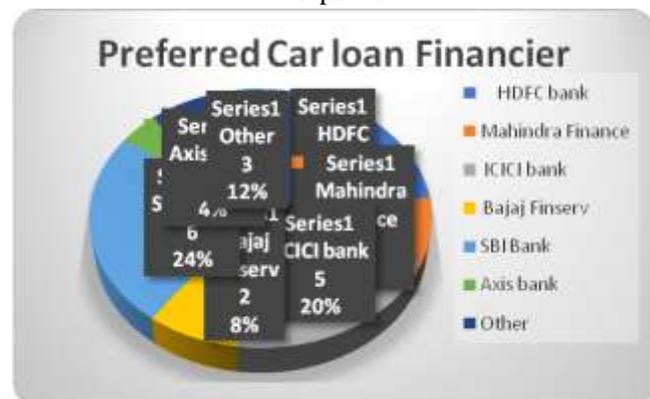
73% of the car dealers deal in new car and 27% of car dealers deal in used car.

3) Dealers Preferred Car Loan Financier

Table 3.1

Bank	Number of Responses
HDFC bank	6
Mahindra Finance	2
ICICI bank	5
Bajaj Finserv	2
SBI Bank	6
Axis bank	1
Other	3
total	25

Graph 3.1



Interpretation: -

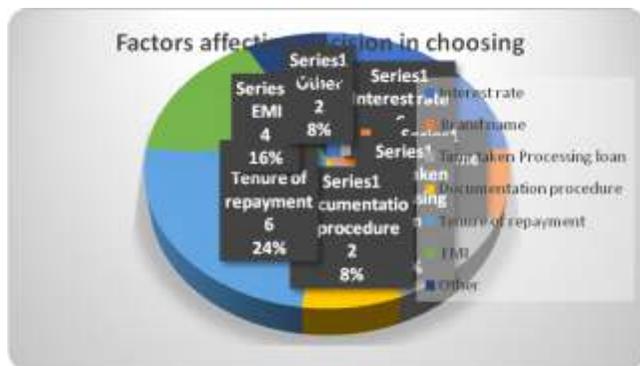
24% of dealers prefer HDFC or SBI Bank followed by ICICI with 20%, 8% Bajaj Finserv and Mahindra Finance, 4% Axis Bank and 12% other. Reason for preferring a financier laid its roots in commission from bank, convenience and relation with the bank staff and bank coordinator, HDFC bank. Dealers found HDFC and SBI bank more cooperative.

4) What influence your decision in choosing financiers?

Table 4.1

Factors influencing the decisions	No. of responses
Interest rate	57
Brand name	23
Time taken Processing loan	35
Documentation procedure	65
Tenure of repayment	92
EMI	10
Other	282
total	57

Graph 4.1



Interpretation: -

24% of the Financiers decision is either influenced by Interest rate or Tenure of Repayment, for rest 16% EMI, 12% Time taken in processing loan, for 8% documentation procedure and others like relation with bank etc.

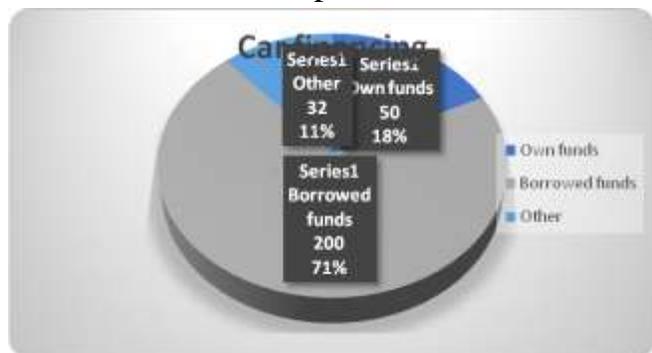
For Customers

How are you planning to Finance your new car?

Table 2.1

Options	Frequency
Own funds	50
Borrowed funds	200
Other	32
total	282

Graph 2.1



Interpretation: -

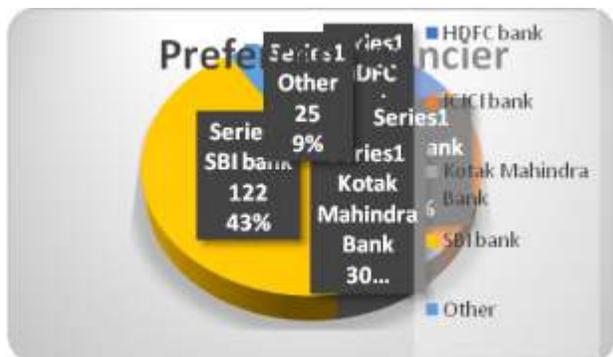
71% of the responses prefers using borrowed funds for car loan, followed by 18% preference for own funds and 11% preference for other.

Preferred financier

Table 3.1

Options	Frequency
HDFC bank	45
ICICI bank	60
Kotak Mahindra Bank	30
SBI bank	122
Other	25
Total	282

Graph 3.1



Interpretation:-

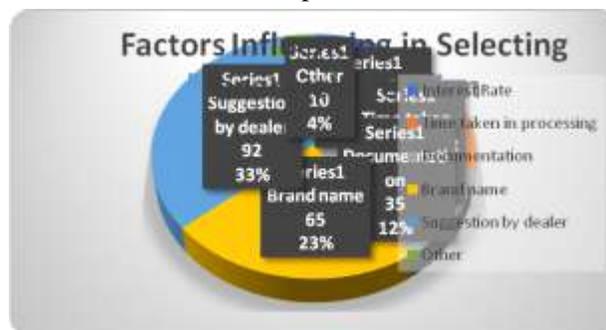
21% of responses prefer ICICI bank, 16% of responses prefer HDFC bank, 43% of the responses prefer SBI bank, 11% Kotak and 9% other.

- 1) What influences your decision for Car loan Financier?

Table 4.1

Options	Frequency
Interest Rate	57
Time taken in processing	23
Documentation	35
Brand name	65
Suggestion by dealer	92
Other	10
Total	282

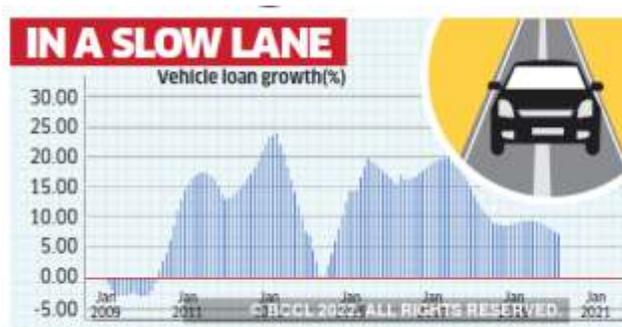
Graph 4.1



Interpretation:-

A major reason in deciding the financier is dealer's suggestion with 33% share, followed by brand name 23%, Interest rate 20%, documentation procedure 12%, time taken in processing loan and complexities 8%.

SBI who once was leading the market is now facing downturn, following graph portrays true picture.



Source: RBI

Comparative Analysis of SBI with its major competitors

Bank and Their loan service procedure				
Name of bank	Loan procedure	Loan Sanctioning Time	Market Share OF Pre-Owned Car	rate of interest
<b>SBI</b>	Income verification, background verification, Vehicle Inspection, CIBIL Score monitoring, cross verify etc.	2-3 days	22%	8.1%- 15%

<b>HDFC</b>	Same as above but the process is faster since it is assisted by a person visit customer place for verification.	One day	15%	8.50%- 11.25%
<b>ICICI</b>	Same as above but the process is faster since it is assisted by a person visit customer place for verification.	One day,	10%	12%- 14.50%

**Findings of the Study: -**

The study finds out that there are several deciding factors for customer's decision before selecting the bank for car loan.

**According to the survey: -**

- 35% of the car dealers deal in Station wagon, followed by 22% in sedan, 17% combination, 13% convertible, 9% Hatchback, and 4% sports Car.
- 73% of the car dealers deal in new car and 27% of car dealers deal in used car.
- 24% of dealers prefer HDFC or SBI Bank followed by ICICI with 20%, 8% Bajaj Finserv and Mahindra Finance, 4% Axis Bank and 12% other.
- 73% of the responses are from salaried employees, 11% businessman, 5% teaching professional and 11% others.
- 71% of the responses prefers using borrowed funds for car loan, followed by 18% preference for own funds and 11% preference for other
- 21% of responses prefer ICICI bank, 16% of responses prefer HDFC bank, 43% of the responses prefer SBI bank, 11% Kotak and 9% other.

- A major reason in deciding the financier is dealer's suggestion with 33% share, followed by brand name 23%, Interest rate 20%, documentation procedure 12%, time taken in processing loan and complexities 8%.

**Observation from Visits: -**

- **Role of Car loan dealers:** Car loan dealers play an important role in selection of loan financiers by customers, their biases towards any financial institution bend customers interest towards it. As private banks now a days trying to capitalize over the car loan dealers by giving them decent amount of commission. Thus, attracting more customers.
- **Previous accounts:** - customers who are willing to take car loan generally take from from institutions they have their account with. It has been observed mostly in case of Salaried people that they wanted to avail benefit given by their bank at the same time preventing hustle and bustle of car loan procedure of newer bank.
- **Staff Biases:** - service of staff also influences customers decision of taking a loan from a particular financial institution.

Rude and non-cooperative staff pushes the customers whereas cooperative staff attracts new customers and retains the older one.

- Offers and schemes: - One of the distinguishing factors which plays an important role is scheme and policy of the bank, it has been observed that private banks give different and exciting offers which attract new customers, and their efficient Customer Relationship Management also plays a key role in attracting new customers.

Recommendations and Suggestions: -

Bonding with the agents: - According to the survey conducted, in majority of the cases decision of people is based on suggestion of car dealers as according to people car dealers are experienced individuals and will guide them right, offering rewarding benefits to these dealers will help the Bank to spread word of mouth.

Documentation Procedure: - Public sector banks are famous for long queues of people waiting in row for their turn at the same time a little less productive staff as compared to private banks, collaboration of staff with customer is important.

Use of Technology: - In the Digital Era, nothing is better than click of the finger, mobilizing things via app will help the organization to increase productivity, at the same time decreasing burden on staff.

Offers for Influential Group – Women have become the part of Influential group, so bringing offers for them will attract the customers at the same will help the organization to have an edge over its competitors.

Extension into used Car loan Segment - Most of the middle-Income Groups whose purchasing

power is driven by rationale look for second hand options which is growing market.

Convenience for Senior Citizen – SBI can lay its hands for its one of the most loyal customer group i.e., Senior Citizen, giving them Car loan offers which their family can avail (as the age bracket is 21-65 for car loan).

Services: - Improvement in customer relationship as well as improvisation on relations with the dealers by giving them constant feedback is necessary.

Exploring newer Market

It has been observed that used car market is one of the booming sectors. The Indian used car loan Market is forecast to grow at a CAGR of over 11% in value terms and to reach around

USD16 billion by FY2027 thus, capitalizing over this opportunity will give edge over others. Today society is governed by luxurious possessions people have, giving certain additional benefits on loan on used cars of certain brands will also help to attract new customers.

## 6. Conclusion

Car loan market in India is one of the most booming Industry, in spite of pandemic hitting the economy badly. This market is expected to grow at 8% CAGR by 2022. In India people behavior is dominated by their urge to improve their standard of living, thus giving push to the demand of car loan, for salaried employees car loan come to rescue. One of the reasons of lower demand of car loan demand is pandemic which is on recovering mode.

Paradigm Shift from fuel-based Automobile to Electricity based automobile also contributed to the rising demand for Car loan. There are many

deciding factors on which a consumer decides from which bank he will be taking loan, some of them are: -

Convenience – Salaried Employees generally prefer banks they have their account into, because of human nature of saving energy and time.

Brand Name: - Finance Industry runs on trust thus brand name plays a very big role in attracting and retaining customers who decide word of mouth of their fellows.

Documentation procedure and Processing of loan: - Time taken by any bank in processing the car loan as well as documentation procedure whether its tedious or simple is also one of the deciding factors for consumer before putting their feet into taking car loan.

SBI Bank has been a prominent player in Car loan market, USP being low interest rate, and less charges, but with the attractive offers, Private banks has also entered the race i.e. - ICICI Bank and HDFC being the biggest competitors of SBI Bank.

Changing customer preference due to influence of other banks, dealer biases, and miscommunication and less support of branch staff also plays a vital role in changed market share of SBI Bank in Car loan segment.

As people are getting more Inclined towards personalized commercial and coupons SBI can benefit by bringing some offers for women- as they have become part of Influential group as well as mobilizing files in stipulated time and working efficiently will also be helpful as in my study 223 in 300 sample find main reason in their selection is documentation procedure of the bank.

## References

1. Nikhil Agarwal and Amar Joshi (2011) in their paper, “A study on response of vehicle finance for fourwheelers in Moradabad.
2. Dr. M. Muthu Kumar (January 2014) in his paper titled, “Car Loan by Commercial Banks – Consumer Attitudes’ on Schemes” “Gender differences in Car loan Access: An Empirical Analysis”, authored by Yanghong Li
3. SHARMA, ADITI; CHOWHAN, SUDHINDER SINGH (2013) in their paper titled, “To Study Marketing Strategies for Car Loans Customers: A Comparative Study of Public Sector Banks and Private Sector Banks with Special Reference to Meerut, U.P.”
4. Comparison of auto loan Interest rates of leading lenders updated for 2020, retrieved from <https://www.creditmantri.com/article-comparison-of-auto-loan-interest-rates-of-leading-lenders-updated-for-2020/>
5. lenders that offer best deals on used car loans, retrieved from <https://www.creditmantri.com/article-5-lenders-that-offer-best-deals-on-used-car-loans/>
6. Loan spotlight HDFC Car loan, retrieved from <https://www.creditmantri.com/article-loan-spotlight-hdfc-car-loan/>

# Customer Relationship Management in State Bank of India – Pune Branch

Dr. Ajit Singh Tomar  
Asst Prof, Symbiosis University  
of applied sciences, Indore

Dr. Sonali Khurjekar  
Faculty of Management  
Studies-BV (DU)

Ms. Shubhangi Mishra  
Student BV(DU)

## ABSTRACT

The study portrays the significance of Customer Relationship Management (CRM) in the banking industry, predominantly focusing on the scenario in SBI Bank, covering 23 branches in Pune city. During the present financing and tech savvy era, where, there are number of competitors in the banking industry; retail banks, payment banks, NBFCs and new generation neo banks, offering similar products or services, it becomes difficult for the organizations to sustain and grow simultaneously. Here, CRM plays a significant role in retaining existing customers and converting potential clients. This study also attempts to view CRM from SBI Bank's employee point of view. Further, CRM's advantages, importance, types and benefits to both; SBI Bank and customers are discussed. The global pandemic, SARS-CoV-19 has significantly affected all the economies across the world, leading to nationwide lockdowns. Somehow, the spread of Covid-19 virus had a silver lining; it pushed the masses towards digitization and utilizing the facility of mobile and internet banking. Hence, the study also throws some light on E-CRM measures followed by SBI Bank.

Key words: Customer Relationship Management (CRM), Customer Satisfaction, Customer Loyalty, Payment Banks, Retail Banks, NBFCs and Neo Banks.

### 1. Introduction

State Bank of India (SBI), the oldest commercial bank of India was originated in 1806 as the Bank of Calcutta. Three years later the bank was issued a royal charter and renamed the Bank of Bengal. Along with the Bank of Bombay (founded 1840) and the Bank of Madras (founded 1843), it was one of three so-called presidency banks, each of which was jointly owned by the provincial government and private subscribers. In 1921 the presidency banks were merged to form the Imperial Bank of India (IBI), which then became the largest commercial enterprise in the country. In 1955 the government of India and the country's

central bank, the Reserve Bank of India (founded 1935), assumed joint ownership of IBI, which was renamed the State Bank of India. Four years later, by the State Bank of India (Subsidiary Banks) Act, banks earlier operated by individual princely states became subsidiaries of SBI. The Reserve Bank's share of SBI was transferred to the government in 2007. (Duigman, n.d.) Since nationalization, SBI has served the needs of Indian economic development through rural-development initiatives and microcredit programs and by financing major agricultural and industrial projects and raising loans for the government.

## 1.1 Background of the study

In the past few years, competition in the banking and financial service industry has intensified because of advancement in technology, deregulation and entry of new competitors. The biggest asset for any bank is the knowledge of its customers and this knowledge can be used for their competitive advantage. The traditional banking distribution has been gradually supplemented by the emerging use of electronic banking. The fintech era has not only encouraged customers to use mobile and internet banking but has also resulted in reduction of masses in the branches and barriers to entry of new customers.

The power of decision-making is within the hands of customers, as rightly said: “Customer is the King”. Hence, the major concern for banks is not only attracting new customers but also retaining the existing customers. For this purpose, banks usually focus on maintaining good relations and ensuring customer satisfaction. Dissatisfied customers lead to decline in customer loyalty which ultimately results in customers switching the banks. Therefore, banks need to leverage effectively on their customer relationships and make better use of customer information across the institution.

The Customer Relationship Management (CRM) is a powerful and top-notch tool that focuses on generating value to the bank from customer relations. Also, when used in an optimized manner can concert potential sales and maximize the value of customers to the bank. Basically, CRM integrates the strategies of all the business components and increases the valuable scrutiny of the bank’s business in the long-run. This does not actually guarantee business’s profit at the moment but definitely adds customer loyalty to the business. In the

increasing competitive environment, sustainability and growth through sales momentum, has become a priority for banks. To build this momentum banks are focusing on customer relationship management initiatives to improve:

- Customer Satisfaction and Loyalty
- Customer insight or 360-degree view of customer
- Improved sales and cross sales
- Capitalizing new market opportunities
- Increased products/service to customer ratio

The idea of Customer Relationship Management (CRM) is that it helps banks to use technology and human resource gain insights into the behavior of customers and the value of those customers. A business can provide better customer service, make its operations more efficient, cross sell products more effectively and help sales staff close deals faster, simplify marketing and sales processes, discover new customers and increase customer revenues.

As the use of internet services in constantly increasing in the recent era, banks also consider the utilization of internet as an opportunity to reduce customer-service costs, stronger customer relationships and personalized marketing for the customers. This has enabled banks to send messages, call customers, emails and ensuring better interaction and communication. This is where E-CRM comes into the picture. The challenge here is to provide accurate information on the correct topic, on the right time as per the customer specific needs. E-CRM primarily focuses on the data warehouse driven processes by taking into consideration the multi-channel view point.

Since the study is conducted during the SARS-

CoV-19 outbreak (pandemic phase), it has some of its own limitations and constraints. Many banks during this phase came up with number of initiatives to make their customers satisfied and ease their difficulty in terms of banking. The SBI Bank initiated door-step facility, especially for the senior citizens, who are very risk-prone while travelling to the bank branches. Hence, this door-step banking facility provides all necessary services or products at the door-step like, delivery of interest certificates, cheque deposits etc. by paying certain service charges. The use of customer service points (CSP) were also promoted heavily during the pandemic. CSPs are the agents or representatives of bank, which extend the basic routine banking services in their respective shops and premises. Along with this, the use of use of digital platforms like YONO and internet banking facilities also got a push as the customers were scared of stepping-in the branch crowd and because of the strict SOPs of social distancing.

The purpose of this study is to analyse the response of SBI Bank customers to the various CRM initiatives taken by the SBI Bank. The research addresses the customer's opinions on banking services which will provide helpful guidance for further development and growth of the banking industry. This research focuses on the interrelationship between CRM and level of customer satisfaction and customer loyalty on banking services of SBI Bank in Pune city of India. Talking about the scope, the study provides an overview on CRM and its need and importance in banks. Further, the CRM strategy and techniques followed in the SBI Bank are also discussed.

### 1.1. Research objective

The study is guided by the following objectives:

- To assess the role and importance of

Customer Relationship Management (CRM) in SBI Bank branches, Pune.

- To understand SBI Bank employee's perception towards implementation of CRM in SBI Bank branches, Pune.
- To understand SBI Bank customer's perception towards implementation of CRM in SBI Bank branches, Pune.
- To understand the relationship between CRM and customer satisfaction in SBI Banks, Pune.
- To understand the relationship between CRM and customer loyalty in SBI Banks, Pune.

## 1.2 Research Questions

- a) What are the CRM initiatives taken by SBI Bank?
- b) Are the customers of SBI Bank satisfied with the Bank's CRM initiatives?
- c) Are the employees of SBI Bank satisfied with the Bank's CRM initiatives?
- d) Does a good CRM help in ensuring customer satisfaction?
- e) Does a good CRM help in increasing customer loyalty?

## 2. Literature Review

### 2.2 Key concepts

The study of Customer Relationship Management in State Bank of India (SBI) requires a clear understanding of some primary concepts. This section of the paper hence introduces the readers to some basic understanding of the key concepts which are discussed in the study.

### 2.2.1 Customer Relationship Management

In simple words, CRM is the establishment, development, maintenance and optimization of a long-term and valuable relationship between any organisation and its customers, with both existing and potential. It basically focuses on the needs and desires of the customers and primarily attempts to integrate them with the organisation's goals and strategies. "Customer Relationship Management (CRM) is a co-ordinate approach to the selling process allowing the various operational, customer contact and sales promotional functions of an organisation to function as a whole." The primary objective of CRM in banks can be understood as follows:

- Enhanced Efficiency
- Minimising Operating Cost
- Increased Customer Service
- More efficient communication

Customer Relationship Management (CRM) in banks possess great benefits like increased productivity, more loyal customers, improved customer experience and moreover, personalized customer journey.

### 2.2.2 Types of CRM

The CRM in banks is used for ensuring better communication and interaction with the customers. It helps to track proforma of revenue generation, approximate cost and track customer profiles. The following are the various types of CRM:



a) Operation CRM: In this, CRM software packages are used to track and efficiently organise inbound and outbound interactions with customers including the management of marketing campaigns and call centres. Operational CRM supports frontline processes in sales, marketing and customer service, automating communications and interactions with the customers. They record contact history and store valuable customer information to ensure a consistent picture of customer's relationship with the bank that can be retrieved by staff as per requirement. The major benefits of operational CRM to banks are:

- Sales Force Automation
- Customer Service and Support
- Enterprise Marketing Automation

b) Analytical CRM: It is about analysing customer information to better address marketing and customer service objectives and deliver the right message to the right customer at the right time through the right channel. It involves the use of data analysis to extract knowledge for optimising customer relationships. The major benefits of Analytical CRM to banks are:

- Customer Retention
- Fraud Detection
- Optimising marketing efforts as per customer life time value
- Credit Risk Analysis
- Segmentation and targeting
- Development of customised new products matching the specific

preferences and priorities of customers.

c) Collaborative CRM – These involve systems facilitating customers to perform services on their own through a variety of communication and interactive channels. It brings people process and data together and enables channelling of data and information appropriately to bank staff for proactive decision making and enhanced informed customer service and support activities. It provides a means of information sharing to all concerned in timely manner and includes customer as a creator of service. The major benefits of collaborative CRM to banks are:

- Providing efficient customer communication across a variety of channels
- Online services to reduce customer service costs
- Providing access to customer data while interacting with customers.

Thus, CRM can be understood as a catalyst enabling transformation of Banking from traditional ‘Transactional banking’ to ‘Relationship Banking’ by use of technology (bankingfinance.in, 2017).

### 2.2.3 E-CRM

In simple words, E-CRM (Electronic Customer Relationship Management) is known as the use of electronic devices in attracting, maintaining and enhancing customer relationships with the organization. With the widespread of Internet, E-CRM can enhance the efficiency and effectiveness of communication and relationship management between banks and customers.

(Dyche, 2001) described that E-CRM is combination of software, hardware, application and management commitment. Vital and important key point is that E-CRM takes into different forms, relying on the objectives of the organizations. It is about arranging in a line business process with strategies of customers provided back up of software’s. E-CRM is about people, process and technology and these are key paramount to success.



### 2.2.4 Customer Satisfaction

Customer satisfaction refers to an attitude or evaluation of a customer comparing their actual experiences and pre-purchase expectations. Customer satisfaction is a fundamental determinant of long-term consumer behaviour. (Mishra & Sahoo, 2010). Delivering customer satisfaction is at the heart of modern marketing, which is a post-purchase judgment of the consumers. Customer satisfaction is the valued outcome of good business practice. According to Drucker (1954), the principal purpose of business is to create satisfied customers. It is an individual’s perception of the performance of the products or services about to his or her expectations (Schiffman & Kanuk, 2004).

### 2.2.5 Customer Loyalty

Customer loyalty can lower costs and increase the profitability of any organization. The cost of retaining a customer is relatively cheaper compared to that of attracting a new customer (Barsky, 1994). In simple words, customer loyalty is generally what a customer reveals to a particular brand and the likeliness of being associated in the future (Uncles, Dowling, & Hammond, 2003). The loyalty of customers is a behavioural aspect, which differs from person to person depending on their perception. For some customers, the priority maybe the quality of the service while the availability of services for others. It simply means the customer's likeliness to carry out different operations with the same bank repeatedly.

### 2.2.6 Service Quality

(Kumar & Manjunath, 2012) defined Service Quality as the difference between customers' expectations of service and their perceptions of the actual service performance. Service quality is the core concept for ensuring a successful supply of services in general. Private banking involves insubstantial goods requiring the participation of the customer in the process (Munusamy, Jayaraman, Chelliah, & Shankar, 2010). In such a setting, bank services aim to optimize the service quality to attain a superior outcome level. The outcome of service quality, what firms expand by delivering a high-quality service, is the return on a quality concept, and service profit chain.

## 3. Research Methodology

This section of the study explains the methodology of research to answer research questions and to prowl the research objectives. Further after addressing these questions, the

hypothesis of the study has been developed. Next, a sampling frame and a systematic data collection procedure have been talked through.

### 3.1 Problem statement

As a result of digitization and advancement of banking technology, banks nowadays face a huge challenge in acquiring new customers and retaining existing customers. Due to a variety of competitors available in the industry, offering same products or services, the customers are becoming more dynamic and comparatively less loyal towards a single Bank. In such a scenario, customer satisfaction becomes the key marketing tool for any bank to grow its customer base. Even during the outbreak of SARS-CoV-19 virus, Banks were successfully operating and all possible transactions were assisted on digital platform, hassle-free. The attempt to delight customer's banking experience didn't pause even during the pandemic face.

### 3.2 Data collection

Data collection and empirical context refer to the overall strategy that you choose to integrate the different components of the study in a coherently and logically, thereby, ensuring you will effectively address the research objective, it constitutes the blueprint for the collection, measurement, and analysis of data. The various types of research design layouts are illustrated in Figure:2 (Research Design & Data Collection). The descriptive research was carried out to evaluate the CRM activities in SBI Bank. Hence, the researcher initially started by searching previous knowledge of the field.

### 3.3 Population and sample area

The population of a study refers to a specific group of the units such as individuals, households, organizations, and similar that are targeted for definite study. For the study, 411 customers and 76 employees of SBI Bank of Pune city branches in India were identified.

### 3.4 Sample method and sample size

The Probability sampling method was used for collecting data for this study. Under this sampling procedure, simple random sampling procedure was adopted for this research. The sample size of the study as per the researcher's ability is 411 customer and 76 employee respondents. The primary data is collected through two different set of questionnaires; one from customer point of view and other through employee point of view. The respondents are asked to give their opinion relating to the various aspects of CRM in SBI Bank. The first part of both the questionnaires comprises demographic variables with optional questions and the second part comprises CRM related initiatives, feedbacks, activities and dimensions.

### 3.5 Question design

The primary data is collected through the questionnaire method, using two different set of questionnaires. The respondents; both SBI Bank's customers and employees are asked to give their opinion relating to CRM practices in SBI Bank branches of Pune.

### 3.6 Measurements of variable and statistical methods

After collecting the data, questionnaires were checked for completeness. The Likert scale was used for rating responses. Each testimonial is measured by 5- point Likert scale: 1= strongly disagree; 2=Disagree; 3=Neutral; 4= Agree; 5= strongly agree. Further, the data was diagnosed and certain figures, charts and graphs were developed using excel. Then, these graphs were interpreted for better understanding of the subject matter.

## 4. Data Analysis & Interpretation

Firstly, the responses from customer point of view questionnaire have been analysed below:

### a) Age Distribution

The age distribution of the respondents is illustrated in Table 4.1. We can see that the majority of respondents, 38.20% belong to the very fourth category of 46-55 Years. This implies that a lot of middle-aged people are customers of the banks and are using their products and services regularly. The respondents belonging to other categories are given as follows:

Table 4.1: Age Distribution of the Respondents

Age Groups	No. of Respondents	% Of Total
Below 25 Years	32	7.79%
25 - 35 Years	57	13.87%
36 - 45 Years	121	29.44%
46 - 55 Years	157	38.20%
55 Years & above	44	10.71%
TOTAL	411	

### b) Gender Composition

The gender composition of the respondents was 35.50% Female and 64.50% Male. This shows

that even females are empowered enough to independently avail the banking services. It also eliminates the stereotypes that a whole family would rely on a single (family) account, frequently with a name of a male in the family. Contrary to this, nowadays people even started to open their children's accounts when they are minors, just a habit of saving for their children's future.

c) Educational Qualification

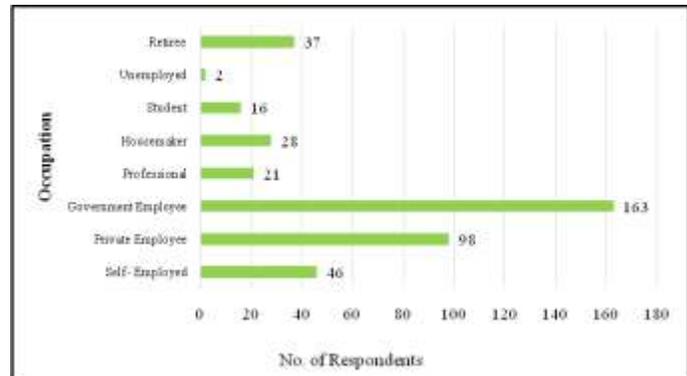
Talking about the highest educational qualifications of the respondents, the majority of the respondents 47.69% belongs to the Graduate category. Literacy plays a vital role in developing one's personality; an educated individual is more likely to avail the banking services and products. Although the banking staff of SBI bank helps their customers in all possible manners, even when it comes to a simple task like assisting their customers in form filling etc., the academic qualifications of service users are often associated with the frequency of using bank services. The respondents categorized as per their highest educational qualification are given in Table 4.2.

Educational Qualification	No. of Respondents	% Of Total
HSC/SSC	15	3.65%
Under Graduate	25	6.08%
Graduate	196	47.69%
Post Graduate	129	31.39%
Diploma	14	3.41%
Professional	32	7.79%
TOTAL	411	

Table 4.2: Educational Qualification of the Respondents

d) Employment Status (Occupation)

Considering the employment status of the respondents given in Graph 4.1, it shows that out of 411 respondents, 40.75% are Government employees, 24.5% are salaried and working in the private sector and 9.25% are retiree. The greater numbers of responses are from Government and Private sector employees, many of them might have their own savings account or other loan accounts associated with SBI bank, while other might have their company's salary accounts with the bank. The other occupation streams of the respondents are given as follows:



Graph 4.1: Employment Status

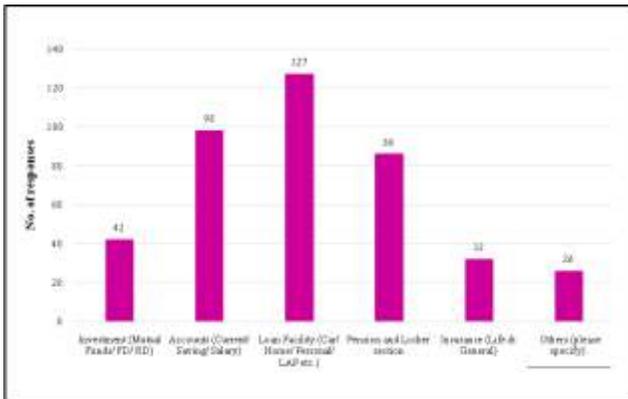
e) Marital Status

Talking about the marital status of the respondents, 71.50% said they were married, 26% were unmarried and the rest 2.50% belong to the others category.

f) Nature of recent transactions

When asked about the nature of recent transactions, customers responded as per the given Graph 2. It can be interpreted that out of 411 respondents, 42 have done investment in the form of mutual fund, FD, RD. 98 have opened accounts like saving and current with the bank. 127 respondents have availed loan facility like car, home, personal loan etc. 86 have done transactions in the form of opening lockers

and remaining 32 and 26 respondents have done life insurance with the bank



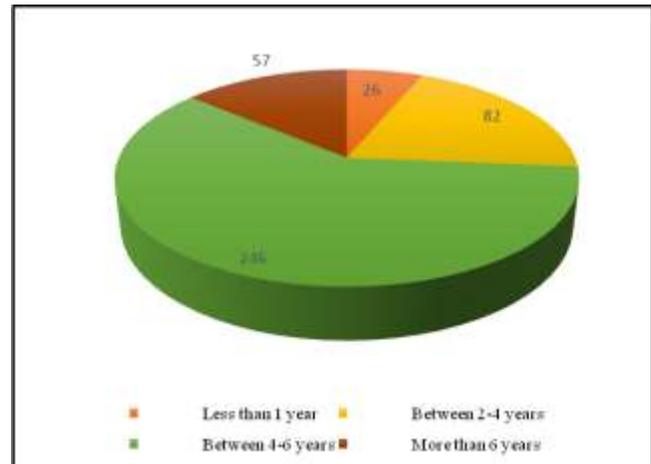
and passbook printing respectively as shown in Graph 4.2. These figures are merely a reflection of the overall transactions but are concentrated to the maximum times an option was checked by a respondent. This indicates that the majority of the customers walking-in to the branches come for loan related enquiries, details and prospects. The support from the analytics department wherein the leads on eligibility of Gold loans, LAP, Car loans or Personal loans etc. were provided which turn out to be fruitful in converting the customers. Similarly, it is noticed that a heavy portion of customers also visit the bank for basic account related work. The others here are concerned with usual routine work like return filing, lodging complaints etc.

g) Years of association

After talking to the customers about their years of association with the SBI Bank it can be concluded that out of 411 respondents collected, 26 are associated for less than a year, 82 are associated for a tenure between 2-4 years, 246 are customers to the bank for a period between 4-6 years and 57 are availing services for more than 6 years as shown in Graph 4.3. This data reflects that the maximum number of customers in Pune branches is banking with SBI Bank from

a quite long course of time. It also indicates that somewhere the customers are satisfied with the overall services and products offered by the bank; else, they would've shifted to other banks during this term of 6-long years.

Graph 4.3: Years of association



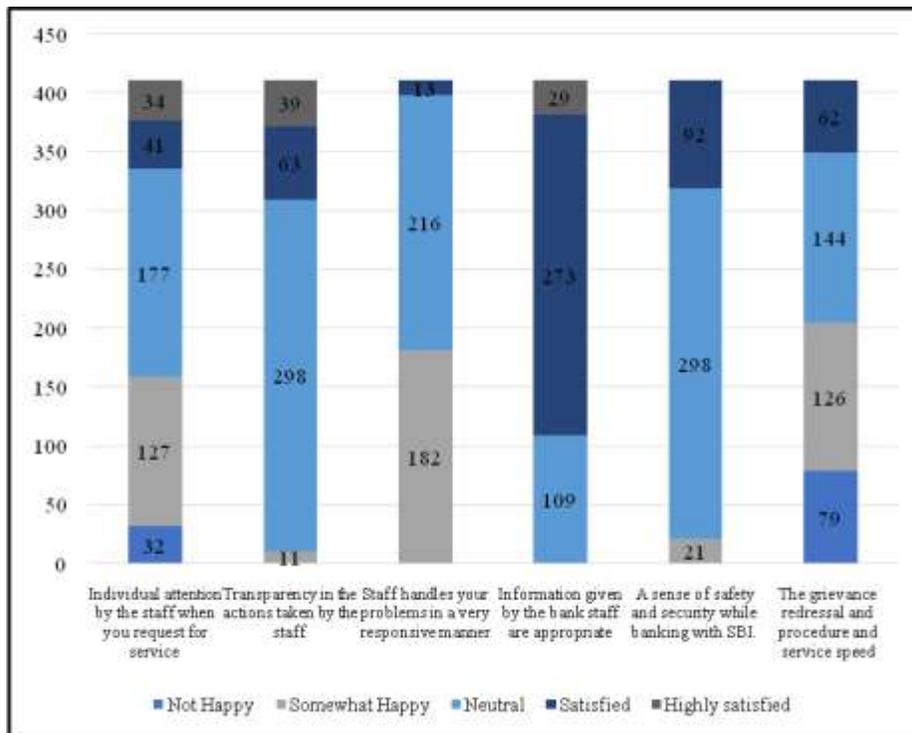
h) Level of satisfaction based on customer and employee interaction

When the customers were asked about their level of satisfaction based on their interaction and employee interactions, considering factors like whether they are given individual attention by the staff when you request for service, there is a transparency in the actions taken by the staff, whether the staff handles their problems in a very responsive manner, the information given by the bank staff are appropriate, whether they feel a sense of safety and security while banking with SBI Bank and their view point grievance redressed procedure and service speed, their responses are shown in the Graph 4.4. We can observe that a few numbers of customers are not happy with the employees when it comes to individual attention while requesting a service. As we know, all fingers in a hand are not equal; there might be some trouble customers

might have faced. But on the other hand, employees also deal with number of professional and personal issues, the outbreak of this global pandemic have made people more sensitive, hence, understanding both the point of views are necessary. We can see that majority of customers, 273 are satisfied with the information they receive from the banks, this reflects the genuine intentions of the

employees to help and assist the customers but at the same time it is important to consider that not all days are good and flowery. But it has been observed that customers tend to keep the bad behaviour and unfavourable scenarios close to their hearts, even when those are not their personal experiences.

Graph 4.4: Level of satisfaction based on customer and employee interaction



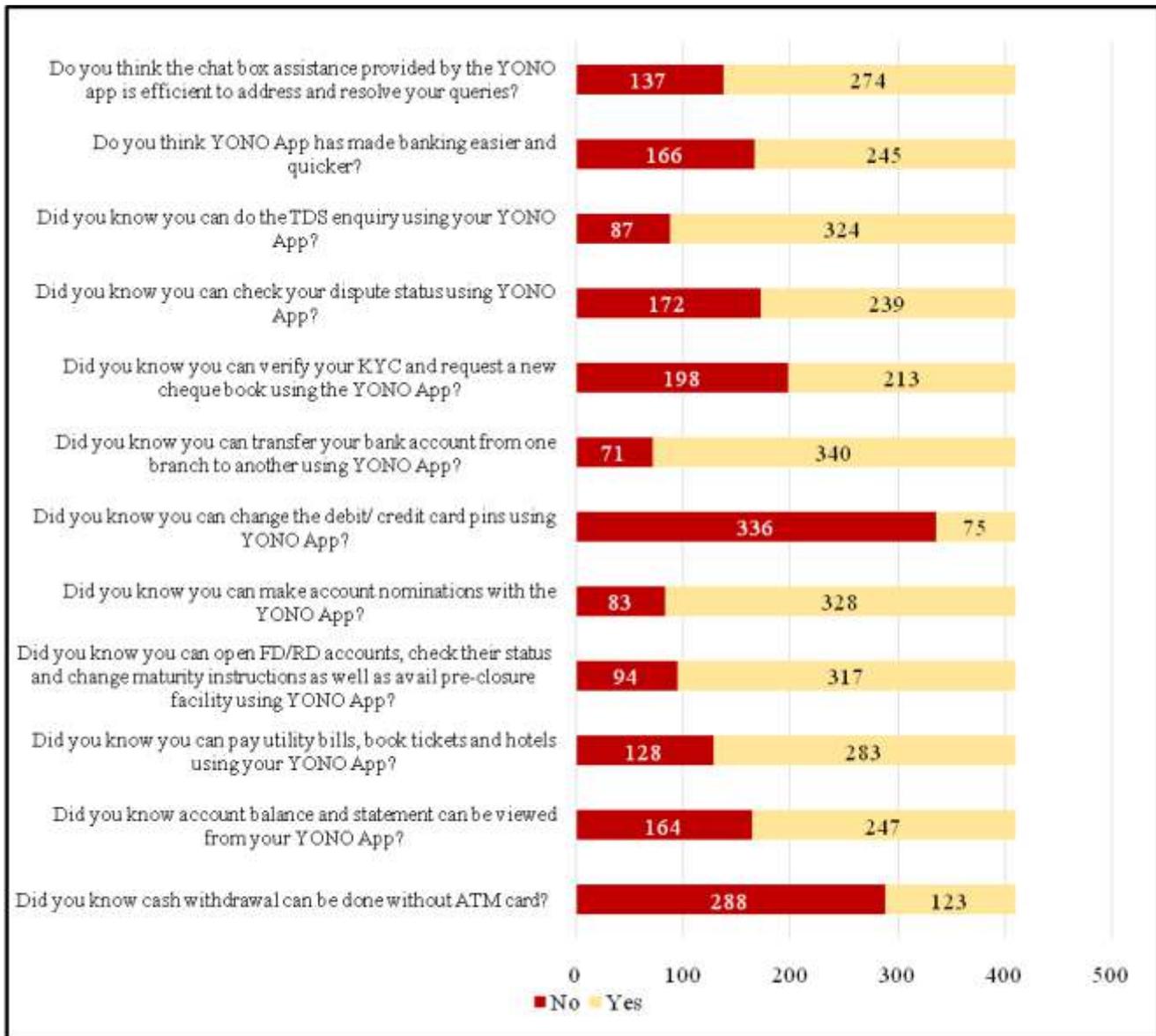
i) YONO application awareness

The introduction of YONO application by SBI Bank primarily focused on making banking easy for their customers. The YONO application introduced by SBI Bank is a one-stop destination for all the banking services which are done in an operating bank branch. The challenge here is that the customers are aware of the very basic functions of the application like balance check, for a new cheque book request, debit/credit card pin change, money transfer, etc. but are unaware of

necessary things like change of nomination details, closure of FD/RDs, transfer of accounts from one branch to another etc. But the challenges which here arise are the awareness about the functions which the YONO application possess. When asked about the application's certain features, customers responded in a surprising manner as shown in Graph 5. We must focus more how the use of YONO can make the CRM better for the banks. The employees can promote the use of YONO and properly

guide the customers towards the right direction and ensure that they don't face any difficulties while operating the application; this will result in making their bond even stronger. On the same time, the data which a bank cannot assess in branch banking can be collected, updated and used for a better analytics purpose thereon. For example: the passbook printing kiosk

located in the branches provides the bank with number of usage (number of passbooks printed/updated), but it does not provide the deep insight on how many times one single customer is visiting the kiosk for updating their passbook in say 15 ordinary days or in a month. When the customer uses the YONO application for the same, the bank can keep the track.



j) Degree of agreeability with the statements based on SBI Bank's operations

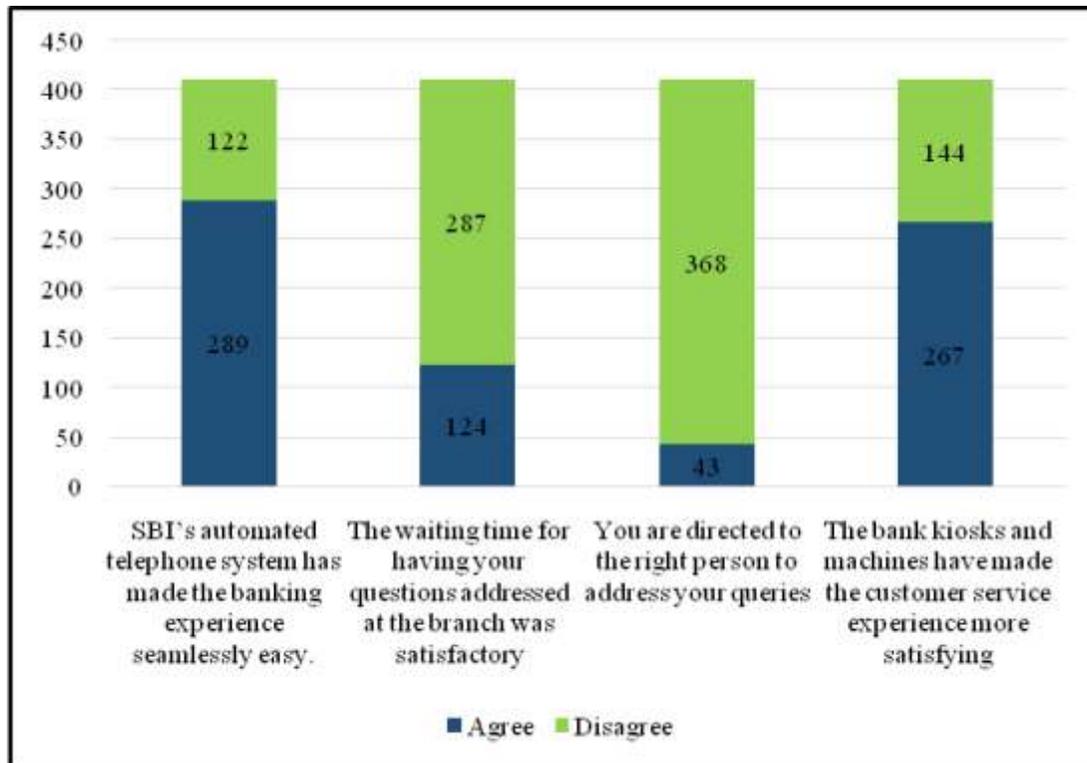
When the customers were asked to rate their agreeability on statements based on SBI Bank's operations which includes; SBI's automated telephone system has made the banking experience seamlessly easy; the waiting time for having customer's questions addressed at the branch was satisfactory; when visiting a branch, the customers are directed to the right person to address their queries and the bank kiosks and machines like cash deposit, cheque deposit, passbook printing and token system have made customer experience more satisfying, the customers have given the following responses as shown in Graph 4.6.

We can observe that majority of responses believe that they are not correctly directed to the right person to resolve their issues. This maybe the result of chaos and confusion created because of the number of counters and traffic of customers in the branch. At certain times, even when the customers are directed to the right counter, they often end-up asking at other places for the right direction again and again. When any staff member is absent, others tend to cover their work space and handle their customers that day, this also impacts the mind of the customers, they think that the employees in the branch keep changing their desks and there is no proper plan of

action, we meet somebody new in every visit (those customers who rarely visit the branches). On the other hand, it is difficult for the employee to assist and cater other employee's customer, although, all of them are the clients of same bank, still, each employee have a specialised hold on customer's mind and heart.

Talking about the waiting time in the branches, majority of responses are not satisfied with the time taken in the branch to address their issues and queries. This may be due to increased number of customers walking-in to the branches for minute transactions. Here, CRM plays an important role in training the employees to properly guide and educate the customers to use the digital platforms like YONO application or internet banking services of SBI Bank. There is still a scope of promoting the use of door-step banking facility and customer service points (CSPs), as the number of routine of banking transactions like cheque deposit, cash deposit and withdrawal, passbook printing and update etc. can be easily done through these extended facilities. This will result in filtering of the customers coming to the branches, only customers with crucial and necessary queries and issues will visit the branches. The employees can also pay attention to them and ultimately it will result in consuming lower than usual time in the branches.

Graph 4.6: Degree of agreeability with the statement based on SBI Bank's operations



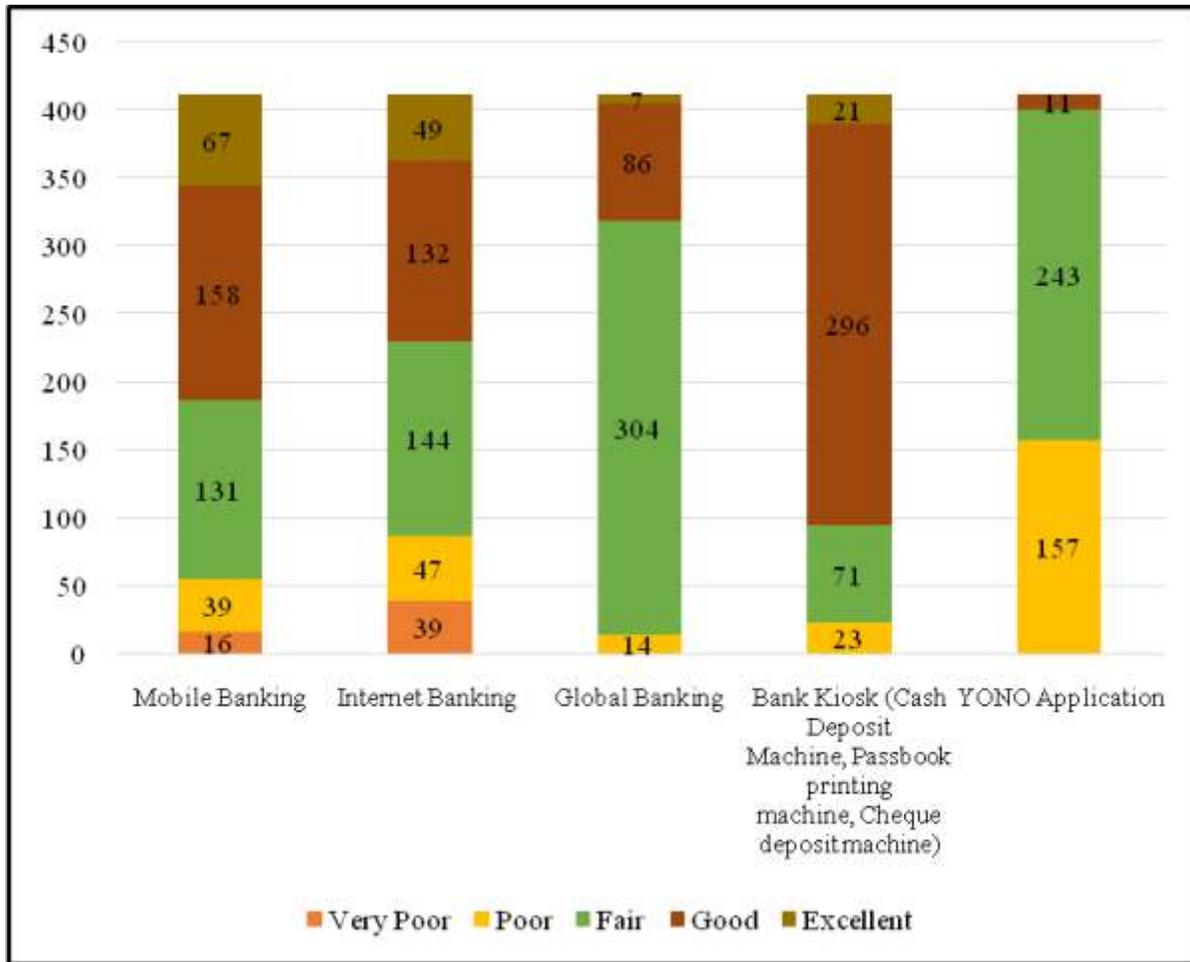
k) Level of satisfaction based on banking services

The customers were asked to rate their satisfaction based on SBI Bank's services including; Mobile Banking, Internet Banking, Global Banking, banking Kiosk and YONO application. Their responses are given in Graph 4.7. We can observe that a few customers have rated the performance and use of mobile banking and internet banking services very low. This might be due to their individual experiences at some point of time because of which they are resisting the use of digital platforms for their banking transactions. Many of them are even influenced by the bad experiences of other customers, they themselves have never operated any digital platform still they are confident enough that these platforms are not safe and secure. The employees must try to

change this mentality of their customers to make their relations even stronger and increase customer's reliability on the bank.

Similarly, talking of the level of satisfaction based on the functioning of YONO application, the results are very contradictory to question "i) YONO application awareness", where the customers are not even properly aware about the various features of the application. Without knowing the broader picture, customers are not in the right position to comment on the performance of the YONO application. It has variety of features like cashless withdrawals, balance check, viewing statement, updates on loans, offers, booking hotels and tickets, paying bills, selecting nominations, KYC update etc. Many branches in Pune have dedicated kiosk and employees for raising awareness about the use of YONO

Graph 4.7: Level of satisfaction based on banking services



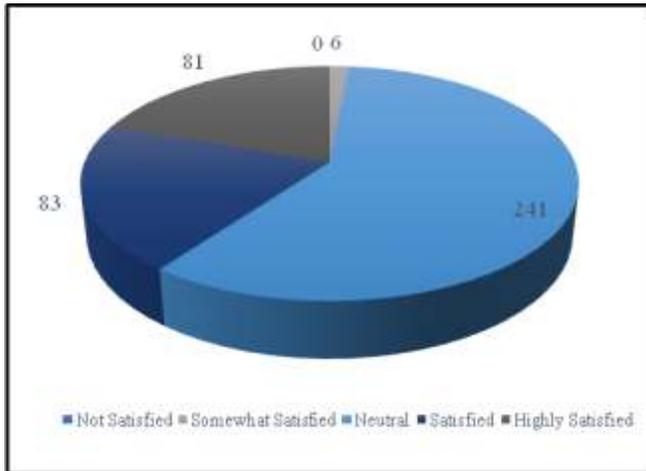
a) Rate your overall banking experience with SBI Bank

The customers were asked to rate their overall banking experience with SBI Bank by keeping in mind all the service dimensions and range of products offered by the bank on the scale of 1 to 5 where 5 means Highly Satisfied. Their responses are shown in Graph 4.8. It can be interpreted that there are majority of customers i.e., 241, who have a neutral response in terms of rating the overall satisfaction in banking with SBI Bank branches in Pune. This may be due to their positive and somewhat unlikely

experiences with various products or services offered by the bank; for example: a customer is happy with his loan account but is facing trouble whenever he visits the branch for passbook printing because of non-functioning printing kiosk, then, he has wait in line or take a token to do so. In such a scenario the employees must provide a proper guidance to the customer and make his aware about the facilities of YONO app for their own convenience. We can also see that there are 81 customers who are highly satisfied with the overall banking experience with the SBI Bank in Pune city branches. This indicates that these are those customers who are well-

aware about all the facilities extended by the bank like YONO, internet banking, banking kiosk, CSPs, door-step banking facility etc. and henceforth, utilising them for seamless banking experience.

Graph 4.8: Rate your overall banking experience with SBI Bank



The responses from employee point of view are analyzed as follows:

- a) Do you think Customer Relationship Management (CRM) is required at your bank?

After asking the employees about their point of view on whether CRM is required at their Bank, looking at their responses it can be concluded that out of 76 employees, 75 employees said yes that CRM is the need of the hour in order to retain their valuable and existing customer as well as to attract new potential customers and 1 employee had a contradicting point of view as shown in Graph 4.9. As of my opinion, the CRM practices play a very vital role in building the strong foundation of long-run relation between the customer and employees. This is the reason why banks pay so much attention to CRM activities. The SBI Bank has also come up with a robust software for maintain CRM activities.

Graph 4.9: CRM is required at the Bank

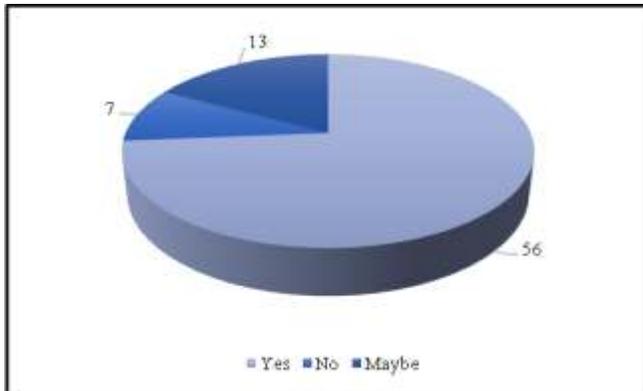


- b) Do you think your bank is sufficiently indulging in the CRM activities?

When the employees were asked about whether their bank is sufficiently indulging in the CRM activities, as shown in Graph 4.10 out of 76 employees, 56 employees feel that the Bank is doing its best to sufficiently indulge in CRM activities, 7 employees don't think that the Bank is doing enough and rest 13 respondents have contradicting views as they think something better can be done than the present scenario to ensure a smoother customer relation. The effectiveness of any CRM initiative cannot be judged over a night, it requires a certain course of time. The bank generally waits for the customers to use the facility, provide their valuable feedback for improvement and then aim to improve them. CRM includes making available various platforms for seamless banking to the customers, providing them proper guidance and assistance and ensuring they feel delighted every single time they visit any SBI branch.

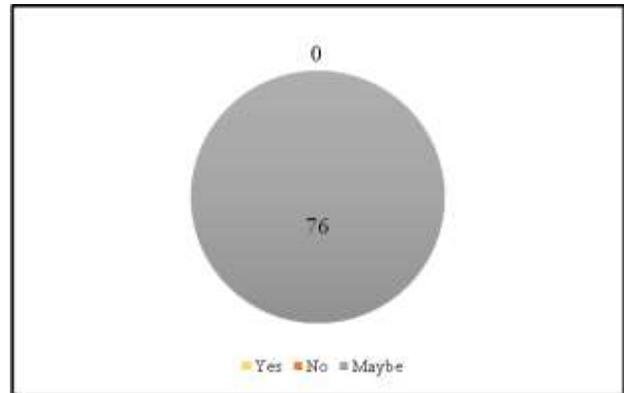
- c) Do you think CRM activities play a crucial role in pitching potential customers?

Graph 4.10: Bank is sufficiently indulging in CRM



After asking the employees whether CRM helps them in pitching potential customers, without any contradictions, every employee said yes as shown in Graph 4.11. Their point of concern was bad word of mouth. All the existing customers, if satisfied, tend to spread positive reviews about the bank, listening to which new customers visit the branches. But as compared to positive review, one single bad review can hamper the bank's goodwill and it loses a potential customer. Hence, it becomes the social as well as professional obligation of the bank employees to ensure that each and every customer entering in the branch, steps out satisfied and worry free. Here, the values of empathy, responsiveness and assurance play a crucial role to make the customer feel important.

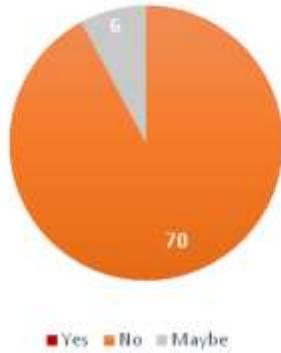
Graph 4.11: CRM plays a crucial role in pitching potential customers



- d) Do you think CRM activities help in retaining existing customers?

When the employees were asked about whether the CRM activities help them in retaining bank's existing customers? After looking at their responses it can be interpreted that out of 76 employees, 70 employees said yes that CRM helps in retaining existing customers of the bank and comparatively tend to keep them more loyal and 6 employees had an opposite view on the same as shown in Graph 4.12. There exists a hypothetical marketing funnel for converting potential buyers into the brand advocates of the brand. The same can also be applied to the customers of SBI Bank branches in Pune. Although the brand name itself doesn't need any kind of advertising but if more and more existing customers of the bank branches in Pune are satisfied they automatically act as the brand advocates, creating popularity of the brand, increasing positive views and simultaneously attracting new customers.

Graph 4.12: CRM helps in retaining existing customers

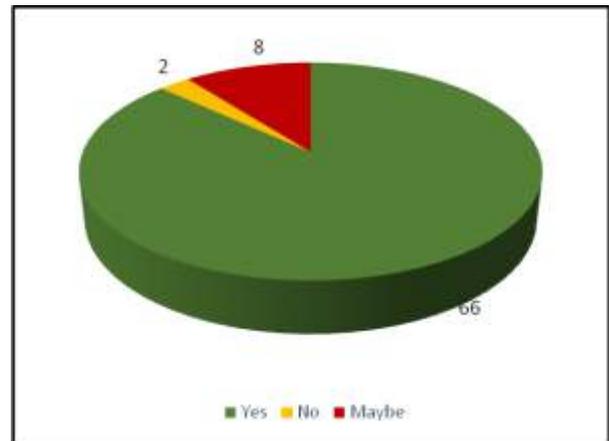


e) Do the CRM activities help you in understanding customer needs?

After asking the employees about understanding customer needs through CRM, it can be concluded that out of 76 employees, 66 employees said yes that CRM helps employee in understanding their customer’s needs in a more personalized manner and 2 employees had an opposite though on the same and remaining had a diplomatic view as shown in Graph 4.13.

The SBI Bank has developed very robust CRM software which has a feature to pen down and record the necessary conversations that took place between the employee and the customer. These details carry the information about their prospects and plans, financial position and attitude and approach towards banking. It can be viewed by any employee, in any branch without any geographic constraints. This provides the bank with an opportunity to avail benefit and derive value based upon the relations created with the customers by the other co-employees of the bank.

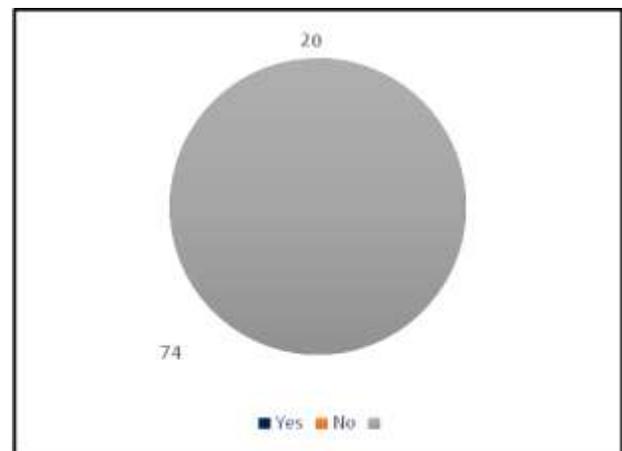
Graph 4.13: CRM helps in understanding customer needs



f) Do you participate in the CRM activities and campaigns organised by your bank?

When the employed were asked whether they participate in the CRM activities and campaigns organised by SBI Bank, out of 76 respondents, 74 said yes, they do participate and the rest politely declined as shown in Graph 4.14. The employees must be aware enough to promptly answer what are the various CRM initiatives that are undertaken by the bank. The bank does not need to come up with other campaigns relating to the CRM practices nor for the customer or the employees, the bank just need to rejuvenate the existing policies and campaigns in a different manner to ensure their successful implementation.

Graph 4.14: Employees participate in CRM activities and campaigns



## 5. Findings of the Study

We can see that after collecting the responses from customer's point of view, majority of respondents in the bank branches come for accounts and loan related issues; status check, enquiry, closure, etc. Out of 411 respondents maximum of them are associated with SBI Bank for period of 4-6 years and about 57 customers are loyal to the banks for more than 6 years now.

Talking about the satisfaction which customers derive by employee interaction, many feel that the employees are comparatively neglecting and do not give individual attention. Although number of respondents supported the points that they feel safe and secure while doing transactions with the bank.

This is the area where the bank has to work in order to increase the awareness amongst the customers about the various other functions available on the YONO application for which the customers visit the bank and wait in queues. Although the service dimensions like automated telephone services and banking kiosks and machines are satisfactory for the customer, issues like waiting time in a bank branch and direction towards the right person to get their issues properly resolved are points where the customers show a sense of disappointment. Almost every customer who does not resist technological and digital advancement are somewhat satisfied by the digitization of SBI Bank services except some of them have faced transaction failures due to server issues and problems with the application. When asked

about the satisfaction from the overall banking experience with SBI by keeping in mind all the service dimensions, majority of customers rated their satisfaction on the average level, 20.75% were satisfied and 20.25% were highly satisfied.

When asked about customer relationship management (CRM) to the employees, majority of them feel that CRM is required at the Bank in order to retain existing customers and attract new potential customers. The majority of employees feel that the bank is sufficiently indulging in the CRM activities, although a few of them had a contradictory view as they think something more efficient can be done than the present scenario to ensure a smooth customer relation.

The majority of employees also feel that CRM not only help them to retain their existing customers but also helps them in pitching potential customers. Their point of concern was bad word of mouth. All the existing customers, if satisfied, tend to spread positive reviews about the bank, listening to which new customers visit the branches. But as compared to positive review, one single bad review can hamper the bank's goodwill and it loses a potential customer. The CRM also helps employees in understanding their customer's needs in a more personalized manner. And almost every employee of the bank take participates in the CRM activities and campaigns organised by the bank. To summarise the responses of the employees, please refer the following tables:

Table 5.3: Responses of the employees

Question	Responses		
	Yes	No	Maybe
Do you think Customer Relationship Management (CRM) is required at your bank?	75	01	-

Do you think your bank is sufficiently indulging in the CRM activities?	56	07	13
Do you think CRM activities play a crucial role in pitching potential customers?	76	-	-
Do you think CRM activities help in retaining existing customers?	70	-	06
Do the CRM activities help you in understanding customer needs?	66	02	08
Do you participate in the CRM activities and campaigns organised by your bank?	74	02	-

The centralised banking software of SBI plays a crucial role in maintaining customer relationships, once a new customer enters in the branch all their details, requirements and needs are recorded to create a customer identity. Henceforth, whenever these customers visit any SBI Bank branch, anytime, the bank employees can view their profiles in just one click. This specific feature helps the employee to understand their customers in a better manner and advise them various products and services based on their needs and requirements. The bank started computerising its branching operations since 1990s but somehow the employees feel that they were losing their market share to other banks who engaged more modern and centralised core processing systems. This particular issue was addressed when SBI implemented core banking solution from TCS

BaNCS, the largest centralized core system implementation ever undertaken. This modernisation in the banking system of SBI has proved to impress majority of its customers who felt the bank didn't meet their expectations.

The digital identity of the customers maintained with the banks is updated consistently across all channels with quality information after every customer interaction. It not only helps in cross-sell and up-sell of products and services but also serve a more refined analysis.

According to the survey, maximum customers were satisfied with the variety of CRM efforts taken by SBI Bank, but certainly some areas need more attention for improvement. A sense of personalized touch must be provided to each and every customer. The majority of customers seem to be disheartened because they feel they're

queries are not properly addressed within a respectable time frame.

CRM plays a crucial role in increasing customer confidence, but moreover the attitude of employees towards CRM adds a supporting strength in its implementation. In SBI Bank, the employee's attitude towards CRM activities was found to be neglecting. The majority of staff is not even properly aware about the various CRM initiatives which their bank has introduced. It is very important to mould this attitude of the employees as they are the face of SBI Bank. Maybe this is the reason why the bank is unable to improve its image with the new and potential customers.

It is also observed that employees, who are allotted those desks where the customer traffic is larger, often tend to develop a rude, arrogant and annoyed attitude towards everything. This might be the result of number of day-to-day experiences they've had with number of customers. This attitude sometimes affects the employee productivity and at times also disappoints the customers. As we know, a major portion of the branch traffic is of senior citizens; who mind this slight change in attitude very much. For them bank is a place where they can come and interact, share their issues and talk about their experiences and knowledge. Hence, the staff must always try to meet their expectations.

During the study, I also came across many staff members; including the employees, Branch Managers, Chief Manager and even the helping hands, who were extremely polite in their conduct with the customers. But as rightly said; "people pay more attention to the loopholes rather than appreciating the efficiency in the operations". Hence, now onwards the objective must be elimination of any kind of loopholes in the operations, so that there is nothing left top complaint about.

The Bank is trying its best in rendering services on time, customer satisfaction, creating improved image, modern CRM initiatives and awareness regarding the same to retain customers and attract potential customers. Not only the branch banking staffs but also the back-end staffs from the data analytics department are also successfully contributing in maintaining the data and providing helpful insights for better CRM.

## 6. Observation of the Study

The basic reasons because of which a normal routine customer opens an additional bank account with other banks or switches their bank are listed below:

- There are various natural as well as man-made reasons resulting in variations in attitude of an individual. Similarly, the manner of behavior of the bank staff may vary from person-to-person. This scenario when viewed from the customer's point of view portrays a relatively rude or arrogant image of the employee, which is not always the case. There must be a clear understanding between the customer and bank staff.
- Dissatisfaction in banking experience is one of the most common problems during this pandemic phase. The people are totally traumatized due to the post effects of the pandemic. The customers expect the branches to function in a full-fledge manner, whereas the bank staff also have their own limitations as an individual. The bank must also operate by keeping all the SOPs in mind.
- Competitive rivalry amongst the banks gives advantages and value for money to the customers.

Word of mouth plays a very important role in converting potential clients into permanent customers. But in case of unhappy customers, this word of mouth has a comparatively larger negative impact on the customer base. Usually, dissatisfied customers tend to share their bad experience with a greater number of people which then creates a negative goodwill about the bank.

Almost every day number of customer visits the bank branches with complaints. If handled properly, these customers tend to visit the branch again with a positive attitude, but if they are not given proper attention, they often end up opening additional accounts in other banks and switching banks in worst case scenarios, for a seamless banking experience. Customers feel a sense of empathy when their issues are properly heard and resolved, such customers are found to be more loyal towards their bank. If said in simple words, a complaint that is handled efficiently is actually better than no complaint at all.

As of my experience in certain SBI Bank branches, I feel customers come to bank with huge expectations which at time are not met by the bank staff, leading to customer's disappointment. Many a times the employees are also not at fault as there might be some server issues, inappropriate manpower at the branch, any suggestion cannot be given by consulting a superior, etc., but somehow such incidents lead to creating havoc in the branches and ultimately hampers the employee and customer relations.

Traditionally in CRM, bankers try to gain more control in interaction with the customers, manage customer expectations in a better manner, and understand their need and requirements, offer products or services that adhere to customer's requirement. Talking

about E-CRM, the same process is done digitally; customer's needs are served on automated platforms and through phone banking representatives. Resolution of complaints is also easily done through online complaint portals. There also exists a lack of motivation the employees in utilizing the potential of CRM solutions which are introduced by the bank. In comparison to the mass customers coming into the branches, there is an inactivity sensed in the behavior of a few staff members. Many of the employees lack the skills and knowledge in the software domain; hence, it is important to train them so that all the modifications in the software can be successfully implemented in the favor of the bank.

It has been observed that whenever the employees are specifically asked about any update or implementation of certain CRM initiatives, they have nothing to answer in return. The SBI bank has developed efficient CRM software to ensure valuable scrutiny and sharing the benefit of value generation by customer relations to the bank. But it is in the hands of the employees at the operational level to decide the direction of the software's success. As per the feedback received from the employees, due to heavy traffic in the branches, employees do not get enough time to give their valuable inputs and feedbacks on the software. The basic CRM Model of SBI Bank is described as follows:

Figure 1: CRM Model in SBI Bank



For ease of management, SBI Bank has categorized its customers into the following categories:

- 1) Personal Banking segment
- 2) Agriculture segment
- 3) Small and Medium Enterprises
- 4) Corporate and Government segment

The SBI Bank has come up with number of initiatives in order to ensure seamless banking experience for the customers. The various channels for CRM used in SBI Bank are:

- Branch assistance
- Mobile Banking
- Internet Banking
- Cash Deposit Machines
- ATMs
- Credit and Debit Cards
- Contact Centre (Toll-free assistance)
- Green Remit Cards/ Insta Deposits Cards
- Passbook Printing Kiosk
- Token Machines

As far as the various programs and initiatives relating to CRM is concerned, the bank is not

leaving any page unturned. Additionally, the CRM software of SBI has added four stars to its attempt in improving the CRM. However, it must be noted that these initiatives can only be successful if the employees are capable enough to implement them in the right manner and still many employees are not aware about its systematic functioning. Hence, there is a need to make the employees aware about the necessity and advantages that such CRM initiatives hold for the bank. If the employees are properly trained and well-aware with regards to the implementation of CRM policies and initiatives, then they will be capable enough to convince the customers and generate valuable and crucial relations which will benefit the bank in the long run. Similarly, employees must be trained on various features of the CRM software and how if used properly it can do wonders to the bank's performance. After all, CRM simply means a customer can be new to a city.

7. Recommendation & Limitations of the study
  - Understanding Customer needs: After conducting the study and looking at various responses, the basic requirement is to strive and understand customer

needs in a better manner, a basic mentality of almost every existing customer and potential customer regarding the bank is that they have to especially take a day off from their routine to visit any branch, because it's time-consuming. There is huge footfall in the branches, the staff members to address the issue and needs are comparatively lower than the crowd of customers barging the branches. When talking in a wholesome manner, the very basic requirement of each and every customer is individual attention. In order to improve their CRM, bank must emphasize more on this dimension. For this purpose banks can appoint Relationship Managers (RM), who further ensures that their customers get quick and prompt services and resolution of issues in an efficient and effective manner.

- Employee's willingness to help: Employee's willingness to help the customers, their emotion of empathy and assurance plays a very important role in maintaining good customer relations and ensuring customer satisfaction. Hence, customers who are visiting the branch, especially, senior citizens need more personalized and individualized attention. Giving prompt and correct resolutions to their issues are crucial for banks to retain customers.
- Separate desk for assistance: In order to avail any service at a bank branch, customers are required to collect a token from the token machine. This particular facility is very useful to minimize the crowd gathering at the counters but on the other hand, customers with very simple requirements like adding a bar code to passbook, KYC details updating, form filling also have to wait in a long queue for

their turn. For resolving this issue, a separate kiosk for assisting customers with small paper work related issues must be established. It in-turn reduces the unnecessary footfall in the bank branches.

- Proper functioning of Bank Kiosk: In order to be more efficient and effective, SBI Bank came up with technically advanced Banking Kiosk, Passbook printing machine, Cash deposit machines etc. But their functionality must be properly taken care of, usually, some or the other machines in the branches are not in working condition, this results in diversion of this machine accessing customer mass towards the employee desk.
- Dedicated Relationship managers: In order to make the customers aware of the new products or services, bank utilizes various methods like phone calls, text messages, automated calls etc. This sometimes leads to customers getting irritated and annoyed. For this purpose, every branch can divide a portion of their customer base amongst their employees, so that such information can be shared in mass by one single employee and the customers don't remain oblivious from such product or service can depend on the same. Usually, banks allot RMs for their superior, premium and HNW customers for their ease, but the same must be practiced for all other customers as well. For example: the members of the same family having multiple accounts at SBI can be allotted one single RM or employees of the same company having their salary accounts with SBI can be allotted one RM.
- Better server & operating systems: The YONO application provides almost every banking service at one single platform. But

customers face issues in doing certain transactions due to server issues. Similarly, such server issues are also faced by employees trying to operate systems through the bank branches. This results in customer disappointment and more than usual time consumption.

- Giving appointments: Unlike the regular clients like businessmen who have to daily visit the bank branches, other customer segments can take appointments from their touch points i.e., RMs. This will ensure that they do not have to wait for their turn in the branch and such reviewing of appointment and walk-ins in the branch can also help the staff to transfer more and more queries and service request to virtual, call-centre or digital channels. This suggestion cannot be implemented for all SBI branches but a certain number of branches can be converted into appointment-only visiting branches.
- Increasing manpower: As we know, SBI bank has the largest number of customers banking with them; the traffic in the branches is also relatively higher than other competing banks. In such a scenario when there is absenteeism of employee or the number of employees in the bank branches are insufficient to handle the crowd it becomes disappointing for the customers. Hence, the bank must focus on increasing their manpower in order to efficiently address their customer's requirements.
- Shift systems for employees: It is primarily observed that the employees who are sitting at the desk where there is more customer traffic have tended to develop a very arrogant and annoyed attitude. They often communicate

rudely without any issue. This problem can be addressed if a proper analytical system is developed to monitor the performance of employees and based on their performance a rotation or shift can be implemented on hourly, weekly or monthly basis so that the pressure doesn't lie on one single member.

- Chat-box assistance: Although the digital platforms have stipulated chat-box facility, still there is a need for up gradation or advancement of this feature. The chat-box feature identifies certain words from the customer's input and replies accordingly. When a different set of words are used, the chat-box assistance fails at times to provide necessary solutions.

#### Limitation of the study

- The study is conducted during the COVID-19 pandemic phase; hence, the responses of both the customers and the employees are limited and geographically concentrated. The pandemic has significantly impacted the emotional and physical health of everyone; hence, it becomes a social responsibility to respect the willingness of respondents to answer certain questions.
- The study is primarily conducted in Pune city of Maharashtra, hence, the response are demographically limited.
- The sample size of the study may not be sufficient, due to time barriers only limited number of responses have been collected.
- As the research is based upon the responses provided by the customers, hence, some wrong responses may become part of the error.
- It is not possible to collect responses from each and every customer because some were hesitant to share their views while others were ignorant; hence, a representative sample has been collected.

## 7. Conclusion

SBI Bank focuses on identifying customer needs, segment customers and building accurate customer profiles which helps the bank to proactively cross-sell its products or services resulting in improved customer experience and deepen relationships. Today, collection of customer-based data is not a challenge but to use the same for competitive and business advantage is a task. This implies the need of Customer Relationship Management (CRM) in order to bridge the gap between potential and existing customers and converting data into customer insights which will increase profitable customer relationships across multiple points. Rather than focusing only on the traditional CRM techniques, SBI has come up with many innovations in the field. The bank has advanced its system and has initiated CRM-CMS, wherein customers can trail the previous complaints and other details of their previous applications as well. Now, it provides ease for customers to lodge complaints, track them and have a proper resolution. During the FY2020-21, the bank has also initiated many customers centric projects to ensure a delightful customer experience, some of these initiatives are:

- Deceased claim settlement through CRM
- AI Based email handling solutions
- Door step banking facility
- Using best AI/ML techniques for improving efficiency
- Automation of identified services through registered mobile number.

The E-CRM platform if properly used by the banks can create a digital experience that is consistent with what customers would expect from meeting their banker in person. Banks can easily deliver effortless engagements that

customers love, in real time and across any channel or device. Customer relationship Management not only enables the banks to personalize their relations with the customers but also establishes a need-based, customer-centric business model. It also helps banks to make marketing efforts more effective. The technical solutions deployed by SBI Bank like YONO, YONO Lite, Passbook Kiosk, No Queue, etc., are flexible, user-friendly and meant to facilitate specific workflow and requirements in implementation processes. The SBI Bank has begun to implement end-to-end technologies through all its departments with the intention of removing human error from the processes. Changes are all pervasive in nature; the existing manual environment of operations could not have been adequate as well as suitable for further vision, growth, plan and strategies. Presently, the customers enjoy the advantage of customized technical solutions and the bank is using the same to build a strong long-term relation which benefits both the parties. The customers are highly satisfied by the range of products and services extended by the bank but at the same time they are unaware about the CRM practices of SBI Bank. In the long-run SBI has a greater scope of performance and competing with the other players in the industry if attention is paid to certain dimensions of CRM, for example: a separate desk specifically dedicated only to assist the customers or dedicated relationship managers for every customer etc. can definitely prove to enhance the customer's experience at bank.

The bank must ensure better server and operating systems as most of the times the employee complaints about the bad server issues, customers must be served on appointment-based systems, making them feel that their time is valued by the bank. The bank must also pay attention on increasing the

manpower of the branches as the ratio of employees to customers in any SBI Bank branch is relatively low as compared to other public and private players. Undoubtedly, the top management of the bank is coming up with robust ideas, in terms of strategies and advanced technological solutions for better service and banking experience, but somewhere the bank is lagging behind on the operational front in implementing these ideas. Hence, there arises a need for training the employees and making them aware about how crucial these CRM initiatives and CRM software is for the bank. If the employees are well aware, they will surely end up directing the customers properly in the right direction and therefore, generating valuable and long-term relations.

## Appendix

### LIST OF GRAPHS

Graph no.	Name of the Graph
4.1	Employment status
4.2	Nature of recent transactions
4.3	Years of association
4.4	Level of satisfaction based on customer and employee inter action
4.5	YONO application awareness
4.6	Degree of agreeability with the statement based on SBI Bank's operations
4.7	Level of satisfaction based on banking services
4.8	Rate your overall banking experience with SBI Bank
4.9	CRM is required at the Bank
4.10	Bank is efficiently indulging in CRM
4.11	CRM plays a crucial role in pitching potential customers
4.12	CRM helps in retaining existing customers
4.13	CRM helps in understanding customer needs
4.14	Employees participate in CRM activities and campaigns

### LIST OF TABLES

Table no.	Name of the table
4.1	Age Distribution of the respondents
4.2	Educational Qualification of the respondents
5.3	Responses of the employees

### LIST OF FIGURES

Figure no.	Name of the Figure
1.1	CRM Model in SBI Bank

QUESTIONNAIRE – “Customer point of view”

“A study on Customer Relationship Management in SBI Bank”

I am Shubhangi Mishra of Institute of Management and Entrepreneurship Development (IMED), Bharati Vidyapeeth Deemed University (BVDU), Pune, pursuing MBA (with a specialization in Finance & IT) is conducting a study on Customer Relationship Management in SBI Bank. Your participation by responding to the following questions will prove to be a great support.

16. Name: \_\_\_\_\_

17. Gender:

Male      Female      Prefer not to say

18. Name of the Home Branch: \_\_\_\_\_

19. Age:

Below 25 Years      25 - 35 Years

36 - 45 Years      46 - 55 Years

55 Years & above

20. Marital Status: Unmarried Married Others Accounts (Current/ Saving/ Salary)  
 Loan Facility (Car/ Home/ Personal/ LAP etc.)
21. Occupation: Self-Employed Pension and Locker section  
 Private Employee Insurance (Life & General)  
 Government Employee Others (please specify): \_\_\_\_\_  
 Professional  
 Housemaker  
 Student  
 Unemployed  
 Retiree
22. Nature of your recent transaction with the bank: Investment (Mutual Funds/ FD/ RD)
23. Your years of association with SBI:  
 Less than 1 year  
 Between 2-4 years  
 Between 4-6 years  
 More than 6 years
24. Please rate your level of satisfaction based on customer and employee interaction (on the scale of 1 to 5, where 5 means highly satisfied):

	Not Happy	Somewhat Happy	Neutral	Satisfied	Highly Satisfied
Individual attention by the staff when you request for service					
Transparency in the actions taken by the staff					
Staff handles your problems in a very responsive manner					
Information given by the bank staff are appropriate					
A sense of safety and security while banking with SBI.					
The grievance redressal and procedure and service speed					

25. Please answer the following questions with regards to the YONO application based on your level of awareness:

	Yes	No
Did you know cash withdrawal can be done without ATM card?		
Did you know account balance and statement can be viewed from your YONO App?		
Did you know you can pay utility bills, book tickets and hotels using your YONO App?		
Did you know you can open FD/RD accounts, check their status and change maturity instructions as well as avail pre-closure facility using YONO App?		
Did you know you can make account nominations with the YONO App?		
Did you know you can change the debit/ credit card pins using YONO App?		
Did you know you can transfer your bank account from one branch to another using YONO App?		
Did you know you can verify your KYC and request a new cheque book using the YONO App?		
Did you know you can check your dispute status using YONO App?		
Did you know you can do the TDS enquiry using your YONO App?		
Do you think YONO App has made banking easier and quicker?		
Do you think the chat box assistance provided by the YONO app is efficient to address and resolve your queries?		

26. Indicate whether you agree or disagree with the following statements:

	Agree	Disagree
SBI's automated telephone system has made the banking experience seamlessly easy.		
The waiting time for having your questions addressed at the branch was satisfactory		
You are directed to the right person to address your queries		
The bank kiosks and machines have made the customer service experience more satisfying		

27. How would you suggest quality of SBI's following services?

	Not Happy	Somewhat Happy	Neutral	Satisfied	Highly Satisfied
Mobile Banking					
Internet Banking					
Global Banking					
Bank Kiosk (Cash Deposit Machine, Passbook printing machine, Cheque deposit machine)					
YONO Application					

28. How will you rate your banking experience with SBI (on the scale of 1 to 5, where 5 means highly satisfied):

1      2      3      4      5

29. Any suggestions for improvement / betterment in SBI's banking operations:

---



---

QUESTIONNAIRE – “Employee point of view”

“A study on Customer Relationship Management in SBI Bank”

I am Shubhangi Mishra of Institute of Management and Entrepreneurship Development (IMED), Bharati Vidyapeeth Deemed University (BVDU), Pune, pursuing MBA (with a specialization in Finance & IT) is conducting a study on Customer Relationship Management in SBI Bank. Your participation by responding to the following questions will prove to be a great support.

- 1) Name: \_\_\_\_\_
- 2) Gender:
 

Male      Female      Prefer not to say
- 3) Name of the Br \_\_\_\_\_
- 4) Name of your department: \_\_\_\_\_
- 5) Do you think Customer Relationship Management (CRM) is required at your bank?
 

Yes

No
- 6) Do you think your bank is sufficiently indulging in the CRM activities?
 

Yes

No

Maybe
- 7) Do you think CRM activities play a crucial role in pitching potential customers?
 

Yes

No

Maybe

8) Do you think CRM activities help in retaining existing customers?

Yes

No

Maybe

9) Do the CRM activities help you in understanding customer needs?

Yes

No

Not Sure

10) Do you participate in the CRM activities and campaigns organised by your bank?

Yes

No

11) What type of CRM campaigns does your bank run?

\_\_\_\_\_  
\_\_\_\_\_

12) What are the various options available to you as an employee under the scope of CRM?

\_\_\_\_\_  
\_\_\_\_\_

13) What challenges do you face while doing CRM?

\_\_\_\_\_  
\_\_\_\_\_

14) Any suggestions for improvement in strategies and implementation of CRM activities in SBI Bank?

\_\_\_\_\_  
\_\_\_\_\_

# A STUDY OF THE EFFECT OF DIFFERENT LEADERSHIP STYLES

Ms. Krupa Ulhas Kelkar  
Senior Business Analyst  
Genpact

Mr. Shreyas Dingankar  
Faculty of Management  
Studies-BV (DU)

Ms. Gargi Banerjee

## ABSTRACT

In this paper we have discussed about the effects of different Leadership styles. Leadership is one of the key determinants associated with the success or failure of any organization. Leadership style is the manner in which people are directed and motivated by a leader in order to achieve organizational goals. This study examines the effects of different leadership styles. The focus was on the six major leadership styles and their effects on various fields – transformational, transactional, autocratic, democratic, bureaucratic, charismatic. This study has provided deep insights about the effects of different leadership styles. In this study both the primary and secondary research has been conducted. The primary research has been done using qualitative approach by using the reports from various organizations. The secondary research has been done using the review of previously established literature for achieving the research objectives.

Keywords –Transformational, Transactional, Autocratic, Bureaucratic, charismatic, Democratic leadership styles and their effects in various fields.

## 1. INTRODUCTION

The role of leadership in an organization is crucial in terms of creating a vision, mission, determination and establishment of objectives, designing strategies, policies, and methods to achieve the organizational objectives effectively and efficiently along with directing and coordinating the efforts and organizational activities. Top quality leadership is essential to achieve both the mission and vision along with copying the changes occurring in the external environment. In current time, many companies are facing problems related to unethical practices, high labor turnover, poor financial performance etc. This may be due to the lack of effective leadership. Unfortunately, some

companies do not take account of the leadership styles adopted by the managers. Based on this premises the present study aims to explore the effects of different leadership styles.

The main objective of this research is to determine the effects of autocratic, democratic, Transactional, charismatic, Transformational, Bureaucratic, leadership styles in various organizations. In order to determine the effects of leadership styles, the research hypothesis was formulated. Sule as cited in Ogbe (2006) states:

... an effective leader could be linked to a “Fulani herdsman .... The herdsman goes ahead of the cattle, while the cattle follow from behind, where there is a river to cross, he does not leave cattle in crossing. He sleeps where the cattle

sleep, drinks the water the cattle drink, if there is an attack on the herdsman either by an animal or person, the cattle all rally round to fight with the common enemy. Thus the question now is how many leaders are compatible?"

The answer to the question above seems inconclusive. Theoretically, the different leadership styles yielded different results - desirables and undesirables. The best or an effective leadership style is the one that produces desirable results for individual workers and the organizations at large.

## II. Literature review

Leadership styles are the general way a leader behaves towards subordinates in order to attain objectives. The degree to which a manager delegates authority, the modes of power he employs and his or relative concern for human relationship or task orientation all tend to reflect the managers leadership styles. In this views, North house (2007) argues that leadership style is the manner and approach of providing direction, implementing plans and motivating people .This argument was corroborated by the researchers believe that leadership styles refer to a leaders behavior and it is also the result of the philosophy, personality and experience of the leader.

Noteworthy is the fact that each organization is a unique combinations of individual, tasks and the objectives. Rowe (2007) posits that, in an emergency when there is little time to converge on an agreement and where a designated authority has significantly more experience, an autocratic leadership styles may be most effective; however, in a highly motivated and aligned team with a homogeneous level of expertise, a more democratic or laissez-faire style may be more effective. Lamb submitted that the style to be adopted by a leader should be the one

that most effectively achieves the objectives of the group while balancing the interest of its individual members.

Mehra, Smith, Dixon and Robertson (2006) argue that when some organization seek efficient ways to enable them outperform others , a long standing approach focus towards the effects of leadership. Team leaders are required to play a pivotal role in shaping collective norms, team scope with their environments and coordinating collective actions. This leader centered perspective valuable insights into the relationship between leadership and the team performance. This is only because intangible assets such as leadership styles, culture, skill and motivation are seen increasingly as a key sources of strength in those firms that can combine people and processes and organizational performance.

## III. THEORIES OF LEADERSHIP STYLES

### 3.1 Autocratic Leader

It is the one who does not consult or take inputs from his/her team members while taking decisions or formulating policies. The main characteristics here associated is here all the decision making power are centralized with the leader. Leader here gives orders and insists that they are obeyed. Leader takes decisions or determinates the policies for the group without consulting the group members. It does not give group members any freedom to influence decisions of the leader and not asks for feedback from group members.

### 3.2 Democratic Leadership

Involves the leader including one or more employees in the decision making process. The decision making power is shared with group members and all decisions or policies are finalized with the acceptance of all members in the group and before starting any activities the

group members are informed about the long term plans and policies .

3.3 Laissez Faire Leadership, is also known free –rein leader is the one who gives complete freedom to subordinates to plan and execute the work assigned in the manner most suitable to them. Here basically leader plays like the role of an observer who gives suggestions or advice whenever required. Leader avoids using of power as the decision making powers are delegated to subordinates and process leader provides support to subordinates to acquire information and resources required to accomplish the work assigned.

3.4 Transformational leadership enhances the self – concept of followers and encourage followers personal and collective identification with the goals and the objectives of both the leaders and the organizations. Transformational leaders have inspirational motivation and intellectual stimulation. Inspirational motivation is defined as the degree to which leaders articulate an appealing vision and intellectual motivation is defined as the degree to which leaders stimulate their followers effort to be innovative and creative way.

3.5 Transactional leadership occurs when a leader exchanges something of economy, political or psychological value with a follower. It engages followers in an agreement that specifies the followers performance expectations and the consequences for meeting those expectations.

#### IV. RESEARCH METHODOLOGY

This research follows a survey design and analysis is based on primary data generated through a basic structural questionnaire. Survey instrument used in the data generation is the multifactor leadership questionnaire

developed by Bass in his study. ‘Leadership and performance beyond expectations’. This instrument is by far the most widely used instrument for measuring leadership styles outcomes and effects. It comes in several outcome versions. The version used in this study is the popular MLQ form. The independent variables are Transformational and Transactional leadership styles and the dependent variables are the outcomes: extra effort, satisfaction and effort, productivity, loyalty in the small scaled enterprises. Therefore questions in the questionnaire are those relating to leadership styles or behaviors and performance as measured by extra effort satisfaction, effectiveness. This variables are proposed by Bass (1990) and House (1997). This study operationalizes these variables to the effect of leadership styles or behavior on performance of small scale enterprises in the survey area. In the MLQ each independent variables are given equal weighting. Each research statements has 5 potential ranging from “not at all” to “all the times”.

The transactional leadership style, democratic leadership styles were independent predictors on organizational performance. Here also the results show that organizational performance is affected by leadership styles . There are three leadership styles which were found to have positive relationships with organizational performance – democratic Transformational, transactional leadership styles were found to have positive relationships here.

In order to answer the research question, quantitative approach has been utilized in this study. There are three types of research approaches namely; quantitative, qualitative and mixed approach. According to Kumar (2005), when the goal of study is to find the relationship among variables, quantitative approach is usually utilized. This study utilizes

quantitative approach as the objective is to determine relationship between dependent and independent leadership styles.

### Sampling and data collection

Leadership scale for research work was adopted from Zhu (2002). Organizational performance is basically measured using respondents perception of their organization's performance in comparison of their competitors. The study was conducted on the employees of twenty randomly select organizations. The datas were collected using the survey . All the required permissions were taken from the bank authorities for conducting the survey. After all the procedures, the questionnaires were distributed and the respondents had to fill them out.

### Data analysis

The reliability of the data was measured using Cronbach's Alpha reliability coefficient. The Cronbach's Alphacoefficient values for charismatic leadership, bureaucratic leadership, Transformational leadership, transactional leadership, democratic leadership and autocratic leadership were found to be 0.813, 0.780, 0.087, 0.790, 0.753 respectively. The impact of leadership on their performance was measured using the organizational performance scale. Here the scale only compares the performance of the various leaders associated with different leadership styles.

### Research participants

The accessible population included administrators in one Board of education in South western Ontario. The sample person's included 10 board employees who held senior

administrative positions and approximately 135 principals and vice principals . The total sample thus consisted of 145 educational leaders.

### Quantitative instrumentation

In addition to participants reporting their self perceived thinking and behavior style, the life styles inventory was used as a quantitative measures of leadership behavioural style. Administrators stressor were measured with the administration, an index of stress levels which was identified basically ad a major sources of stress.

### Qualitative instrumentation

The qualitative component of the study included a brief reflection of leadership scenario that participants self identified as being a stressful situation, but that they were able to de-stress based on a self identified leadership style they applied to the scenario. Additionally, participants were asked to self identify the leadership behavioral style they employed to contend with the stressful situation they described in the reflection. To ascertain this a brief description of each of the leadership style were provided on the qualitative survey. Here are those:-

1. Autocratic leadership style- This leadership style is fully applicable in those places where the employees are just new or inexperienced with these assignments. So qualitatively this leadership styles didn't have so much advantages in an organization. Commitment, courage, creativity, innovation, caring are typically eliminated by this leaders. This leadership didn't give any motivation for the newcomers.
2. Democratic leadership:- This leadership

styles have to give efforts for building employees they are required to build consensus for the most mandatory decisions. Here motivation and team spirit follows and newcomers get chance for establishing innovative ideas.

3. Free rein leadership:- This leadership basically not at all suitable for building a proper organization. Though here everyone gets chance but disputes created due to improper managing style. So it is not so preferred.

So based on above information it has been that the leader who exhibited Transformational or collaborative leadership styles would experience less administrator stress. Both leadership styles foster trust in staff where the leader supports and inspires puts collaborative effort to achieve a common goal. Trust and commitment be a less stressful. The research predicts that transactional leadership style and charismatic leadership more success. In addition those who appear for these leadership such as directive or nondirective appears stress less. Research study participants who apply for people / satisfaction (self actualizations, Human encouraging affiliative and approval will experience less stress on the job.

## V. ANALYSIS

From time to time people asks us what is the best leadership style is to promote better employee engagement. Unfortunately there isn't a cut and dry answer to that question.

There is no doubt that human capital is the most important asset for any organization. It is the efforts of employees which help an organization to achieve its goals. However, for efficient and effective performance, employees need effective direction, motivation and most importantly a

superior who leads from the front. Therefore, success of any organization largely depends on its leader. Of course, employees work at ground level but is the leader only who takes them forward as one big group. An organization is seen through its leader and his / her values.

For example, Bill Gates and Microsoft are considered as one, Tata industries means Ratan Tata, Infosys is represented by Narayan Murthy. These leaders may retire but the organizations will be known by their name. You know why? Because they have played a key role for the success and excellence of their respective organizations.

To analyze it, a good leader is expected to have qualities of a perfect individual. He should be knowledgeable, must be updated with the changes in business environment, must be decisive and capable of keeping his subordinates as one United team, must be looked upon as a trusted friend and motivate his/her team to take initiatives and work for the benefit of the organization.

A leader may not possess all the qualities of a good leader by birth but to become good leader he / she can acquire all qualities through training, experience and conscious efforts. Leadership is both a process and property stated by Gay and Strake.

If viewing leadership style from the perspective of exchange of power and its utilization in various fields Transformational and transactional leaders are best somehow for proper outcome. Understanding these different tropes can only provide a vocabulary for discussion that can leading to meaningful and desired results.

Be it a different leadership styles as we have seen famous leaders follow their own leadership style but they have power to motivate. Be it a

Mukesh Ambani, Bill Gates, or Ratan Tata Transformational and transactional leadership styles are mostly followed.

“ I personally proud to believe that subhash Chandra Bose is the best example of any leader . He adopt democratic leadership and have all skills .Today’s independencegive a best example of proper leadership STYLES”.

The perfectionists leadership behavioral style is based on the need to attain a flawless results, avoid failure and involves the tendency to equate self worth with the attainment of unreasonably high standards.

## VI. OBSERVATION

- 6.1 Autocratic leaders are classic “ do as I say” types. Typically these leaders are inexperienced with leadership thrust upon them in the form of a new position or assignment that involves people management. Here lack of opportunities for initiatives or self development may effect performance and lacks flexibility and creativity. This type of leadership style is suitable where involvement of subordinates in decision making is not required. Commitment, creativity and innovation are typically eliminated by autocratic leaders. Activities require fast actions or work is being done by unskilled or untrained workforce.
- 6.2 Democratic leadership- It sounds easy enough . Instead of one defined leader, the group leads enough itself. Democratic leaders are frustrated by the enormous efforts required to build consensus for the most mundane decisions as well as the glacial pace required to lead a group by fiat. Expectations of employees increase and they start feeling that it is their right to

be consulted thus may feel frustrated if not consulted before taking decisions. Employees may resist any change or implementation of decisions if their prior expectations is not taken.

- 6.3 Bureaucratic Leadership – Bureaucratic leaders are usually strongly committed to procedures and process instead of people, and as a result they may appear aloof and highly change adverse. The specific problem or problems associated with using policies to lead aren’t always obvious until the damage is done .The danger here is that leadership’s greatest benefits, motivating are ignored by bureaucratic leaders. The specific risk is that policies come before people and complaints to that effect are usually met with disinterest. In fact, the detrimental impact could be significant and far outweigh any benefits realized by these leadership styles.
- 6.4 Charismatic leadership –This leadership provides fertile ground for creativity and innovation and is highly motivational. It sounds like a best case scenario. There is however, one significant problem associated with this that potentially under cuts the value of charismatic leaders; they can leave. Once gone, an organization can appear rudderless without direction. Their leadership style is based upon the strength of personalities. As a result, charismatic leadership usually eliminates other strong personalities and competitors.
- 6.5 Transactional leadership – It include a good performance review, a promotion, a raise or a desired change in duties. The problem with this leader is the high expectations which sometimes didn’t

fulfilled. They display the traits or behaviors of charismatic leaders and can be quite effective in many circumstances while creating motivated players. They are adept at making deals that motivated and this can prove beneficial to an organization. The issue then is simply one of sustainability.

- 6.6 Transformational Leadership- It is strongly desired since it has no artificial constraints in terms of buy-in and instead is focused on getting followers on board based upon their own evolving thought process and changing responses to leadership challenges. It is particularly suited for fast – paced, changed environments that demand creative problem solving and customer commitment. Organizationally this achieves the best leadership outcome since Transformational leaders develop people. They seek to change those they lead. In doing so, they can represent sustainable, self replicating leadership. Not content to simply use force of personality or bargaining to persuade followers, this leadership uses knowledge and vision to make changes.

## VII. CONCLUSION

To offer parting words after this journey, it is important to understand that what ever leadership style chosen, it has to relate to inherent beliefs.

It is very important for leaders to find their own icebergs and self-reflect on what their beliefs mean to their leadership styles and how they develop their management strategies in an effective and efficient way. As prospective leaders and managers in the society, it is highly

required to locate and cultivate a personal leadership style to become successful in a future society.

## VIII. REFERENCES

1. Ancon, Deborah G., and DAVID A. Nadler. "Top Hats and Executive Tales: Designing the senior Team." *Sloan Management Review* (Fall 1999) : 19-28
2. Bass, Bernard M. *Leadership and performance Beyond Expectations* Englewood cliffs, New Jersey: The Free Press, 1985
3. Bass, Bernard M. " The Inspirational Process of leadership." *Journal of Management Development* 7, no5: 21-31.
4. Bartolome Fernando. " Nobody Trusts the Boss completely- Now what?" *Harvard Business Review* (March-April 1999): 135-142. How to overcome the limits of trust and the former of candor.
5. Bass, Bernard M., David A. Waldman, Bruce and Michael . "Transformational leadership." *Group and organizational studies* 12, no1, (March 1987): 73-87.
6. Boggler R., The influence of leadership style on teacher job satisfaction, *Educational Administration quarterly*, 37, 662-683 (2001)
7. Bass B.M., "Leadership and Performance beyond expectations".
8. Scott E.B., The role of Transformational and transactional leadership in sharing ,creating and exploiting organizational knowledge, *Journal of leadership and organizational studies*.
9. Luring long, Impact of leadership style on organizational change, *IEEE* (2008)

10. Lashbrook w., Business performance, employee satisfaction and leadership practices, performance Improvement, 29-33 Page no.
11. Effects of Transformational Leadership in an organization and its relationship with other constructs Journal 10: 24-34.
12. R. Gopal and Rima Ghosh Choudhury(2014) Leadership styles: International Journal of research in Business Management vol.2, Issue 5, May 2014, 1-10
13. M. Sabir, adilsohail, Muhammad Asif khan (2011), Impact of leadership style on organization and role of employee values.
14. Rima Ghosh chowdhury (2014).A study on the impact of leadership styles on employee motivation and commitment PhD Thesis.
15. Farid Ahmed, Ahahid Latif, Abdul Rasheed(2014), Impact of Transformational Leadership on Employee, Journal of Management policies and practices June 2014, vol.2, No.2, Pp-11-25.
16. N. Babak, The impact of participate leadership on employee's motivation, job satisfaction and innovation, Ph.D. Dissertation, Dept. Business, British University, Dubai 2012
17. Roontz, H and Donnell, C. (1993). Introduction to Management McGraw – Hill Inc., New York.
18. KatzD., and St Kahn, R.L.(1978). The social psychology of organization (2nd ed.)Newyork: whiley.
19. Fry, L.W,(2003).Towards a Theory of spiritual Leadership. The Leadership quarterly, 14, 693-727.
20. Burners,J.M.(1978). Leadership. New York: Harper and Row.
21. Mcshane, S.L and Von Glinow, M.A.(2000). Organizational Behavior, Burr Ridge, IL:
22. Unamaka, FC(1995). Business Administration in Enugu. Precision printers and Publishers.
23. Yukul,G.(2002) Leadership in organizations. 5th Edition. Englewood cliffs, NJ: Prentice-Hall.

#### IX. BIOGRAPHY

Gargi Banerjee is a management student in institute of management and Entrepreneurship development, punebharativedyapeeth college under Deemed university.

# Agriculture Mobile Apps – A Helping Hand for Farmers

---

Ms. Sangeeta Patil  
Assistant Professor, BV(DU)

Ms. Pratima Gund  
Assistant Professor ,BV( DU)

Mr. Jitesh Gupta  
Associate Analyst, Deloitte

## ABSTRACT

Agriculture sector is a major contributor of national income. It creates employment opportunities in rural areas. Developing countries need huge amount of capital for its economic development. Agriculture sector is a significant source of capital formation in initial stage of economic development. Capital formation can be achieved through agriculture taxation, export of agricultural products, transfer of labor and capital from farm to non-farm activities etc. Agriculture plays major role in providing raw materials to other industries. So it is important to focus on Indian agriculture sector. Information and communication technology helps to enhance the agricultural growth. Agriculture sector requires daily and updated information to take effective action against future calamities. Mobile phone technology is important aspect of ICT. It helps to get in touch with more and more farmers in rural areas. Accessing information through mobile apps is very convenient way to increase knowledge about specific sector. So, mobile apps are vital road map to rural development by assisting farmers. So, this paper presents information about some existing mobile apps in the agriculture sector.

Keywords: Agriculture, economic development, India, capital, GDP

### 1. Introduction

India is an agricultural country which means most of its citizen is dependent on agriculture whether directly or indirectly. While some people choose farming as their primary source of their livelihood other tend to use it as a for business purpose. Being an agricultural country, agriculture is a major contributor towards Indian economy. With more than 58% of the households in rural India considers agriculture as their primary source of livelihood, when it comes to GDP which is Gross Domestic Product, agriculture is one of the major contributors to GDP along with fisheries and forestry.

Agriculture plays a vital role in providing raw materials to industries like flour, rice and oil mills, bread, meat, milk products, sugar factories, wineries, jute and textile mills and various other industries. India is the second most populated country in the world which caters to almost 1.30 billion peoples, thus due to the humongous population there is rapid increase in food demand. Therefore, it is very essential to spotlight agriculture for rural development which will push the country towards a steady and incremental growth.

## Digital agriculture

Digital Agriculture can be defined as ICT in agriculture to sustain the development and prompt delivery of required information and services to make agricultural profitable along with more gaining factors like distributing safe, healthy and easily available food for excessive population of India. Rural connectivity can act as a key factor for providing low-cost data as well as access to the information. The digitization process of agriculture has the potential to create more opportunities for rural youths which will help them to realize their capabilities and potential to increase the productivity of agriculture. This will also help farmers to increase their profitability by enabling them to access variety of different markets present in the country with proper information regarding the farming related activities.

With the digitization of Agriculture, the need of related mobile apps which will serve as a platform for farmers to interact with the digital process will also increase tremendously which will help them to access different government schemes and policies which will benefit them and will increase their productivity. This digital change can act as a crucial turning point in the India's agricultural process.

In the year 2015, India amounted to have almost 720 million smart phone users, among them 300+ million users were rural. This estimate also included 50 million mobile phone users with access to internet. A study by the Boston Consulting Group provided data about rural mobile phone users will raise to 48% by 2020.

The government of India along with many other research institutes did take initiative for this process and introduced many mobile applications for the support of this cause. These apps were focused to provide farmers a helping hand for their agricultural practices and to earn

some market profit means some apps provides free information and some are paid. The applications mainly focused on providing farmers the required data about the insurance, prices of the basic agricultural commodities in various parts of the country, information about the seeds and climatic conditions which favors the growth. These applications help to get the knowledge of the market trend and fixing of their prices according to the dynamic market trend of the country.

The farmers were able to seek expert's advice from various experts belonging to various parts of the country regarding the cultivation process of crops. Therefore, it is foreseen that with this process along with mobile applications involvement in the agriculture, the productivity and efficiency of agriculture process will boost.

## Challenges faced by Indian farmers

- Lack of timely and relevant information:  
The government plans various schemes for the wellbeing of society. As we know agriculture is backbone of Indian economy so it is required to give more focus on its development. Government always introduces many agriculture schemes to help farmers. Due to administrative and technical reasons, much of the information has not been able to reach farmers in time to take advantage of the existing schemes.
- Lack of Market information:  
Rural India still in bad shape, farmers are not getting market information on time. Due to poor market information, the farmers have to rely on middlemen and local traders for the selling of their farm produce with throw-away price. Due to such situation farmers are becoming poorer.

- **Less use of agriculture tools:**  
In several parts of the country, the majority of the agricultural functions are carried out by human hand using traditional tools e.g. spade, wooden plough, sickle etc. so, farmers in traditional farming have to spend more time to harvest the crops compared to high-tech farming. Indian agricultural productivity is very less compared to world standards due to use of obsolete farming technology.
- **Shortage of capital:**  
Agriculture is one of the important industries and like all other industries which needs capital. The investment of capital in agro industry is becoming more crucial due to advancement of farm technology. Most of the population in rural area is below poverty line. Their capacity to save is low. This results in a low rate of capital formation. Illiteracy is also major obstacle for forming capital.
- **Fragmentation of land holding:**  
Due to the excessive growth of population and break-down of the joint family system, there has occurred continuous sub-division of agricultural land into smaller and smaller plots, when the size of land become smaller and smaller, cultivation becomes uneconomic these factors account for the low productivity of Indian agriculture.
- **Lack of water management:**  
Indian farming is depending upon monsoon. If monsoon is good, then entire Indian economy is upbeat and when the monsoon fails, all the stakeholders of agriculture will suffer to some extent. The major problem is of proper management of water or the lack of it. Proper management of water will improve agricultural output

and boost the overall Indian economy. Water usage is also unplanned with some waterless areas.

- **Frequent Climate change condition:**  
Indian agriculture is facing a lot of difficulties due to frequent climate change conditions. Global warming is a root cause of frequent climate change situations. In such scenario it is very hard to increase agriculture productivity and to feed the growing population of the country.

#### Mobile apps – A boon for farmers

- Mobile apps are one of the important interfaces between farmers and agriculture experts. It is the platform to reduce the gap between farmers and experts. They will allow farmers to seek guidance of experts even from far and distant places of the country.
- India is the country with second highest population in the world. Due to break down in joint family systems, land also divided into smaller and smaller pieces. So, with the help of technology utilization of small area of land to produce more is a big challenge to every farmer. The mobile apps help farmers to make better land management decisions, i.e. it helps to identify pests and diseases, weather conditions and agriculture best practices to settle the product.
- In this current era occurrence of unforeseen calamities becomes the cause for huge loss in agriculture. So, it is required to ensure crop to support farmers in such disaster. Crop insurance complete details provided by some agriculture mobile apps. Farmers can get information related to crop insurance cover and with the help of different constraints like area, coverage and

loan amount are able to calculate the premium. The introduction of mobile apps will enable farmers to get insights of various information like subsidy, normal sum extensions etc.

- With the advancement in technology, we can use GPS feature in mobile apps to provide farmers information related to prices and agricultural activities within 50 km of their radius. They will get all the required information automatically because apps can use location to optimize the search content.
- Farming mobile apps helps to the farmer for decision making which directly impacting on their yield. It is one of the helping hands for farmers to increase productivity. Internet connectivity getting affordable day by day which result into extensive use of mobile apps even in remotest areas of the country. As mobile

apps works as interface between farmers and agro information world, it definitely affect the growth of the farmers.

- The small farmer, who is much more at risks like climate change, poor quality seeds, lack of water and labor problems etc. and he is farming to support his family and doesn't care about the profit margin. His main motive is survival not money. Therefore, he needs all the possible low-cost methods to support his survival, other than anyone else. The current improvements in information and communication Technology (ICT) have facilitated the parameters to support and cater the small farmer's needs.
- Some existing mobile apps in Indian agriculture

Following are some mobile apps which help farmers to get updated information of agribusiness and to increase the returns.

Sr. No.	Name of Mobile App	Type of Information
1	<b>Kisan Suvidha</b>	Kisan Suvidha provides information about commodities prices in the nearby town, weather forecast for next five days and weather alerts. It also provides knowledge on IPM practices, plant safety, seeds, agro advisories, machineries and dealers.
2	<b>IFFCO Kisan-Agriculture</b>	It helps farmers by providing information on market prices, weather, and agro advisory in selected language in the form of textual content, images, audio clips and videos. It also provides helpline numbers of Kisan Call Centre, weather forecast, latest mandi prices, best practices tips related to agriculture and horticulture.
3	<b>RML Farmer - Krishi Mitr</b>	This app provides information about accurate usage of pesticides and fertilizers, news related to farm activities and farmer guidance, weather forecasting and farm advisory. It also provides agriculture news regarding policies and schemes provided by government.

4	<b>Pusa Krishi</b>	It gives information about farm technologies developed by Indian Agriculture Research Institute (IARI), which will definitely help to farmer to increase returns. It also provides the information of various new crop varieties developed by ICAR (Indian Council of Agriculture Research), guidelines regarding farm practices to preserve resources as well as implementation of farm machinery which will help to farmers in increasing the income.
5	<b>AgriApp</b>	It provides complete information on Crop production, Crop protection and all relevant agriculture allied services on your smart phone. In addition to being an information portal, Agri App is also an online market place bringing farmers, agriculture inputs, retails & fulfilment of services on a common digital platform. Agri app is available in Multiple Languages like Kannada, English, Hindi, Telugu, Tamil and Marathi which is very helpful for farmers to understand their requirements. It aims to empower Indian Farmers in addressing their challenges for identification of pests and due to crop diseases affecting their crops through digital agriculture solutions.
6	<b>Kheti-Badi</b>	This app supports ‘Organic Farming’ and also provides valuable information on issues related to Indian farmers. Modern Agriculture relies heavily on genetically customized seeds, pesticides and fertilizers. It helps farmers to switch from chemical farming to organic farming. However, this app is currently only available in four languages namely Hindi, English, Marathi and Gujarati. Users can read a variety of rich information from the agricultural sector and it is also possible to post their own content to inform and enlighten others.
7	<b>Krishi gyan</b>	It works like WhatsApp communication but is considered the best way as it does not require individual phone numbers to stay connected. This application provides general information on farming and enables Indian farmers to connect with Krishi Gyan experts to ask questions related to farming, and acquire answers within the app through notifications. The farmers as well as agriculture enthusiasts can share their views with each other.

<b>8</b>	<b>Crop insurance</b>	This mobile phone app has made it easier for insurance agencies to collect reliable and timely data on crop yields, enabling them to offer lower premiums to farmers. The technology has also made it possible for insured farmers to receive quicker claims payments, providing them with much needed cash flow during the cropping season. It can also be used to get details of normal sum insured, extended sum insured, premium details and subsidy information of any notified crop in any notified area. It is further linked to its web portal which caters to all stakeholders including farmers, states, insurance companies and banks.
<b>9</b>	<b>Aagri Market</b>	The app is focused with an aim to provide relevant information to farmers about crop prices and discourage them from going to the sales with fewer prices. It facilitates farmers to get information within 50 km radius of their respective area.
<b>10</b>	<b>AgriBuzz</b>	This app provides platform to the farmer community and helps them in exchanging agriculture commodities, selling and buying. Online executives are all the time ready on Agribuzz to chat with farmers to solve the problems. Here, people can connect with each other to buy or sell in over 12 categories and 110 subcategories. Some of which include seeds, vegetables, planting materials, types of machinery, tools etc.

### Conclusion

Majority of farmers are not aware that mobile phones can be used to conduct businesses and receive information. Mobile phone costs should be lowered to enable majority of farmers for having access to the current information about agribusiness within the state or country. Young farmers are more educated about mobile phone technology, they can take advantage of mobile phone technology to flourish agriculture sector. Agriculture mobile apps are sustainable platform to reinforce agriculture growth in rural area.

### References

1. Kavitha, A., Suseela, S., Sangeetha, M. and AnandaLakshmi, K. 2013 ICT in Agriculture-Indispensable.
2. Kekane Maruti Arjun, 2013 Indian Agriculture- Status, Importance and Role in Indian Economy.
3. Prof. Sheetal Desarda, Prof. Sangeeta Patil, 2017 Use of ICT to Solve Problems Faced by Indian Agriculture Industry.
4. <https://navbharattimes.indiatimes.com/tech/tech-photogallery/some-best-apps-for-farmers-based-on-agriculture/kisan-suvidha/photomazaashow/65195568.cm>

# Uses of Artificial Intelligence in Human Resource

---

Mr. Mayank Thakur  
Business Analyst, Genpact

Ms. Prachi Thakur  
Student BV(DU)

## ABSTRACT

India is a growing country. With economic growth adaption rate of technology has increased at a very high level. A smartphone is an important commodity in day-to-day life. Several factors affect the decision-making process while buying a smartphone. Each person has different needs, so it's important to find out the needs and the smartphone should fulfill all those needs. In this paper, the factors affecting the buying behavior of people are studied. There are several factors such as price, specifications, brand as well as demographic factors, and income-based factors. This study can be used for setting the price of a smartphone.

Keywords- Buying behavior, Smartphones, Demographics.

## INTRODUCTION

Smartphones have become an essential thing in day-to-day life. During this pandemic, online working culture and lockdown thing smartphones have played an important role in all cases from education to work. Because of this smartphone has become a fundamental part of our life. India is a country with second-largest country with a population of 134.6 crores, for many smartphones manufacturing companies India is the target market. The adoption of new technologies and smartphones is rising day by day in India.

The use of smartphones differs from person to person. India is a country of various cultures; the company has to understand the psychology of the people and have to release the smartphones accordingly. A smartphone should fulfill the needs and requirements of the customer. India is a growing economy. The price factor is an

important aspect of the large population in India.

The best smartphone for a consumer can be decided by various factors such as income, age, gender, and needs. In this paper, we will study the effect of these factors while choosing a smartphone and the psychology of customers. This study seeks to know the factors underlying a person's decision to choose a smartphone to use.

## LITERATURE REVIEW

MesaySata (2013) conducted research in Hawassa Town, Ethiopia. The data was collected using the sample random sampling method from 246 consumers. 'Price, social influence, durability, brand name, product feature, and after-sales service' these six factors were taken into consideration. From this paper, it was found that the product feature and

durability were the main factors that motivated people to buy a smartphone.

Deepika Ganlari, Pradeep Kr. Deka and Chandan Dutta (2016) The paper is about the internal and external factors which influence buying behavior. This paper focuses on the consumer's attitude towards smartphones and brands. From this paper, it can be seen that 'branding, product design, product performance, and price' are the main factors that influence the customers.

Chan Kit Hie (2017) researched the Kuching region of Malaysia to study the factors affecting smartphone buying decisions in a specific generation that is Generation-Y. The emphasis was on the following seven factors 'brand, convenience, dependency, price, social influence, product feature, and social needs'. From the research, it was found that brand image and innovative product features played an important role in buying decisions.

Ms. Harshleen Kaur Sethi (2017) This paper is about the role played by the brand name of a smartphone company and the way purchase was made that is via an online site or a store. The data was collected from Delhi and NCR region in India. It was observed that brand image played an important role. And the purchases were made mostly from local big stores and through company outlets

B. Ismail Zabiullah, B. Eswar Sai, and B. Amarendra (2020) The authors collected the data from the local area using a systematic questionnaire covering important factors which influence the behavior. The effect of digital advertising over traditional advertising was studied. They found that the ergonomics of a smartphone also affect behavior. Also, it was founded that the external trigger was an important factor for the change in the buying behavior.

## OBJECTIVES OF THE STUDY

### PRIMARY OBJECTIVE:

- To study the buying behavior of customers towards smartphones.
- To study the effect of demographics on buying behavior.
- To study the different aspects of a smartphone that are responsible for the sale.
- To find out the things which trigger a customer to buy a smartphone.

## RESEARCH METHODOLOGY

As the world is facing a pandemic, one to one interview is not possible. For data, collection a questionnaire survey method is used. In this, a google form is used to get feedback from people on the questionnaire. The data from the survey is used as primary data. The data is collected from different customers of different age groups, different income groups, and of different occupations such as students, working people, and housewives also.

### Types of Data-

1. Primary data -Primary data is a type of information that is directly obtained from surveys, experiments, and observations.
2. Secondary data - In this type of data, the information is already collected by the third person and available in journals, magazines, newspapers, journals, etc.

Type of data collection method- A qualitative data collection method is used for this study. In this type of study, data collection includes surveys, interviews, and questionnaires.

Research Design - The research is designed with

questions related to demographic dividends such as age, gender, and income group. From this descriptive and quantitative data can be obtained.

Sample design- The overall data for this paper will be collected from about 100-150 people. 50 people from each age group are taken. For example, 50 from the 18-25 age group, 50 from the 26-60 age group, and 50 from the 60+ age group.

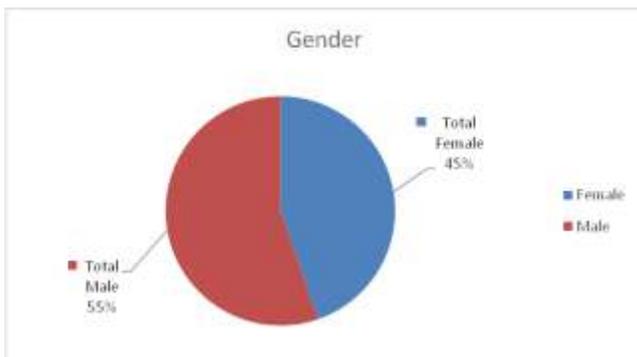
- (a) Sampling techniques – The questionnaire was circulated via social media in various cities across India.
- (b) Sample size – 140 responses were collected through the questionnaire.
- (c) Data Collection – The questionnaire was circulated using google form and the responses were collected and analyzed.

**INTERPRETATION**

The data was collected through the questionnaire which was circulated using google forms. For easy understanding and to get the interpretations easily, the data is presented in the form of pie charts.

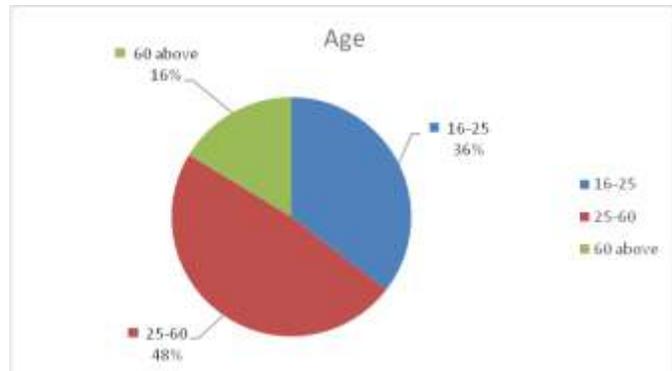
? Gender: -

A total of 140 responses were collected out of which 77 were males and 63 were females. The responses were collected randomly. The gender pie chart can be found below,



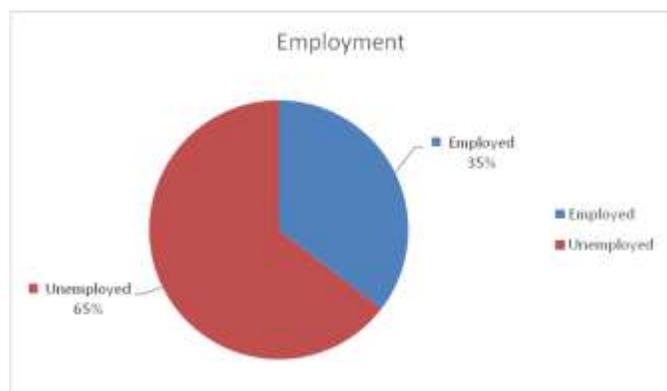
? Age: -

There were three age groups were considered while collecting the data i.e., 16-25, 25-60, and 60 above. 48% of responses were collected from the 25-60 age group i.e., 68. 22 and 50 responses were collected from the above 60 and 16-25 age groups, respectively. This shows that the above 60 age group is the smallest respondents among the total.



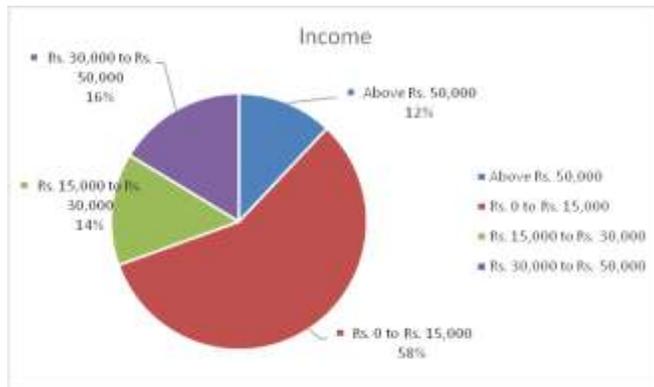
? Employment: -

From the chart, it can be interpreted that around 65% of respondents were unemployed as the age group above 60 are retired ones and the 16-25 age group consists of students. The 25-60 age group consists of working people which counts for around 35% of total responses. Out of 140 respondents, 49 were employed and 91 were unemployed.



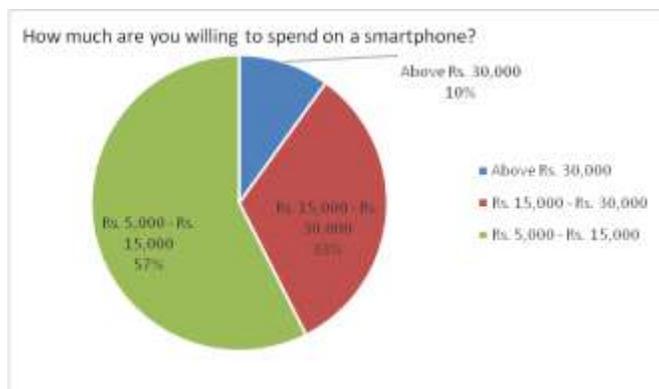
**Income: -**

It can be seen that the income group of Rs. 0 to Rs 15,000 accounts for 58% as it consists of students and retired people who come from above 60 and 16-25 age group. 14% of the respondents were from Rs. 15,000- Rs. 30,000 income group while 16% were from Rs. 30,000-Rs. 50,000 income group. Whereas 12% of respondents had income above Rs. 50,000 which counts around 17 responses.



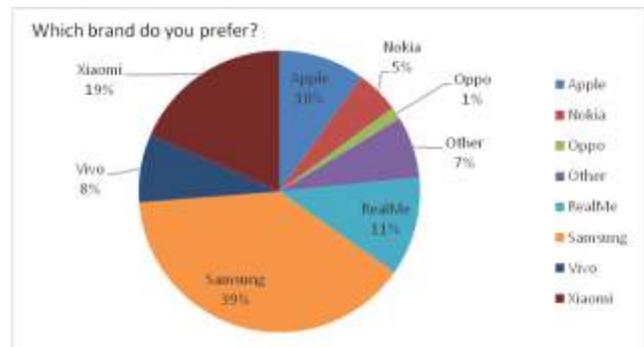
**How much are you willing to spend on a smartphone?**

Around 57% of respondents were willing to pay Rs. 5,000 to Rs. 15,000 for a smartphone. The respondents who were willing to pay Rs. 15,000 to Rs. 30,000 for a smartphone counted 33% of total respondents. 10% of respondents were interested in buying a smartphone that costs above Rs. 30,000.



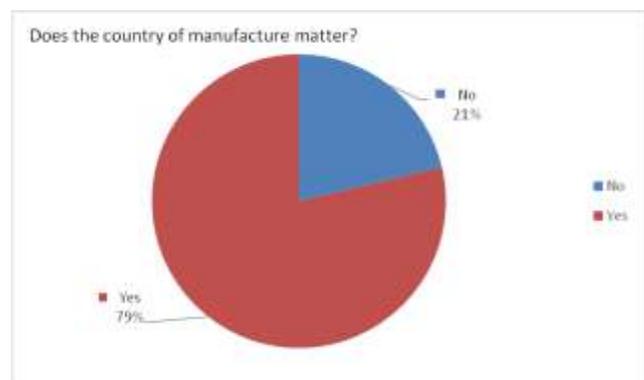
**Which brand do you prefer?**

From the pie chart, it can be seen that Samsung was a preferred brand among the other brands which counted for 39% of the total i.e., 55. Xiaomi was the second most preferred brand after Samsung as it counts 19% of total responses. 11% of respondents were interested in buying a Realme smartphone. Apple was the choice of 10% of respondents while Vivo, Nokia, and Oppo were preferred by 8%, 5%, and 1% of respondents respectively. 7% of respondents were interested in buying a smartphone from other companies.



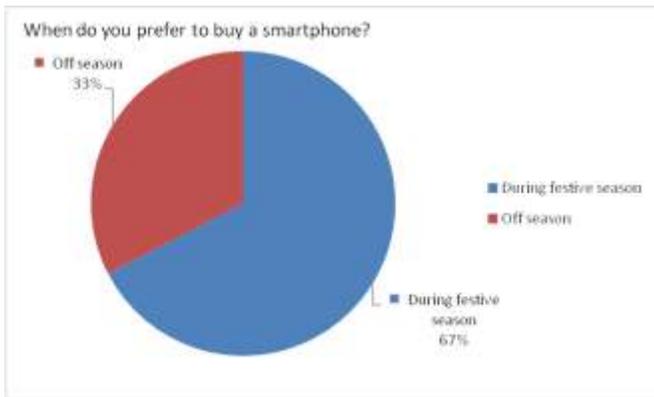
**Does the country of manufacture matter?**

This question asks about the preference over the manufacturing country for example Made in India or Made in China. The following graph shows the preference of respondents regarding the country of manufacturing. 79% of respondents preferred buying a smartphone that is manufactured in India which counts for 111 responses out of 140. Whereas for 21% of respondents the country of manufacture didn't matter.



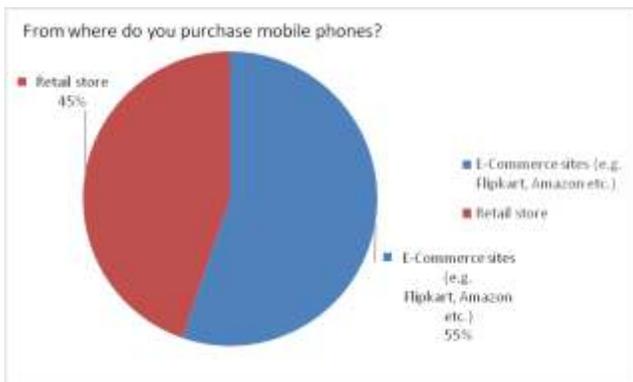
When do you prefer to buy a smartphone?

The information about the buying period of respondents is obtained through this question. It can be interpreted that the festival season is a prime period for respondents to buy the smartphone. 67% of respondents considered buying a smartphone in the festive season. 33% of respondents were interested in buying a smartphone during normal days which counts for 46 out of 140 responses.



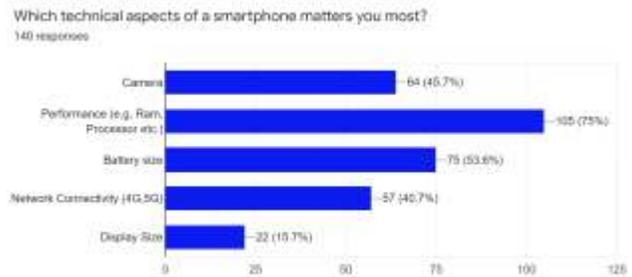
From where do you purchase mobile phones?

The following chart shows where the respondents prefer buying smartphones i.e., from a retail store or E-commerce site. In this digital age, 55% of respondents preferred buying from an E-commerce site instead of a retail site whereas 45% of respondents preferred retail stores.



Which technical aspects of a smartphone matter to you most?

The performance of a smartphone was the most preferred technical aspect for the respondents. 105 respondents selected performance while the battery size was the second most preferred feature of a smartphone with 75 responds. The camera was preferred by 64 respondents which count around 45.7%. Network connectivity and display size were preferred by 57 and 22 respondents respectively.



#### FINDINGS OF THE STUDY

- The number of respondents was almost the same, 55% were male and 45% were female.
- Most of the responses were from the 25-60 and 16-25 age groups.
- 65% of respondents were unemployed and 35% were employed.
- 56% of respondents had income in between Rs. 0 to Rs. 15,000.
- More than half of the respondents were willing to pay between Rs 5,000 to Rs. 15,000 for a smartphone.
- Samsung was the most preferred smartphone brand followed by Xiaomi and RealMe.
- Country of manufacture was important to 79% of respondents.
- 67% of respondents preferred buying a smartphone during the festive season.
- 55% of respondents chose an E-commerce

site over a retail store to make the purchase.

- Performance, Camera, and Battery size were the most considered aspects while making the purchase.

## SUGGESTIONS

- From the responses, it can be interpreted that most of the respondents are willing to pay a maximum of Rs. 30,000 for a smartphone. So, the companies should introduce new smartphones in between Rs. 10,000 to Rs 30,000.
- As India is an emerging market there is a big chance for companies like RealMe and Vivo to increase their market by introducing new smartphones with good specifications at a reasonable price.
- Most of the respondents preferred to buy a smartphone that is made in India. Companies can manufacture smartphones in India which can give them an advantage.
- Introducing a new smartphone during the festive season can be a great opportunity for brands as a majority of people buy smartphones during the festive season.
- In this digital era, a maximum number of people prefer buying a smartphone from an E-commerce site, so companies should focus on marketing on digital platforms.
- Smartphone companies should focus on key specifications such as camera, performance, battery size, and network connectivity as most people consider these specifications while buying a smartphone.

## CONCLUSION

- From the above study, it can be concluded that consumer buying behavior depends on

a customer perspective that includes what an individual considers while purchasing the product. A customer prefers a product that satisfies the needs at a reasonable or preferred price. Brand value plays an important role in the customer's vision. Samsung has a brand value, and the customer considers it as a trustable brand. Pricing is an important factor to the people of India as it is a growing economy. The expenditure on a smartphone has a relation with the income and age of the customer.

- As the E-commerce sites provide discounts during normal days and provide special offers during the festive season, people prefer online stores as compared to retail stores. Due to conflict between China and India, most people prefer products that are manufactured in India. Although price is an important factor, the key specifications of a smartphone play an important role in attracting the customer. Overall, it can be said that India is a huge market that is full of opportunities for smartphone brands that can understand the psychology of customers.

## REFERENCES

- 1) MesaySata (2013). "Consumer Buying Behavior of Mobile Phone Devices". Journal of Marketing and Consumer Research-An Open Access International Journal. Vol.2 2013.
- 2) Deepika Ganlari, Pradeep Kr. Deka and Chandan Dutta (2016). "A study on consumer buying behavior of mobiles phone". Journal of Management in Practice. Vol. 1, No. 1, 3 May 2016, ISSN: 2456-1509.
- 3) NushratShabrin, Sarod Khandaker, Saad Bin Abul Kashem, Chan Kit Hie, and Teresa

- Susila (2017). "Factors Affecting Smartphone Purchase Decisions of Generation-Y". *The Journal of Contemporary Issues in Business and Government*. 2017 Volume 23, Number 1, pp47-65.
- 4) Ms. Harshleen Kaur Sethi (2017). "Consumer Buying Behavior of Smart Phones". *International Journal of Engineering Research & Technology*. ISSN: 2278-0181, Vol.6 Issue 06, June-2017.
  - 5) B.Ismail Zabiullah, B. Eswar Sai, and B. Amarendra (2020). "Buying Behaviour of Customers Towards Smartphone'S". *EasyChair Preprint no. 2726*, Date: February 20, 2020.
  - 6) K. Prabha Kumari (2017). "A Study on buying behavior selecting mobile phones with reference to Tirupur city". *International Journal for Research in Multidisciplinary Field*. ISSN: 2455-0620, Vol. 3, Issue- 11/11/2017.
  - 7) BishalNagarkoti, "Factors Influencing Consumer Behavior of Smartphone User", Master Thesis, Department of International Business, Arcada University of Applied Sciences, pp. 1-42, 2009.
  - 8) Uddin, M. R., Lopa, N. Z., & Oheduzzaman, M. (2014). Factors Affecting Customers' Buying Decisions of MobilePhone: A study On Khulna City, Bangladesh. *International Journal of Managing Value and Supply Chains*, 21-28.
  - 9) Mohan Kumar A. and Dinesh Kumar S., A Study On Customer Purchase Behaviortowards Mobile Phone With Special Reference To Erode City, *IOSR Journal of Business and Management (IOSR-JBM)*, 4-8.

# “Buying Behavior towards Smartphones.”

---

Mr. Kundan Patil,  
Student BV(DU)

Mr. Pranav Methe,  
Student, Sanjay Bhokare  
Group of Institute, Miraj

## ABSTRACT

In this competitive business world, for any kind of business activity the human resource (HR) is a mandatory asset for improving the organizational performance. To be successful, organizations have to compete for higher customer – satisfaction which is inevitable key for their survival, and to achieve this, organizations have to familiarize with adoption of Innovative HR – practices to improve their performance and be different among its competitors. In upcoming arena, HRM is moving away from its foundation functionality like recruitment, selection, appraising to more advanced progress like Artificial Intelligence. At present the buzz word is AI and how it is doing 180° transformation in the human resources, and how AI is seizing millions of jobs globally in each and every sector.

Keywords: Artificial Intelligence, Decision making, Recruitment, Human resource.

### 1. Introduction

Artificial Intelligence means when a computer or technology can think program learn and execute like a human. Deep learning and Machine learning is a type of AI. Artificial Intelligence is used in object detection, face recognition, solving complex problems and rectifying data on its own. AI is something, a study of how to make the technology or computer do the certain task which in present scenario human can do in better way. AI is all about technology. For example – Artificial Intelligence took a central stage in the field of HR. For recruiter who earlier used to go throughout plethora of CVs. Now with the help of Artificial Intelligence, it saves time since basics CVs are filtered by using AI,

And HR can put more focus on Interviewing process. Mundane and Monotonous work are

gradually taken over by AI. Different people have different perception, majority perceived wrong about AI that it is nothing but a robot which is made by human, the word itself defines artificial means non-natural but that doesn't mean it is only a robot. on top of that AI is not only a system but it is a study of technology and machine. artificial intelligence is a complete study of maths, physics, philosophy science and everything which is related to technology and machine, it also a field that has a long history but is still constantly and actively growing and changing. Artificial Intelligence also contains the part where machines are programmed to exhibit traits as of a human mind of problem-solving and learning because of the movies we consider artificial intelligence as robots which is not the case artificial intelligence has various types

different subsets. Machine learning is a subset of artificial intelligence in machine learning the main concept is to program computers to automatically learn and adapt to new data without the need for human intervention or human assistance. Another subset is Deep learning, also known in layman terms as data science deep learning is the study of data it enables a computer to automatically learn from a huge amount of unstructured or structured data given like text images or videos and find a plausible output.

Natural Language Processing (NLP) is used as a language interpreter between computer and humans. It is the part of the AI where Artificial Intelligence has different types: -

Reactive Machines- At the beginning of the era of artificial intelligence, these are the forms of ai systems which have the most limited capability and do not have a memory to learn and work on the basis of pre-fed input code.

Limited Memory- Advancing the reactive machines with a memory to learn and make decisions actually in present-days AI comes under the category of limited memory. Deep learning is a part where a large volume of data stored in memory is made to function and stored for the future. The Face recognition system in your mobile has a limit to store the number of faces.

Theory of mind- This type of AI is a concept or a little bit of work in progress. This is solely based on human emotions, needs beliefs and thought processes and then understand the entities with help of the above factors. This is also being an area of interest for AI researchers with a name called artificial emotional intelligence.

Self-aware- This is the final stage of AI where a computer (machine) has evolved so much that it decides just like a human brain and has

developed self-awareness this stage is called a hypothesis.

Best examples of ai in our day -to- day life-

Google maps is an AI where we just open an app to enter our destination and it gives the direction, With the help of the machine learning and technology, it knows about every destination with the help of images, text fed by users. It channels data automatically to identify roads, traffic signals, roadblocks, congestion, etc. A similar AI technology is used by applications like ola uber. Face detection and recognition in your mobile phones uses AI technology fed with data of different eye patterns, eyebrows, skin tones and various other facial features to identify and recognize faces.

HR is not traditionally associated with this emerging technology, failure to deploy AI with HR practices could prove to be a costly which makes the organizations difficult to grow big and survive in this globe driven by advanced technologies and machines. Global workforce is completely threatened by AI and advanced learning machines and they are snatching away the interference or involvement of humans in each and every domain. To compete with AI the real challenge now lies within the HR – departments that how well they train and re-transform their workforce in understanding the AI and collaborating working with AI & Robots. The world is depending towards the high use of machine learning and AI. Enterprise softwares is getting more sophisticated and it automates an increasing number of jobs.

## 1.2 USES OF AI IN HR

The various parts where company or HR department can use this data: -

Scanning Resumes - The main or starting of

recruiting any staff is to go through their resumes. the Hr department faces this dull, boring, and tedious task to go through each resume application for a specified job. There are multiple positions in the company for which thousands of applications and resumes come. The HR department needs fast scanning and selection.

All resumes are digital today, so getting them in a PDF format and then reading them is tedious, so companies make online forms which are shortlisted by the help of NLP (Natural Language Processing) tool which gains the structured data and find candidates that stand out from the crowd.

Managing Talent - Hiring the talent is the only way to acquire it for the company. Proper training and mentoring of the staff are required to access to people with desired skills. The mentors are connected to mentees with augmented AI. There are many apps like ELLEN from NextPlay.ai that help mentors to connect with mentees. When someone joins a program, app connects him to the most potential partners.

Employee Decrement Reduction- Many people get into an organization to nurture themselves but change the job for getting a higher wage. Top market companies know the worth of single talent on the market and are ready to pay higher wages. Attracting people to get into is a thing but keeping them with job is completely another issue. It is a very big fuss to find people with high skills, so companies with the help of artificial intelligence process the data about employees and information about their activities spot those people that are willing to change the job.

Promotions and Inclusion - With such a war of talents, companies are aware of the fact of minority issues and the ease of offending someone. The companies hired Public Relations

Staff to eliminate the risk of use of offensive or biased language. But it is still not enough. The companies have started using platform like TEXTIO, which is an augmented writing platform that analyses the text in real-time and spots if there is a mistake or any abusiveness or clumsiness. The platform spots biased or offensive language and provides suggestion for replacement.

Chatbots - Chatbots are the versatile tools that are used in various branch of business, in HR, customer service or helpdesk. Chatbots are very helpful in contacting the staff, but also in contacting potential candidates. They also ease out the internal operations of the company. Various companies use chatbot to take short interview as well as help staff in improving their performance and keep up with their well-being.

Data Aggregation - All the above uses of AI are only possible if there is a data. Data cannot be aggregated without the help of machine-learning techniques. The images, text, videos, searches, etc. All this type of structured and unstructured data is aggregated, sorted, and processed with help of ML algorithms. Scraping out the data from social media, internet cookies, and various other places is task that could not be achieved without using AI.

HIRETUAL is an AI tech platform which collects data about employees. They process the data, analyses the experience, and then counts his or her market value. This platform is used by various tech giants.

## 2. Literature review

Richa Verma in her paper titled artificial intelligence and human resource management in Indian sector has talked about the use of artificial intelligence in human resources due to changes in technology in its landscape it

highlights the challenges and limitations of artificial intelligence in the present scenario. Mariana Jatoba in her paper titled evolution of artificial intelligence research in human resources investigates the evolution of the application of artificial intelligence in human resource management it presents a panorama of research that can be used in the field of hr through quantitative descriptive analysis of journals and proceedings. Ginu George and Mary rani Thomas in their paper titled integration of artificial intelligence in human resource highlights how ai has been integrated into different functions of hr and its impact on organizations employees and hrs

## 2. Research objectives

- To analyse what is AI
- To determine the Current and future impact of AI on Human Resource Management.
- To study whether AI can replace HR.

## 3. Research Methodolgy

For analyzing the “Use of Artificial Intelligence in Human Resource”, we use both primary and secondary data.

Types of data:

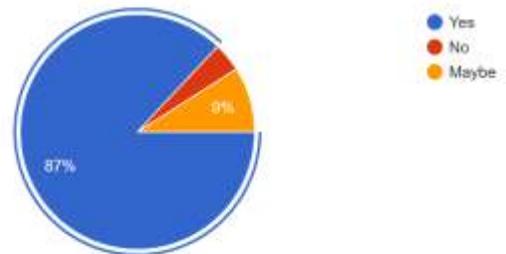
1. Primary data -Primary data is a type of information which is directly obtained from surveys, experiments, and observations.
2. Secondary data - In this type of data, the information is already collected by the third person and available in journal, magazine, newspaper, journals etc.

Sample design- Target population – Random people

- (a) Sampling techniques – In our study we use non- probability sampling. The population we considered here are Random people.
- (b) Sample size - 100 respondents, with different mindset.

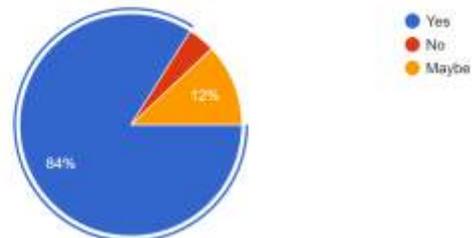
## 4. Data Analysis and Interpretation

Do you think AI plays a vital role in today's business ?  
100 responses



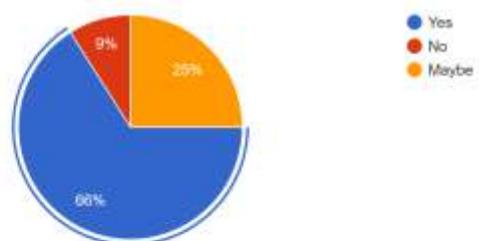
Interpretation 1: It is observed that majority of people thinks that AI plays a vital or you can say important role in today's business scenario.

Do you think AI is helping Corporates ?  
100 responses



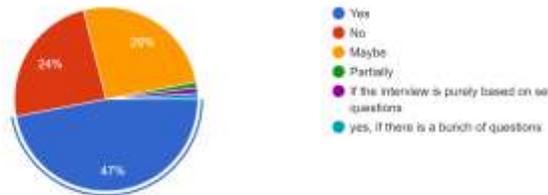
Interpretation 2: The above chart shows 84% are in favour, 4% said no and the remaining 12% said maybe, AI is helping corporates.

Do you think AI is helping HR ?  
100 responses



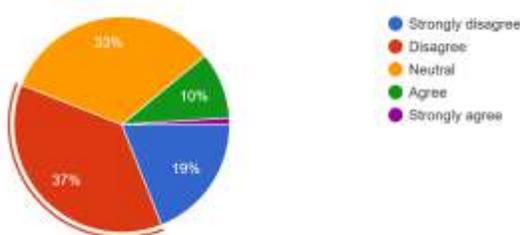
Interpretation 3: From the above pie-chart we can clearly see that 66% of people think, AI is helping HR, 9% thinks that AI is not helping HR in any field and the remaining 25% thinks may be AI is helping but they're not sure.

Can technology also conduct job interviews?  
100 responses



Interpretation 4: This the important question to be asked, will technology conduct job interviews. Although 47% people think it can, 24% says no, 26% thinks may be and the remaining 3% thinks partially or if the interview is purely based on set questions.

Will corporate no longer need HR department in 10 year - due to AI?  
100 responses



Interpretation 5: By this we can analyse that different people have different perception, but most of the people thought that no matter what AI can't able to replace HR department in 10 years.

## 5. Findings of the study

- It is observed that majority of people thinks that AI plays a vital or you can say important role in today's business scenario.
- The above chart shows 84% are in favour, 4% said no and the remaining 12% said may be, AI is helping corporates.

- From the above pie-chart we can clearly see that 66% of people think, AI is helping HR, 9% thinks that AI is not helping HR in any field and the remaining 25% thinks may be AI is helping but they're not sure.
- This the important question to be asked, will technology conduct job interviews. Although 47% people think it can, 24% says no, 26% thinks may be and the remaining 3% thinks partially or if the interview is purely based on set questions.
- By this we can analyse that different people have different perception, but most of the people thought that no matter what AI can't able to replace HR department in 10 years.

## 6. Suggestions

- The world is getting leaned towards the use of machine learning and AI. Enterprise software is getting more sophisticated and it automates an increasing number of jobs.
- In order to get the clear picture about the topic it is important to perform more surveys on the topic, AI in HR.
- Training and Development plays a vital role, Human Resource department should focus on installing the technology and upskilling its personnel to keep up with the pace.
- It is required to provide basic digital infrastructure to its employees so that it can add on to the productivity of the employees.
- Collaboration not Competition – Artificial Intelligence can be of great help since it can improve the efficiency by taking out mundane work so that Human Resource department can focus on other important areas like training and development.

## 7. Conclusion

The Artificial Intelligence has advanced our world to a newer level Technology has always been an important part for various departments and now it also has an effective role in the HR department. The use of AI has redefined the HR function and their way of operations. The most important part of AI used in HR is Machine Learning. This tremendous way of driving the technology into the field of HR will save time and drive efficiency in many ways. Artificial Intelligence is now a very important HR tool that will help companies in different ways. Human Resource people are freed up and have now time to interact with the staff. They have no tiresome job to answer same things repetitively, instead just use chatbots and they don't have to look through immense number of applications and resumes. AI is not replacing workers, but helping workers to get most out of their roles. HR people can manage the workforce more effectively, can predict workers future demands according to weather, days, holidays, etc. The reward programs suggested by AI are more likely to succeed. AI has successfully helped the HR department and we can see the future scope of AI in companies. As we already know that the HR department is using the take AI for their benefits, but that doesn't mean that the HR jobs will be diminished. The AI or computers can help people and departments in easing out their work, but there is no possibility that they can replace humans. HR department still has administrative works, social groups, teams that can be managed by a human only. They can fully automate the tasks like posting for jobs, shortlisting candidates, screening, recording and verifying interviews, verifying users, checking over expenses which will relieve them from the daily stress and mundane tasks. They will get eased up, and focus on much more important tasks and give their appropriate time. They can plan strategies for the company to improve work efficiency, improve their production, plan their

marketing strategy, create an emotional and professional bonding with the teams, improve the problem handling skills. AI has a favourable future in HR and all the other departments, but amalgamating it with HR is itself a big challenge. A company has to surpass these challenges to get a beneficial outcome with use of AI in HR. AI can only work like a human if the data provided to it is correct, otherwise all the results and will go in vain. Companies have to ensure that their data is correct, thus a tiresome work is to be done by the HR team.

Secondly, the documents and information provided has to be kept safe and secure, companies have to ensure policies so that their data is not misused. If there is a breach company has to take preventive measures about that too. AI is a little advantageous as it does not have human errors and biasing in it. Despite these challenges, companies are using AI in every department even in HR and with those advantages this fusion of AI and HR is still on the go.

## References

1. <https://builtin.com/artificial-intelligence/artificial-intelligence-future>
2. <https://theonebrief.com/the-future-of-business-how-artificial-intelligence-can-drive-organizational-change/>
3. <https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp>
4. <https://albertchristopherr.medium.com/use-of-artificial-intelligence-in-human-resource-management-ddb4e4de9c6e#:~:text=AI%2Dbased%20HR%20applications%20raise,capabilities%2C%20or%20limited%20proven%20applications.>
5. <https://www.cmswire.com/digital-workplace/7-ways-artificial-intelligence-is-reinventing-human-resources/>

---

## Guidelines for submission of manuscript

title of paper - Times New Roman Font Size 14, Bold, Centered, Upper and Lower Case

Author Listing:

- Name of the Author, Department, College, University, City, e-Mail Address
- 12 point, Times New Roman, Bold, Centered, Upper and Lower Case

Abstract:

- Maximum 200 words in 12 point Times New Roman
- Three to five keywords related to the main topic

Full Paper:

- Body of the Paper: A4 Size Paper, 12 point Times New Roman, 1.5 Line Spacing, 1" Margin from All Sides, Maximum 4000 words
- Headings up to Three Levels (e.g. 1, 1.1, 1.1.1) should be clearly marked and numbered.
- Tables and diagrams should be placed within the body of the paper near the text that refers to them.

References: References should be alphabetically arranged in the following form:

1. Adams, W.G., The Bakerian Lecture on the Forms of Equipotential Curves and Surfaces and Lines of Electric Force, Transactions of the Royal Society of London, 24, 1876, pp. 1-32

Important Note: Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere.

## IMED JMSR

### Calling Papers for Volume-13 Issue-I

**Paper Submission Last Date is 16 May 2022 | Publication Date is June 2022**

**Published By: Bharati Vidyapeeth (Deemed to be University), Institute of Management and Entrepreneurship, Pune**

#### **Student/Scholar/Researcher/Scientist/Faculties,**

Journal of Management Science and Research (JMSR) is an Academic Peer Reviewed journal with valid ISSN. JMSR's key objective is to provide the academic and industrial community a medium for presenting original cutting edge research related to management, computational and its allied branches which gains a foot hold in India and opens to the world.

To maintain a high-quality journal, manuscripts received for publication in JMSR are being subjected to a rigorous review process and plagiarism check. This includes blind reviews by members of the editorial review board, followed by a detailed review by the JMSR editors.

ISSN: 0975-8429

#### **Website: [www.imed.bharativedyapeeth.edu](http://www.imed.bharativedyapeeth.edu)**

Send your paper at E-mail: [ranpreet.kaur@bharativedyapeeth.edu](mailto:ranpreet.kaur@bharativedyapeeth.edu) and [sonali.khurjekar@bharativedyapeeth.edu](mailto:sonali.khurjekar@bharativedyapeeth.edu)  
(It is mandatory to send your paper in both email address)

#### **Important Dates:**

Last Date of Paper Submission: 16 May 2022

Date of Publication: June 2022

Why JMSR:

**Journal of Management Science and Research (JMSR) is a peer reviewed Journal bearing valid ISSN. You can select this journal to publish your articles due to following reasons:**

1. Published By one of the top 75 management institutes in India (as ranked by NIRF, MHRD, Government of India)
2. JMSR does not compromise with quality of research.
3. JMSR will publish articles online accessible across globe
4. Fast turnaround time of 07 days.(Acceptance Notification)
5. Author can download their full length paper from the website at any time.
6. Turnaround time for authors query is 48 hours.

#### **Submission Procedure:**

Manuscript are invited in MS Word format and to be submitted via mail on

E-mail: [ranpreet.kaur@bharativedyapeeth.edu](mailto:ranpreet.kaur@bharativedyapeeth.edu), [sonali.khurjekar@bharativedyapeeth.edu](mailto:sonali.khurjekar@bharativedyapeeth.edu)

Once a paper is accepted, authors are assumed to submit copyrights of the paper to JMSR. All papers received before the deadline will be acknowledged.

For more details, Please goto website: [www.imed.bharativedyapeeth.edu](http://www.imed.bharativedyapeeth.edu)

#### **Editor In Chief**

**Dr. Sachin S Vernekar**

Journal of Management Science and Research (JMSR)

Website: [www.imed.bharativedyapeeth.edu](http://www.imed.bharativedyapeeth.edu)

Tele No: 020-25425517/25448005 Fax: 020:24531060